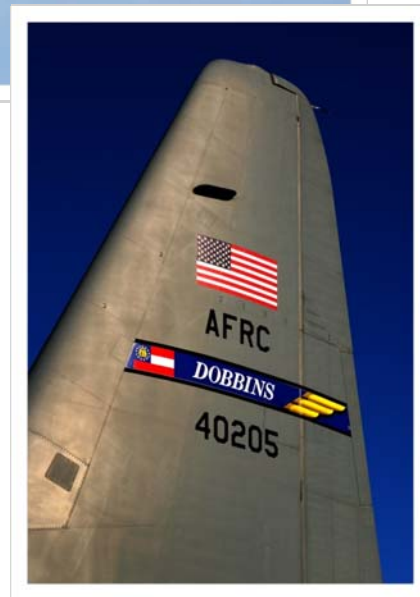
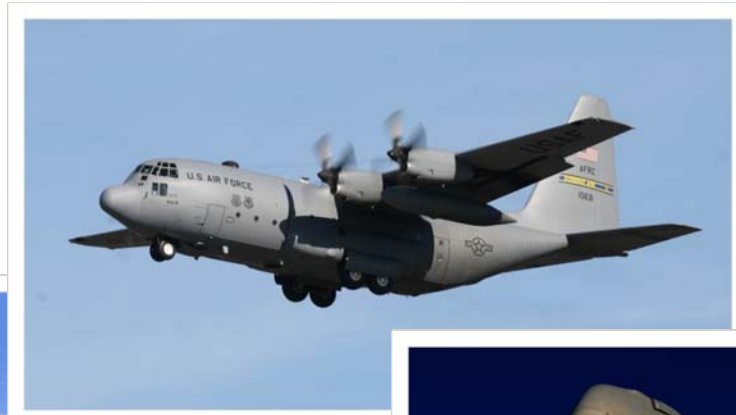


*FINAL*  
**ENVIRONMENTAL ASSESSMENT  
ADDRESSING A PROPOSED COMMISSARY  
AT  
DOBBINS AIR RESERVE BASE, GEORGIA**



**NOVEMBER 2012**

## ABBREVIATIONS AND ACRONYMS

700 AS	700th Airlift Squadron	DNL	Day-Night Average Sound Level
ACHP	Advisory Council on Historic Preservation	DNR	Department of Natural Resources
ACM	Asbestos-containing material	DOD	Department of Defense
AFB	Air Force Base	EA	Environmental Assessment
AFI	Air Force Instruction	EBS	Environmental Baseline Survey
AFMC	Air Force Materiel Command	EIAP	Environmental Impact Analysis Process
AFP-6	Air Force Plant-6	EIS	Environmental Impact Statement
AFRC	Air Force Reserve Command	EISA	Energy Independence and Security Act
AICUZ	Air Installation Compatible Use Zone	ELG	Final Effluent Limitations Guideline
AQCR	air quality control region	EO	Executive Order
ARB	Air Reserve Base	ESA	Endangered Species Act
AST	aboveground storage tank	FAA	Federal Aviation Administration
BD/DR	Building Demolition/Debris Removal	FEMA	Federal Emergency Management Agency
BMP	best management practice	FIRM	Flood Insurance Rate Map
BRAC	Defense Base Closure and Realignment	FONPA	Finding of No Practicable Alternative
BTU/hr	British Thermal Units per hour	FONSI	Finding of No Significant Impact
BX	Base Exchange	FPPA	Farmland Protection Policy Act
C4I	Command, Control, Communications, Computer, and Information	ft <sup>2</sup>	square feet
CAA	Clean Air Act	FUDS	formerly used defense sites
CAP	Corrective Action Plan	FY	Fiscal Year
CCMWA	Cobb County-Marietta Water Authority	GA SHPO	Georgia State Historic Preservation Office
CEQ	Council on Environmental Quality	GAARNG	Georgia Army National Guard
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	GADNR	Georgia Department of Natural Resources
CFR	Code of Federal Regulations	GHG	greenhouse gas
CGP	Construction General Permit	HAP	hazardous air pollutant
CO	carbon monoxide	HAZMART	Hazardous Material Pharmacy
CO <sub>2</sub>	carbon dioxide	HAZMAT	Hazardous Materials Emergency Planning and Response
CRP	Compliance-Related Cleanup Program	HMMS	Hazardous Materials Management System
CWA	Clean Water Act	HQ	Headquarters
dBA	A-weighted decibel	HUD	U.S. Department of Housing and Urban Development
DCO	Dial Central Office	HVAC	heating, ventilation, and air conditioning
DERP	Defense Environmental Restoration Program		

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I	Interstate	percent g	percentage of the force of gravity
ICRMP	Integrated Cultural Resources Management Plan	PM <sub>10</sub>	particulate matter equal to or less than 10 microns in diameter
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning	PM <sub>2.5</sub>	particulate matter equal to or less than 2.5 microns in diameter
IRP	Installation Restoration Program	POL	petroleum, oil, and lubricants
ISDN	Integrated Service Digital Network	ppb	parts per billion
JFHQ	Joint Forces Headquarters	PPE	personal protective equipment
JP-8	jet propulsion number 8	ppm	parts per million
kg	kilogram	PSD	Prevention of Significant Deterioration
LBP	lead-based paint	psi	pounds per square inch
LID	low-impact development	PVC	polyvinyl chloride
LQG	large-quantity generator	RCRA	Resource Conservation and Recovery Act
mg/m <sup>3</sup>	milligrams per cubic meter	ROI	Region of Influence
MGD	million gallons per day	SHPO	State Historic Preservation Officer
MMRP	Military Munitions Response Program	SIP	State Implementation Plan
MSA	Metropolitan Statistical Area	SO <sub>2</sub>	sulfur dioxide
NAAQS	National Ambient Air Quality Standards	SPCC	Spill Prevention, Control, and Countermeasure
NANSR	Nonattainment Major New Source Review	SSPP	Strategic Sustainability Performance Plan
NEPA	National Environmental Policy Act	SVOC	semi-volatile organic compound
NHPA	National Historic Preservation Act	SWMU	solid waste management unit
NO <sub>2</sub>	nitrogen dioxide	SWPPP	Stormwater Pollution Prevention Plan
NOA	Notice of Availability	TCE	trichloroethylene
NO <sub>x</sub>	nitrogen oxides	TMDL	Total Maximum Daily Load
NPDES	National Pollutant Discharge Elimination System	tpy	tons per year
NRCS	Natural Resources Conservation Service	TSCA	Toxic Substances Control Act
NRHP	National Register of Historic Places	U.S.C.	United States Code
NSR	New Source Review	UFC	Unified Facilities Criteria
O <sub>3</sub>	ozone	USACE	U.S. Army Corps of Engineers
OSHA	Occupational Safety and Health Administration	USAF	U.S. Air Force
PAH	polycyclic aromatic hydrocarbon	USEPA	U.S. Environmental Protection Agency
Pb	lead	USFWS	U.S. Fish and Wildlife Service
PCB	polychlorinated biphenyl	USGS	U.S. Geological Survey
pCi/L	picoCuries per liter	UST	underground storage tank
		VOC	volatile organic compound
		µg/L	micrograms per liter
		µg/m <sup>3</sup>	micrograms per cubic meter

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**ENVIRONMENTAL ASSESSMENT (EA) ADDRESSING A**  
**PROPOSED COMMISSARY AT DOBBINS AIR RESERVE BASE, GEORGIA**

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Pursuant to the Council on Environmental Quality's (CEQ's) regulations for implementing procedural provisions of the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] 1500-1508), 32 CFR Part 989 has prepared an Environmental Assessment (EA) for the proposed construction of a commissary at Dobbins Air Reserve Base (ARB), Georgia. The EA is incorporated by reference into this Finding of No Significant Impact (FONSI).

**INTRODUCTION**

The Air Force Reserve Command (AFRC) is proposing to construct a new commissary at Dobbins ARB. At this time the installation does not have a commissary. The Proposed Action is to construct a permanent commissary to provide service to patrons in the Atlanta metropolitan area that would be approximately 70,972 square feet (ft<sup>2</sup>) in size. The commissary would include general sales and a Grab-N-Go area. In addition, the commissary would have electronic checkout registers, a receiving area, loading dock, meat and produce production areas, cold and freezer storage, and other supporting areas would be included. Four alternative site locations are evaluated in the EA.

**PURPOSE OF AND NEED FOR THE PROPOSED ACTION**

The purpose of the Proposed Action is to construct a permanent commissary for authorized patrons. Four alternative site locations were evaluated for the Proposed Action in the EA. The need for the Proposed Action is to provide a commissary in the Atlanta metropolitan area. A number of commissaries have closed in the Atlanta metropolitan area. As a result, there is not a Department of Defense commissary in the Atlanta metropolitan area. Patrons have to drive several hours to the nearest alternative commissary at Fort Benning, Robins Air Force Base, or Fort Gordon in Georgia, which are at least 2 hours away.

Populations in the Atlanta metropolitan area that use these commissaries include retirees, active-duty and Reserve personnel, and their dependents. Before the commissaries in the Atlanta metropolitan area closed, the annual sales totaled \$33.3 million. It is estimated that there are 60,000 to 70,000 retirees in the area. The construction of a new commissary in the Atlanta metropolitan area would provide service to these patrons and retain the annual expenditures in this region.

**DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

*Proposed Action.* The Proposed Action consists of the construction of a permanent commissary. In addition to the general sales and Grab-N-Go area, the Proposed Action would include a receiving area, loading dock, and other supporting areas. In addition, a parking lot consisting of approximately 350 patron parking spaces, 50 employee spaces, and shopping cart corrals would be constructed. To accommodate deliveries, a paved parking area and loading docks would be built in the rear of the commissary. In addition, an access road that could accommodate the delivery trucks traveling to the back of the commissary would be constructed. The project would be constructed to satisfy current energy conservation policies, standards, and regulations as applicable and force protection measures meeting minimum Department of Defense standards.

This EA evaluated the impacts of the Proposed Action at four alternative site locations, which include the following: Site Alternative 1: Corps Lab Site; Site Alternative 2: Base Exchange (BX) Site; Site Alternative 3: Barclay Gate Site; and Site Alternative 4: City of Marietta Site.



Site Alternative 1, the Corps Lab Site, is in the northwestern corner of the installation near a former U.S. Army Corps of Engineers (USACE) Laboratory facility. This site consists of 24.3 acres and includes property owned by AFRC, Air Force Materiel Command (AFMC), and the Georgia DOD. Site Alternative 2 is the BX Site. At this site location, the proposed commissary would be built adjacent to the existing BX. This site includes 9.0 acres, is owned by AFRC, and is near the intersection of Industrial Drive and Atlantic Avenue. Site Alternative 3 is the Barclay Gate site. This site is owned by AFMC, includes 45.7 acres north of Alternative Site 2, and is southwest of South Cobb Drive. Site Alternative 4, the City of Marietta, is the site of Wildwood Park, which is east of South Cobb Drive and northeast of Alternative Site 3. This property is currently owned by the City of Marietta and consists of 23.2 acres.

*No Action Alternative.* Under the No Action Alternative, the Proposed Action would not be implemented. As a result, there would not be a commissary in the Atlanta metropolitan area for patrons, which include retirees, active-duty and Reserve personnel, and their dependents. Patrons would need to drive outside the Atlanta metro area to visit a commissary.

#### **SUMMARY OF ANTICIPATED ENVIRONMENTAL IMPACTS ASSOCIATED WITH THE PROPOSED ACTION AND THE NO ACTION ALTERNATIVE**

In compliance with NEPA, CEQ guidelines, and 32 CFR Part 989, the evaluation of potential environmental impacts presented in the EA focuses on those resources and conditions potentially subject to impacts and on potentially significant environmental issues deserving of study, and deemphasizes insignificant issues. The environmental resources that were analyzed in this EA includes air quality, noise, land use, geological resources, water resources, biological resources, cultural resources, infrastructure, hazardous materials and wastes, safety, and socioeconomic and environmental justice.

Implementation of the Proposed Action would result in short- and long-term, negligible to minor, adverse impacts on air quality, noise, land use, geological resources, water resources, biological resources, safety, and socioeconomic and environmental justice at Site Alternatives 1, 2, 3, and 4. No significant impacts would occur on cultural resources, infrastructure, and hazardous materials and wastes from the Proposed Action at Site Alternatives 1, 2, 3, and 4. In addition, no significant cumulative impacts would occur under the Proposed Action.

Under the No Action Alternative, the Proposed Action would not be implemented. There would be no commissary in the Atlanta metropolitan area and patrons would have to drive several hours to the nearest alternative commissary. In addition, the annual expenditures that patrons spent at commissaries in the Atlanta metropolitan area would be lost. Based on the analyses addressing the No Action Alternative presented in the EA, it was determined that no significant impacts on environmental resources would be expected.

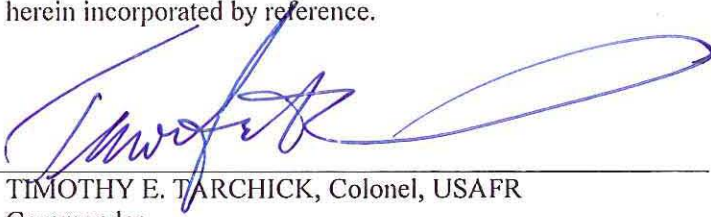
#### **PUBLIC REVIEW AND INTERAGENCY COORDINATION**

AFRC initiated the Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) process for the Proposed Action on December 13, 2011, in accordance with USAF policy. A 30-day public and agency review of the Description of Proposed Action and Alternatives for this EA was previously conducted.

A Notice of Availability (NOA) for this EA has been published in local newspapers. The published NOA solicits comments on the Proposed Action and is intended to involve the local community in the decisionmaking process. Comments received from the public and other Federal, state, and local agencies will be addressed in the EA. Public and agency comments on the Draft EA will be considered prior to a decision made as to whether or not to sign a FONSI.

**FINDING OF NO SIGNIFICANT IMPACT**

I conclude that the environmental effects of the proposed commissary at Dobbins ARB are not significant, that preparation of an Environmental Impact Statement is unnecessary, and that a FONSI is appropriate. The preparation of the EA is in accordance with NEPA, CEQ regulations, and 32 CFR Part 989, as amended and is herein incorporated by reference.



---

TIMOTHY E. TARCHICK, Colonel, USAFR  
Commander

31 OCT 12

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Date

Attachment: Environmental Assessment



## COVER SHEET

### FINAL ENVIRONMENTAL ASSESSMENT ADDRESSING A PROPOSED COMMISSARY AT DOBBINS AIR RESERVE BASE, GEORGIA

**Responsible Agencies:** The Air Force Reserve Command (AFRC) and the 94th Airlift Wing at Dobbins Air Reserve Base (ARB), Georgia.

**Affected Location:** Dobbins ARB.

**Proposed Action:** Construction of a proposed commissary.

**Report Designation:** Draft Environmental Assessment (EA).

**Abstract:** The Proposed Action includes the construction of a new commissary at Dobbins ARB. At this time, the installation does not have a commissary. A commissary would be built to provide service to patrons in the Atlanta area and would consist of a facility that would be approximately 70,972 square feet (ft<sup>2</sup>) in size. The commissary would include general sales and a Grab-N-Go area. In addition, electronic checkout registers, a receiving area, loading dock, meat and produce preparation areas, cold and freezer storage, and other supporting areas would be included.

The purpose of the Proposed Action is to construct a permanent commissary for authorized patrons. The need for the Proposed Action is to provide a commissary in the Atlanta metropolitan area. Four alternative site locations will be evaluated in the Environmental Assessment (EA). Site Alternative 1, Corps Lab Site, is on the north side of the installation near a former U.S. Army Corps of Engineers (USACE) Laboratory. This site consists of 24.3 acres and includes property owned by AFRC, Air Force Materiel Command (AFMC), and the Georgia Department of Defense (DOD). Site Alternative 2 is the Base Exchange (BX) Site, where the proposed commissary would be built adjacent to the existing BX. This property is near the intersection of Industrial Drive and Atlantic Avenue and includes 9.0 acres. Site Alternative 3 is the Barclay Gate Site. This site is owned by AFMC, includes 45.7 acres, and is southwest of South Cobb Drive. Site Alternative 4, the City of Marietta Site, is the location of Wildwood Park, which is east of South Cobb Drive and northeast of Alternative Site 3. This property is owned by the City of Marietta and consists of 23.2 acres.

Under the No Action Alternative, Dobbins ARB would not construct the proposed commissary. As a result, there would not be a commissary in the Atlanta metropolitan area for patrons, which include retirees, active-duty and Reserve personnel, and their dependents.

This EA has been prepared to evaluate the Proposed Action at four alternative site locations and the No Action Alternative. Resources that were considered in the impacts analysis are noise, land use, air quality, geological resources, water resources, biological resources, cultural resources, socioeconomic resources and environmental justice, infrastructure, hazardous materials and waste management, and safety.





*FINAL*

**ENVIRONMENTAL ASSESSMENT  
ADDRESSING A PROPOSED COMMISSARY  
AT  
DOBBINS AIR RESERVE BASE, GEORGIA**

---

**HEADQUARTERS AIR FORCE RESERVE COMMAND  
ROBINS AIR FORCE BASE, GEORGIA**

**NOVEMBER 2012**



**FINAL  
ENVIRONMENTAL ASSESSMENT ADDRESSING A PROPOSED COMMISSARY  
AT DOBBINS AIR RESERVE BASE, GEORGIA**

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# 1. Purpose, Need, and Scope

The Air Force Reserve Command (AFRC) is proposing to construct a new commissary at Dobbins Air Reserve Base (ARB). At this time, the installation does not have a commissary. The Proposed Action is to construct a permanent commissary to provide service to patrons in the Atlanta metropolitan area that would be approximately 70,972 square feet (ft<sup>2</sup>) in size. The commissary would include general sales and a Grab-N-Go area. In addition, electronic checkout registers, a receiving area, loading dock, meat and produce preparation areas, cold and freezer storage, and other supporting areas would be included. Four alternative site locations are evaluated in this Environmental Assessment (EA).

## 1.1 Background

Dobbins ARB consists of 1,664 acres in Cobb County in northwestern Georgia, about 16 miles northwest of the City of Atlanta (see **Figure 1-1**). The 22nd Air Force is headquartered there, and is responsible for recruiting and training Reservists and maintaining subordinate units at the highest level of combat readiness. The 94th Airlift Wing is the host unit at Dobbins ARB and has 8 assigned C-130H *Hercules* aircraft. The 94th Airlift Wing is made up of 3 groups, 12 squadrons, and 5 flights; flying operations are conducted by the 94th Operations Group. Additional units that are based at Dobbins ARB include the AFRC, Georgia Army National Guard, Georgia Air National Guard, and the U.S. Army Reserve. This makes Dobbins ARB one of the largest multi-service reserve training installations in the world. Air Force Plant-6 (AFP-6), which is operated by Lockheed Martin Aeronautical Systems Corporation, is adjacent to and collocated with the installation. Lockheed Martin manufactures the C-130J *Hercules* and performs maintenance on the C-5 *Galaxy* and other aircraft. In addition, the General Lucius D. Clay National Guard Center, which is a Georgia Department of Defense (DOD) facility, is adjacent and collocated with the installation on the south and west sides.

## 1.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to construct a permanent commissary for authorized patrons. The need for the Proposed Action is to provide a commissary in the Atlanta metropolitan area. The Atlanta metropolitan area is defined by the U.S. Census Bureau as the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area, which includes 28 counties (U.S. Census Bureau 2010a). In 2011, commissaries in the Atlanta metro area were located at Fort Gillem and Fort McPherson in southern Atlanta and the Navy Supply Corps School in Athens, Georgia. In 2005, the Defense Base Closure and Realignment (BRAC) Commission made recommendations that affected Fort McPherson, Fort Gillem, and the Navy Supply Corps School. As a result of these recommendations, the Fort McPherson commissary is scheduled to be closed in 2012; the Fort Gillem commissary has already closed. In addition, the Navy Supply Corps School will be relocated to Naval Station Newport in Rhode Island in 2011. Upon closure of these facilities, there will not be a DOD commissary in the Atlanta metropolitan area. Patrons will have to drive several hours to the nearest alternative commissary at Fort Benning, Robins Air Force Base (AFB), or Fort Gordon in Georgia (see **Figure 1-1**). The approximate driving times from the Atlanta metropolitan area to the nearest commissaries are as follows:

- **Robins AFB:** 2-hour drive
- **Fort Benning:** 2-hour drive
- **Fort Gordon:** 3-hour drive.

Populations in the Atlanta metropolitan area that use these commissaries include retirees, active-duty and Reserve personnel, and their dependents. In 2010, sales at Fort McPherson, Fort Gillem, and the Navy Supply Corps School totaled \$33.3 million. It is estimated that there are 60,000 to 70,000 retirees in the



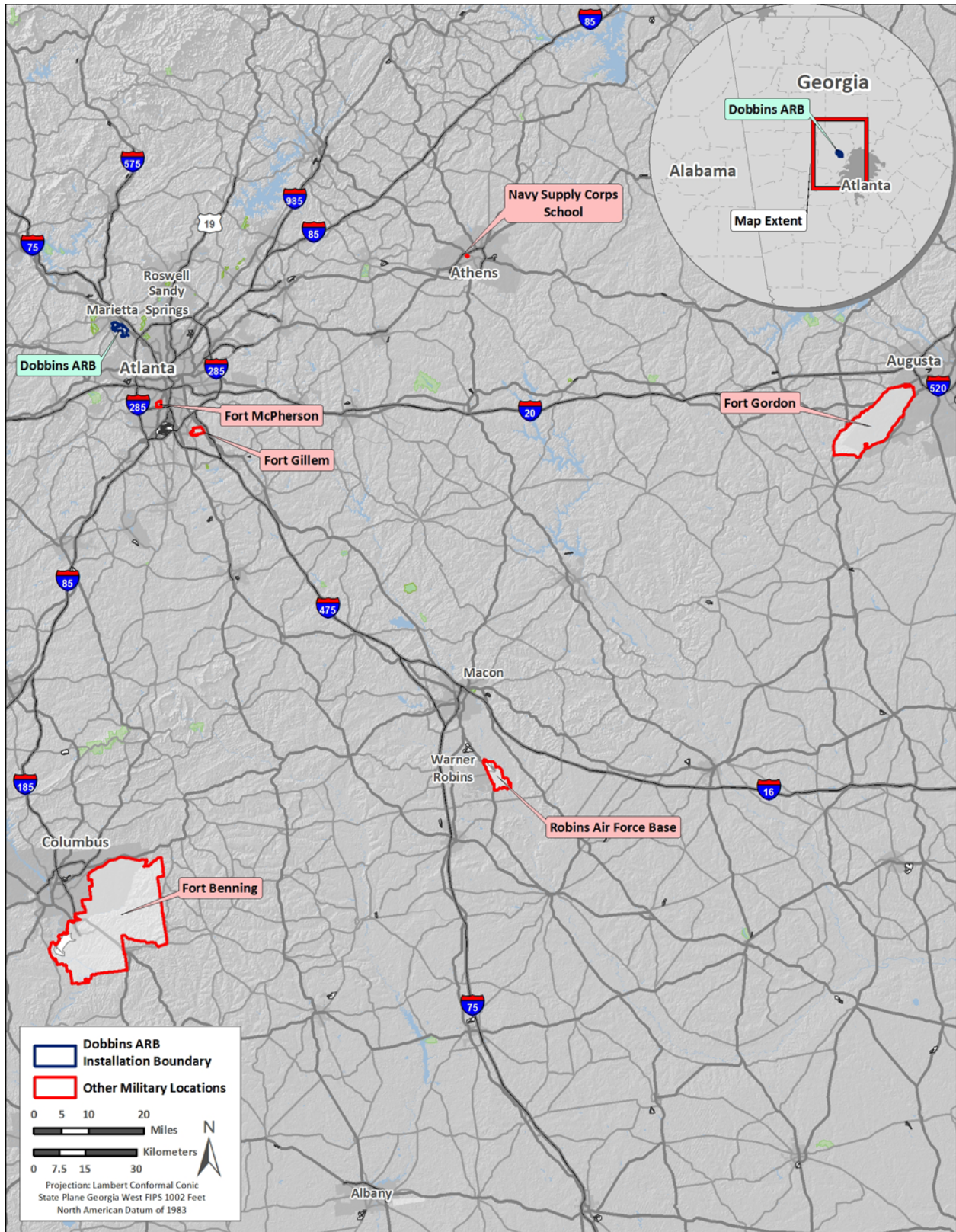


Figure 1-1. Vicinity Map and Surrounding Installations

area. The construction of a new commissary in the Atlanta metropolitan area would provide service to these patrons and retain the annual expenditures in this region.

### 1.3 Scope of the Analysis

This EA evaluates the impacts of the Proposed Action involving the construction of a proposed commissary, approximately 70,972 ft<sup>2</sup> in size, at four alternative site locations. The site locations that are evaluated in this EA are as follows and are shown in **Figure 1-2**:

- Site Alternative 1: Corps Lab Site
- Site Alternative 2: Base Exchange (BX) Site
- Site Alternative 3: Barclay Gate Site
- Site Alternative 4: City of Marietta Site.

Site Alternative 1, the Corps Lab Site, is in the northwestern corner of the installation near a former U.S. Army Corps of Engineers (USACE) Laboratory facility. This site consists of 24.3 acres and includes property owned by AFRC, Air Force Materiel Command (AFMC), and the Georgia DOD. Site Alternative 2 is the BX Site. At this site location, the proposed commissary would be built adjacent to the existing BX. This site includes 9.0 acres, is owned by AFRC, and is near the intersection of Industrial Drive and Atlantic Avenue. Site Alternative 3 is the Barclay Gate site. This site is owned by AFMC, includes 45.7 acres north of Alternative Site 2, and is southwest of South Cobb Drive. Site Alternative 4, the City of Marietta, is the site of Wildwood Park, which is east of South Cobb Drive and northeast of Alternative Site 3. This property is currently owned by the City of Marietta and consists of 23.2 acres.

The scope of this EA includes an evaluation of the Proposed Action and alternatives, including the No Action Alternative. Under the No Action Alternative, a commissary would not be built at Dobbins ARB and patrons would need to drive outside the Atlanta metropolitan area to visit a commissary.

This EA examines the potential effects of the Proposed Action and alternatives on 11 resource areas: noise, land use, air quality, geological resources, water resources, biological resources, cultural resources, socioeconomic resources and environmental justice, infrastructure, hazardous materials and wastes, and safety. These resources were identified as being potentially affected by the Proposed Action and include applicable elements of the human environment that are prompted for review by Executive Orders (EOs), regulation, or policy. The cumulative impacts analysis includes on-installation projects associated with the Proposed Action and other on-installation and off-installation projects.

### 1.4 Summary of Key Environmental Compliance Requirements

#### 1.4.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] Section 4321–4347) is a Federal statute requiring the identification and analysis of potential environmental impacts associated with proposed Federal actions before those actions are taken. The intent of NEPA is to help decisionmakers make well-informed decisions based on an understanding of the potential environmental consequences and take actions to protect, restore, or enhance the environment. NEPA established the Council on Environmental Quality (CEQ), which was charged with the development of implementing regulations and ensuring Federal agency compliance with NEPA. CEQ regulations mandate that all Federal agencies use a prescribed structured approach to environmental impact analysis. This approach also requires Federal agencies to use an interdisciplinary and systematic approach in their decisionmaking process. This process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action.



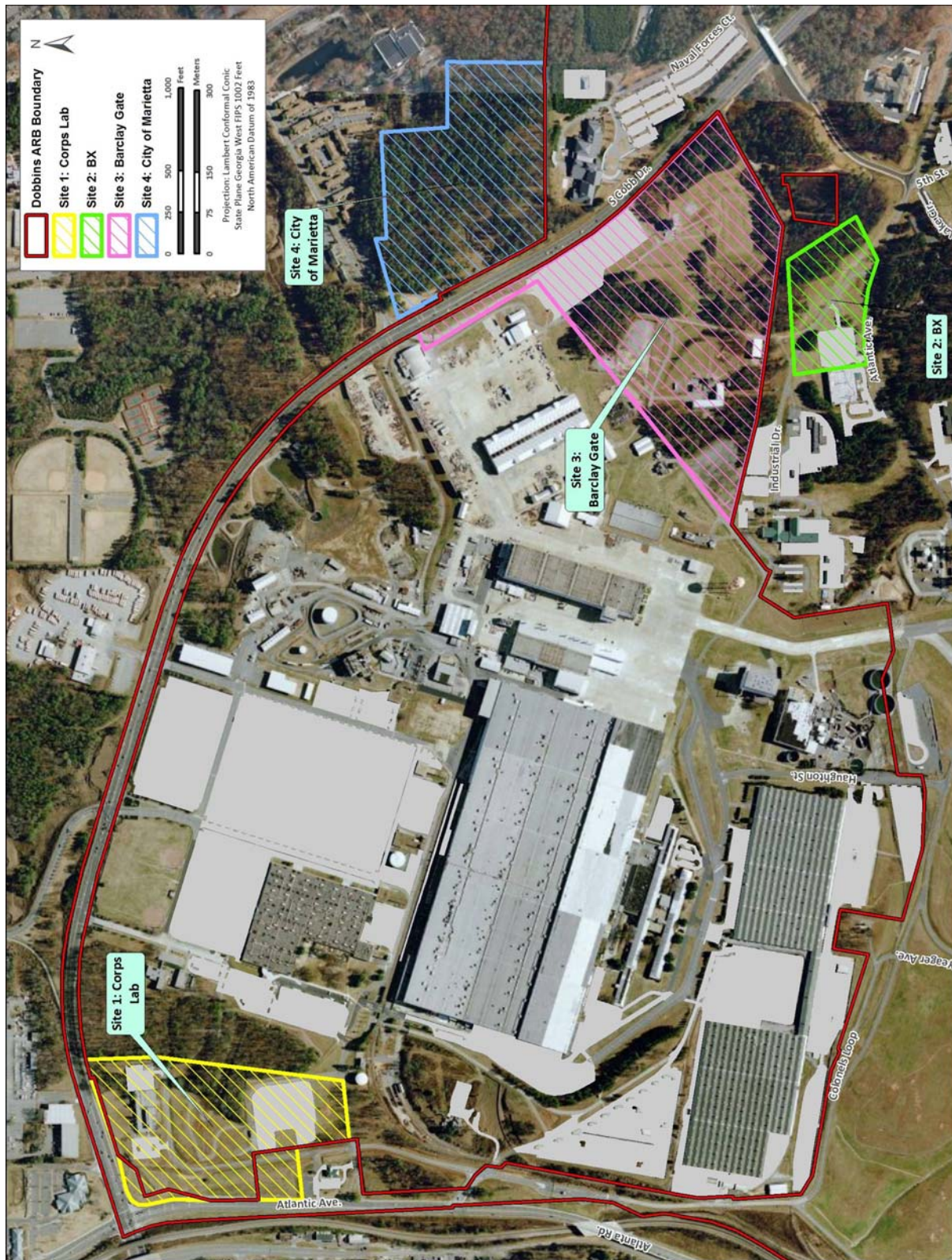


Figure 1-2. Alternative Site Locations Map

The process for implementing NEPA is codified in Title 40 of the Code of Federal Regulations (CFR), Parts 1500–1508, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. CEQ regulations specify that the NEPA process should be used to identify and assess the reasonable alternatives to proposed actions that would avoid or minimize adverse effects of those actions upon the quality of the natural and human environment. CEQ regulations specify that an EA be prepared to briefly provide evidence and analysis for determining whether to prepare a Finding of No Significant Impact (FONSI), or whether the preparation of an Environmental Impact Statement (EIS) is necessary. If an EA is completed and significant impacts are not identified, the decisionmaker would sign and publish a FONSI. This EA can aid in an agency’s compliance with NEPA by identifying when an EIS is unnecessary while organizing information when an EIS is required.

Air Force Policy Directive 32-70, *Environmental Quality*, states that the U.S. Air Force (USAF) will comply with applicable Federal, state, and local environmental laws and regulations, including NEPA. The USAF’s implementing regulation for NEPA is the *Environmental Impact Analysis Process (EIAP)*, codified in 32 CFR Part 989, as amended.

## 1.4.2 Integration of Other Environmental Statutes and Regulations

To comply with NEPA, the planning and decisionmaking process for actions proposed by Federal agencies involves a study of other relevant environmental statutes and regulations. The NEPA process, however, does not replace procedural or substantive requirements of other environmental statutes and regulations. It addresses them collectively in the form of an EA or EIS, which enables the decisionmaker to have a comprehensive view of major environmental issues and requirements associated with the Proposed Action. According to CEQ regulations, the requirements of NEPA must be integrated “with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively.”

While not comprehensive, a list of potentially applicable laws, regulations, policies, and planning criteria is provided in **Table 1-1**.

## 1.4.3 Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), Native American Tribal Consultation, and Public Involvement

**IICEP.** NEPA requirements help ensure that environmental information is made available to the public during the decisionmaking process and prior to actions being taken. The premise of NEPA is that the quality of Federal decisions will be enhanced if proponents provide information to the public and involve the public in the planning process. The Intergovernmental Coordination Act and EO 12372, *Intergovernmental Review of Federal Programs*, require Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal. Air Force Instruction (AFI) 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning*, requires the USAF to implement the IICEP process, which is used for the purpose of agency coordination and implements scoping requirements. Through the IICEP process, Dobbins ARB notifies relevant Federal, state, and local agencies of the Proposed Action, identified alternatives, and provides sufficient time to present any specific environmental concerns associated with the Proposed Action. IICEP material related to this action will be included, as developed, in **Appendix A**, which will be expanded throughout the EA development process.



**Table 1-1. Summary of Applicable Statutes and Regulations**

<b>Regulation</b>	<b>Source</b>
<b>Air Quality</b>	
Clean Air Act of 1970 and Amendments of 1977 and 1990, including the General Conformity Rule and the Greenhouse Gas Tailoring Rule	42 U.S.C. 7401 et seq., as amended
Air Quality Compliance	AFI 32-7040
Federal Leadership in Environmental, Energy, and Economic Performance	EO 13514
<b>Noise</b>	
Noise Control Act of 1972	42 U.S.C. 4901 et seq., Public Law (P.L.) 92-574
Air Installation Compatible Use Zone Program	AFI 32-7063
<b>Airspace</b>	
Air Force Airspace Management	AFI 13-201
Aeronautical Information Manual	Federal Aviation Administration Manual
<b>Health and Safety</b>	
Air Force Occupational and Environmental Safety, Fire Protection, and Health Program	AFI 91-301
USAF Mishap Prevention Program	AF 91-202
Protection of Children from Environmental Health and Safety Risks	EO 13045
<b>Geology and Soils</b>	
Farmland Protection Policy Act of 1981	7 U.S.C. 4201
<b>Water Quality, Wetlands, Floodplains, and Coastal Zones</b>	
Clean Water Act of 1972	33 U.S.C. 1251 et seq., as amended
Safe Drinking Water Act of 1974	42 U.S.C. 300
Water Quality Compliance	AFI 32-7041
Protection of Wetlands	EO 11990
Floodplain Management	EO 11988
<b>Biological Resources</b>	
Endangered Species Act of 1973	16 U.S.C. 1531–1543
Migratory Bird Treaty Act of 1918	16 U.S.C. 703–712
Bald and Golden Eagle Protection Act	16 U.S.C. 668–668c
Sikes Act Improvement Act of 1977	16 U.S.C. 670a–670o, 74 Stat. 1052
Invasive Species (3 February 1999)	EO 13112
Protection and Enhancement of Environmental Quality	EO 11514
Conservation of Migratory Birds	EO 13186
Integrated Natural Resources Management	AFI 32-7064

<b>Regulation</b>	<b>Source</b>
<b>Land Use and Aesthetic Resources</b>	
Land Use Planning Bulletin, Base Comprehensive Planning	Headquarters (HQ) Air Force Center for Engineering and the Environment, 1 August 1986
Land Use Planning	AFPAM 32-1010
Air Force Comprehensive Planning	AFI 32-7062
<b>Cultural Resources</b>	
National Historic Preservation Act of 1966	16 U.S.C. 470 et seq., as amended
Archaeological Resources Protection Act of 1979	16 U.S.C. 470a-11, as amended
American Indian Religious Freedom Act of 1978	P.L. 95-341 and 42 U.S.C. 1996, as amended
The Native American Graves Protection and Repatriation Act of 1990	P.L. 101-601 and 25 U.S.C. 3001–3013
Protection and Enhancement of the Cultural Environment	EO 11593
Indian Sacred Sites	EO 13007
Consultation and Coordination with Indian Tribal Governments	EO 13175
Preserve America	EO 13287
Cultural Resources Management	AFI 32-7065
<b>Hazardous Materials and Waste Management</b>	
Resource Conservation and Recovery Act of 1976	42 U.S.C. 6901, as amended
Comprehensive Environmental Response, Compensation, and Liability Act of 1980	42 U.S.C. 9601 et seq.
Pollution Prevention Act of 1990	42 U.S.C. 1301 et seq.
Toxic Substance Control Act of 1976	15 U.S.C. 53
Superfund Amendments and Reauthorization Act of 1986	26 U.S.C. 9507
Strengthening Federal Environmental, Energy, and Transportation	EO 13423
Solid and Hazardous Waste Compliance	AFI 32-7042
Environmental Restoration Program	AFI 32-7020
Federal Compliance with Pollution Control Standards	EO 12088
Defense Environmental Restoration Program	10 U.S.C. 2701 et seq.
<b>Environmental Justice</b>	
Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations	EO 12898
<b>Transportation</b>	
Hazardous Material Transportation Act of 1975	49 U.S.C. 5101-5128

**Native American Tribal Consultation.** EO 13175, *Consultation and Coordination with Indian Tribal Governments* (6 November 2000), directs Federal agencies to coordinate and consult with federally recognized Native American tribal governments on a government-to-government basis whose interests might be directly and substantially affected by activities on federally administered lands. To comply with legal mandates, federally recognized tribes that are affiliated historically within the Dobbins ARB geographic region are invited to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. Because many tribes were displaced from their original homelands, tribes with cultural roots in an area might not currently reside in the region where the undertaking is to occur. Effective consultation requires identification of tribes based on ethnographic and historical data and not simply a tribe's proximity to a project area. The tribal consultation process is distinct from NEPA consultation or the IICEP processes and requires separate notification of all relevant tribes by Dobbins ARB. The timelines for tribal consultation are also distinct from those of intergovernmental consultations. The Dobbins ARB Cultural Resources Manager serves as the point-of-contact for day-to-day issues with Native American tribes, the Georgia State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP).

A letter requesting consultation will be sent to each affiliated tribe describing the Proposed Action on Dobbins ARB and asking them to identify any potential concerns they might have. The goal of the tribal consultation process is not simply to consult on a particular undertaking but rather to build constructive relationships with the appropriate Native American tribes. Consultation should lead to constructive dialogue in which Native American tribes are active participants in the planning process. A list of the Native American tribal governments who will be consulted regarding this action is included in **Appendix A**. Tribal consultation, which is part of the Section 106 of the NHPA, will occur once a preferred site has been chosen. At this time, a preferred site has not been chosen.

**Public Involvement.** A Notice of Availability (NOA) was published in the *Marietta Daily Journal* and the *Atlanta Journal-Constitution* that announced the Draft EA was available to the public for a 30-day review and comment period. The NOA was issued to solicit comments on the Proposed Action and involve the local community in the decisionmaking process.

## 2. Description of the Proposed Action and Alternatives

This section presents information on the Proposed Action of constructing a new commissary at Dobbins ARB. As discussed in **Section 1.4.1**, the NEPA process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action. Reasonable alternatives must satisfy the purpose of and need for a proposed action, which are defined in **Section 1.2**. CEQ regulations specify the inclusion of a No Action Alternative against which potential effects can be compared. While the No Action Alternative would not satisfy the purpose of or need for the Proposed Action, it is analyzed in detail in accordance with CEQ regulations.

### 2.1 Proposed Action

The Proposed Action consists of the construction of a permanent commissary. The commissary would be approximately 70,972 ft<sup>2</sup> in size and would include general sales, a Grab-N-Go area, electronic checkout registers, receiving area, loading dock, meat and produce preparation areas, cold and freezer storage, and other supporting areas. Mechanical ventilation would be used where required and heat recovery would be used where possible with back-up from a self-contained system. Air conditioning would be installed in the sales areas and computer rooms and reclamation of cold air from commissary display cases would be used in conjunction with the air conditioning system. In addition, the project would include emergency building lighting, fire protection systems, and a refrigeration support system with automatic monitoring control. Supporting facilities would include electronic checkout registers, utilities, communications and alarms, power, pavement, curbs and gutters, sidewalks, storm drainage systems, landscaping, and other site improvements. The project would be constructed to satisfy current energy conservation policies, standards, and regulations as applicable and force protection measures meeting minimum DOD standards.

Under the Proposed Action, a parking lot consisting of approximately 350 patron parking spaces, 50 employee spaces, and shopping cart corrals would be constructed. To accommodate deliveries, a paved parking area and loading docks would be built in the rear of the commissary. In addition, an access road that could accommodate the delivery trucks traveling to the back of the commissary would need to be constructed.

### 2.2 Site-Selection Criteria

In order to identify sites where the proposed commissary could be built at Dobbins ARB, the following site-selection criteria were identified:

- The property must either be owned by DOD or be available for acquisition
- The site on Dobbins ARB should be near existing community service or commercial facilities so that existing utilities and roadways can be used
- The site must be within or adjacent to the military installation so that a controlled access point can be built and manned and emergency military personnel can respond to a crisis within the required 5-minute time period
- The site must be at least 9 acres
- The site must be consistent with future land uses and the Dobbins ARB General Plan
- The site must be consistent with state, regional, and local land use plans.

## 2.3 Alternative Site Locations

Several site alternatives presented in this EA are considered reasonable (i.e., economically and technically feasible) and practicable to be carried forward for further detailed analysis. Some alternatives could be deemed practicable or feasible even if the site location is not on property owned by DOD. Alternatives that did not satisfy the purpose of and need for the action or the site-selection criteria were not considered reasonable and practicable and, therefore, were eliminated from further detailed analysis in this EA. There are four site location alternatives that are evaluated in this EA.

### 2.3.1 Site Alternative 1: Corps Lab Site

Site Alternative 1 is in the northwest corner of the installation at the intersection of South Cobb Drive and Atlanta Road. This site consists of 24.3 acres on USAF-owned land. The eastern portion of the property is within AFP-6, which is owned by AFMC and operated and maintained by Lockheed Martin. Lockheed Martin is not currently using any of the buildings on this site to produce or perform maintenance on aircraft. A fitness trail runs through this property. The western portion of the property is within Dobbins ARB and is owned and maintained by AFRC. Approximately 5.8 acres in the northern portion is owned by the Georgia DOD.

There are several buildings on Site 1, including a former USACE laboratory facility. This facility was used as a soils and construction materials laboratory in the past; currently, the Georgia DOD uses the building for storage. Additional buildings and items on Site 1 include the Aviation Wing of the Marietta Museum of History; aircraft displays; and several trailers in a fenced-in area associated with the museum. The Aviation Wing of the Marietta Museum of History is managed by the Cobb County Historical Commission. If Site 1 were chosen for the Proposed Action, the museum might require relocation.

If the proposed commissary were built at this site, several development constraints require consideration. Property owned by AFMC would be transferred to AFRC. As previously mentioned, Lockheed Martin is not currently using facilities on this property to produce aircraft or perform maintenance on them. The USACE Laboratory facility potentially contains contaminants due to past use, and additional studies to properly characterize potential contamination at the facility would be required prior to redevelopment of the site (GAARNG 2010).

This site does not have a controlled access point, which means nonmilitary personnel can enter the site at any time. Controlled access points are required for commissaries that sell goods to military personnel. Currently, there is an entrance from Atlanta Road to AFP-6 and a separate controlled entrance to access Dobbins ARB, both of which are south of Site 1. If the proposed commissary were constructed on Site 1, the controlled access point would be relocated or a new entrance would be required, and accommodation of access for Lockheed Martin employees would continue. If a new controlled access point were constructed, additional security staffing at the gate would be required.

### 2.3.2 Site Alternative 2: BX Site

Site Alternative 2 is near the intersection of Industrial Drive and Atlantic Avenue. This site is 9.0 acres in size, which includes the area for the proposed commissary, it does not include the existing BX facility. The existing BX is at the southwest corner of Site 2 between and Industrial Drive and Atlantic Avenue. The land to the north of Industrial Drive is generally undeveloped. If this site were chosen, the proposed commissary would be built adjacent to the existing BX, which would likely be advantageous to patrons. All of the property is owned by AFRC.

If the proposed commissary were built at this site, several development constraints would require consideration. To accommodate a new commissary and the required parking spaces, Industrial Drive would be rerouted, likely to the west of the existing BX. Although Industrial Drive would not traverse through Site 2, delivery trucks would still be able to take the rerouted drive and access the BX and commissary from the north side. The new main entrance to the BX and commissary would be from Atlantic Avenue.

If the existing BX and proposed commissary were collocated, there would be an increase in the amount of traffic on the adjacent roadways. The new patrons and employees (about 400 vehicles a day) could cause congestion in the immediate area. In addition, although the site has adequate utilities to accommodate a commissary, some of the existing water pipelines north of Industrial Drive would likely require relocation. These pipes are fairly close to the surface; as a result the grading and construction under the Proposed Action would require the pipes to be moved.

### **2.3.3 Site Alternative 3: Barclay Gate Site**

Site Alternative 3 is southwest of South Cobb Drive and includes 45.7 acres. All of the property at Site 3 is owned by AFMC and operated by Lockheed Martin. If this site were chosen, the property would need to be transferred to AFRC.

There are numerous buildings on this site, some of which are used for storage and some are vacant. Various items are stored on the property including trucks, trailers, and aging equipment. There are two trailers that are used as temporary explosive storage facilities on a parking lot at the north end of the site.

There are six Installation Restoration Program (IRP) sites on the property, including SWMU 1, SWMU 3, SWMU 5, SWMU 9, SWMU 32, and SWMU 78. The IRP was developed by the DOD to identify, evaluate, and clean up contamination from past operations on military installations. The IRP is designed to ensure DOD compliance with Federal and state regulations, while still allowing the military to carry out its mission. The two IRP sites on Site 3 are adjacent to each other. One of these sites is about 1 acre and is a former landfill. The second site is a former leachate pond about 100 x 100 feet in size. The contaminants in both of the IRP sites have been contained, and the sites are in long-term monitoring phase. Site 3 is large enough to accommodate the proposed commissary without encroaching upon the IRP sites.

### **2.3.4 Site Alternative 4: City of Marietta Site**

Site Alternative 4 is east of South Cobb Drive and northeast of Site 3. It consists of 23.2 acres. This property is the site of Wildwood Park and is owned and operated by the City of Marietta. The majority of the park is forested and there are several streams that run through the property. There are numerous walking trails throughout the park and a dog park at the entrance. The City of Marietta has listed the current land use as parks and recreation, but it is zoned Office Institutional.

If the proposed commissary were built at this site, several development constraints would need to be considered. The existing controlled access gates on Dobbins ARB could be used to access this site. Patrons would need to take Gym Road bridge, which crosses over South Cobb Drive, to access the northern part of the installation and Site 4. However, the road network in this region of the installation would require upgrading to accommodate increases in traffic and commercial deliveries, and a new road would need to be constructed to directly access the site. In addition, fencing around the perimeter would need to be installed to ensure the entire site is secure.



There are several areas in the park that would need to be considered when siting the commissary. There are two potential cemeteries, an area with possible cultural significance, and a stream that bisects the site. In addition, there is a groundwater plume with trichloroethylene (TCE) contaminants that has migrated from AFP-6 along the western boundary of the site.

## **2.4 Alternative Site Considered but Eliminated from Detailed Analysis**

Under NEPA, reasonable alternatives must be considered in the EA. Consequently, site alternatives that were considered reasonable and practicable and meet the site-selection criteria were considered. An alternative site that was considered but did not meet all the site-selection criteria is described in the following paragraph.

A.L. Burruss Park is on South Cobb Drive, southeast of Wildwood Park, and is owned and operated by the City of Marietta. The majority of the park is forested. There are numerous trails throughout the park; portions of several were closed in 2011 as a result of flooding. About half of the park is within the 100-year floodplain (FEMA 2008). Given the extensive land within the floodplain, it is also likely that a large portion of the property consists of wetlands. It is USAF policy to avoid constructing new facilities within the 100-year floodplain and in wetlands, if possible. Development within floodplains is avoided to protect the functions of floodplains and wetlands and minimize the potential damage to facilities. Given the potential impact on floodplains and the probable impact on wetlands, this alternative is not considered reasonable and practicable and is eliminated from further detailed analysis in this EA.

## **2.5 No Action Alternative**

CEQ regulations require consideration of the No Action Alternative for all proposed actions. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and other potential action alternatives can be compared and consequently it is carried forward for further analysis in this EA.

Under the No Action Alternative, Dobbins ARB would not construct the proposed commissary. As a result, there would not be a commissary in the Atlanta metropolitan area for patrons, which include retirees, active-duty and Reserve personnel, and their dependents. As previously mentioned, sales at Fort McPherson, Fort Gillem, and the Navy Supply Corps School totaled \$33.3 million in 2010. Patrons would need to drive outside the Atlanta metro area to visit a commissary. Therefore, there would be an annual loss of approximately \$33 million in revenue in the Atlanta metro area under the No Action Alternative. This alternative is carried forward for analysis as a baseline against which the impacts of the Proposed Action and the potential action alternatives can be evaluated.

## **2.6 Decision to be Made and Identification of the Preferred Alternative**

In this EA, Dobbins ARB evaluates whether the Proposed Action would result in any potentially significant impacts at the different alternative site locations. If such impacts are predicted, Dobbins ARB would provide mitigation to reduce impacts to below the level of significance, undertake the preparation of an EIS addressing the Proposed Action, or abandon the Proposed Action. This EA also can be used to guide Dobbins ARB in implementing the Proposed Action and choosing a site location in a manner consistent with USAF standards for environmental stewardship. The Preferred Alternative for the Proposed Action will be identified as planning progresses.

### 3. Affected Environment

All potentially relevant resource areas were initially considered for analysis in this EA. In compliance with NEPA and CEQ guidelines, the discussions of the affected environment in **Section 3** and the environmental consequences in **Section 4** focus only on those resource areas considered potentially subject to impacts and with potentially significant environmental issues. This section includes air quality, noise, land use, geological resources, water resources, biological resources, cultural resources, infrastructure, hazardous materials and wastes, safety, and socioeconomic and environmental justice.

#### 3.1 Air Quality

##### 3.1.1 Definition of the Resource

In accordance with Federal Clean Air Act (CAA) requirements, the air quality in a given region or area is measured by the concentration of criteria pollutants in the atmosphere. The air quality in a region is a result of not only the types and quantities of atmospheric pollutants and pollutant sources in an area, but also surface topography, the size of the topological “air basin,” and the prevailing meteorological conditions.

**Ambient Air Quality Standards.** Under the CAA, the U.S. Environmental Protection Agency (USEPA) developed numerical concentration-based standards, or National Ambient Air Quality Standards (NAAQS), for pollutants that have been determined to affect human health and the environment. The NAAQS represent the maximum allowable concentrations for ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter (including particulate matter equal to or less than 10 microns in diameter [PM<sub>10</sub>] and particulate matter equal to or less than 2.5 microns in diameter [PM<sub>2.5</sub>]), and lead (Pb) (40 CFR Part 50). The CAA also gives the authority to states to establish air quality rules and regulations. The State of Georgia has adopted the NAAQS for federally listed criteria pollutants with the exception of some SO<sub>2</sub> standards. **Table 3-1** presents the USEPA NAAQS for federally listed criteria pollutants and the Georgia specific SO<sub>2</sub> standards.

**Attainment Versus Nonattainment and General Conformity.** The USEPA classifies the air quality in an air quality control region (AQCR), or in subareas of an AQCR, according to whether the concentrations of criteria pollutants in ambient air exceed the NAAQS. Areas within each AQCR are therefore designated as either “attainment,” “nonattainment,” “maintenance,” or “unclassified” for each of the six criteria pollutants. Attainment means that the air quality within an AQCR is better than the NAAQS; nonattainment indicates that criteria pollutant levels exceed NAAQS; maintenance indicates that an area was previously designated nonattainment but is now attainment; and an unclassified air quality designation by USEPA means that there is not enough information to appropriately classify an AQCR, so the area is considered attainment. USEPA has delegated the authority for ensuring compliance with the NAAQS in the State of Georgia to the Georgia Department of Natural Resources. In accordance with the CAA, each state must develop a State Implementation Plan (SIP), which is a compilation of regulations, strategies, schedules, and enforcement actions designed to move the state into compliance with all NAAQS.

The General Conformity Rule applies only to significant actions in nonattainment or maintenance areas. The General Conformity Rule requires that any Federal action meet the requirements of a SIP or Federal Implementation Plan. More specifically, CAA conformity is ensured when a Federal action does not cause a new violation of the NAAQS; contribute to an increase in the frequency or severity of violations of NAAQS; or delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS.

Table 3-1. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary Standard	Secondary Standard
CO	8-hour <sup>(1)</sup>	9 ppm (10 mg/m <sup>3</sup> )	None
	1-hour <sup>(1)</sup>	35 ppm (40 mg/m <sup>3</sup> )	None
Pb	Rolling 3-Month Average	0.15 µg/m <sup>3</sup> <sup>(2)</sup>	Same as Primary
NO <sub>2</sub>	Annual (Arithmetic Average)	53 ppb <sup>(3)</sup>	Same as Primary
	1-hour <sup>(4)</sup>	100 ppb	None
PM <sub>10</sub>	24-hour <sup>(5)</sup>	150 µg/m <sup>3</sup>	Same as Primary
PM <sub>2.5</sub>	Annual <sup>(6)</sup> (Arithmetic Average)	15.0 µg/m <sup>3</sup>	Same as Primary
	24-hour <sup>(7)</sup>	35 µg/m <sup>3</sup>	Same as Primary
O <sub>3</sub>	8-hour <sup>(8)</sup>	0.075 ppm (2008 Standard)	Same as Primary
	8-hour <sup>(9)</sup>	0.08 ppm (1997 Standard)	Same as Primary
	1-hour <sup>(10)</sup>	0.12 ppm	Same as Primary
SO <sub>2</sub>	Annual (Arithmetic Average)	0.03 ppm <sup>(11)</sup> (1971 Standard) 80 µg/m <sup>3</sup> (Georgia Standard)	0.5 ppm (3-hour) <sup>(1)</sup>
	24-hour <sup>(1)</sup>	0.14 ppm <sup>(11)</sup> (1971 Standard) 365 µg/m <sup>3</sup> (Georgia Standard)	0.5 ppm (3-hour) <sup>(1)</sup> 1,300 µg/m <sup>3</sup> (3-hour, Georgia Standard)
	1-hour	75 ppb <sup>(12)</sup>	None

Source: USEPA 2011a, GADNR 2011

Notes: Parenthetical values are approximate equivalent concentrations.

- Not to be exceeded more than once per year.
- Final rule signed 15 October 2008. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- The official level of the annual NO<sub>2</sub> standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of cleaner comparison to the 1-hour standard.
- To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 100 ppb (effective 22 January 2010).
- Not to be exceeded more than once per year on average over 3 years.
- To attain this standard, the 3-year average of the weighted annual mean PM<sub>2.5</sub> concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m<sup>3</sup>.
- To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m<sup>3</sup> (effective 17 December 2006).
- To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm (effective 27 May 2008).
- To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.
  - The 1997 standard – and the implementation rules for that standard – will remain in place for implementation purposes as USEPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.
  - USEPA is in the process of reconsidering these standards (set in March 2008).
- USEPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard (“anti-backsliding”).
  - The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1.
- The 1971 sulfur dioxide standards remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- Final rule signed on 2 June 2010. To attain this standard, the 3-year average of the 99th percentile of daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

Key: ppm = parts per million; ppb = parts per billion; mg/m<sup>3</sup> = milligrams per cubic meter; µg/m<sup>3</sup> = micrograms per cubic meter

**Federal Prevention of Significant Deterioration.** Federal Prevention of Significant Deterioration (PSD) regulations apply in attainment areas to a major stationary source (i.e., source with the potential to emit 250 tons per year [tpy] of any criteria pollutant), and a significant modification to a major stationary source (i.e., change that adds 10 to 40 tpy to the facility's potential to emit depending on the pollutant). Additional PSD major source and significant modification thresholds apply for greenhouse gases (GHGs), as discussed in the Greenhouse Gas Emissions subsection. PSD permitting can also apply to a proposed project if all three of the following conditions exist: (1) the proposed project is a modification with a net emissions increase to an existing PSD major source, and (2) the proposed project is within 10 kilometers of national parks or wilderness areas (i.e., Class I Areas), and (3) regulated stationary source pollutant emissions would cause an increase in the 24-hour average concentration of any regulated pollutant in the Class I area of 1 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) or more (40 CFR 52.21[b][23][iii]). A Class I area includes national parks larger than 6,000 acres, national wilderness areas and national memorial parks larger than 5,000 acres, and international parks. PSD regulations also define ambient air increments, limiting the allowable increases to any area's baseline air contaminant concentrations, based on the area's Class designation (40 CFR 52.21[c]).

**Title V Requirements.** Title V of the CAA Amendments of 1990 requires states and local agencies to permit major stationary sources. A Title V major stationary source has the potential to emit criteria air pollutants and hazardous air pollutants (HAPs) at levels equal to or greater than Major Source Thresholds. Major Source Thresholds vary depending on the attainment status of an ACQR. The purpose of the permitting rule is to establish regulatory control over large, industrial-type activities and monitor their impact on air quality. Section 112 of the CAA lists HAPs and identifies source categories.

**Greenhouse Gas Emissions.** GHGs are gaseous emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. The most common GHGs emitted from natural processes and human activities include carbon dioxide ( $\text{CO}_2$ ), methane, and nitrous oxide. On 22 September 2009, the USEPA issued a final rule for mandatory GHG reporting from large GHG emissions sources in the United States. The purpose of the rule is to collect comprehensive and accurate data on  $\text{CO}_2$  and other GHG emissions that can be used to inform future policy decisions. In general, the threshold for reporting is 25,000 metric tons or more of  $\text{CO}_2$  equivalent emissions per year but excludes mobile source emissions. The first emissions report is due in 2011 for 2010 emissions. GHG emissions will also be factors in PSD and Title V permitting and reporting, according to a USEPA rulemaking issued on 3 June 2010 (75 Federal Register 31514). GHG emissions thresholds of significance for permitting of stationary sources are 75,000 tons  $\text{CO}_2$  equivalent per year and 100,000 tons  $\text{CO}_2$  equivalent per year under these permit programs.

EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, was signed in October 2009 and requires agencies to set goals for reducing GHG emissions. One requirement within EO 13514 is the development and implementation of an agency Strategic Sustainability Performance Plan (SSPP) that prioritizes agency actions based on lifecycle return on investment. Each SSPP is required to identify, among other things, "agency activities, policies, plans, procedures, and practices" and "specific agency goals, a schedule, milestones, and approaches for achieving results, and quantifiable metrics" relevant to the implementation of EO 13514. On 26 August 2010, DOD released its SSPP to the public. This implementation plan describes specific actions the DOD will take to achieve its individual GHG reduction targets, reduce long-term costs, and meet the full range of goals of the EO. All SSPPs segregate GHG emissions into three categories: Scope 1, Scope 2, and Scope 3 emissions. Scope 1 GHG emissions are those directly occurring from sources that are owned or controlled by the agency. Scope 2 emissions are indirect emissions generated in the production of electricity, heat, or steam purchased by the agency. Scope 3 emissions are other indirect GHG emissions that result from agency activities but from sources that are not owned or directly controlled by the agency. The GHG goals in the DOD SSPP include reducing Scope 1 and Scope 2 GHG emissions by 34 percent by 2020, relative to Fiscal Year (FY)

2008 emissions, and reducing Scope 3 GHG emissions by 13.5 percent by 2020, relative to FY 2008 emissions. The first GHG air quality emissions report is due in 2011 for 2010 emissions.

### 3.1.2 Affected Environment

All of the site location alternatives are in Cobb County, Georgia, which is within the Metropolitan Atlanta AQCR. The Metropolitan Atlanta AQCR also includes Butts, Carroll, Clayton, Coweta, De Kalb, Douglas, Fayette, Fulton, Gwinnett, Heard, Henry, Lamar, Meriwether, Pike, Rockdale, Spalding, Troup, and Upson counties in Georgia (USEPA 2011b). Cobb County has been designated by the USEPA as unclassified/attainment for CO, NO<sub>2</sub>, SO<sub>2</sub>, Pb, and PM<sub>10</sub>. Cobb County has been designated as nonattainment for PM<sub>2.5</sub>, moderate nonattainment for 8-hour O<sub>3</sub>, and maintenance for 1-hour O<sub>3</sub> (USEPA 2011c). According to 40 CFR Part 81, no Class I areas are located within 10 kilometers of the site alternatives (USEPA 2011d).

The most recent emissions inventory for Cobb County and the Metropolitan Atlanta AQCR are shown in **Table 3-2**. Cobb County is considered the local area of influence, and the Metropolitan Atlanta AQCR is considered the regional area of influence for this air quality analysis. O<sub>3</sub> is not a direct emission; it is generated from reactions of volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), which are precursors to O<sub>3</sub>. Therefore, for the purposes of this air quality analysis, VOCs and NO<sub>x</sub> emissions are used to represent O<sub>3</sub> generation.

**Table 3-2. Local and Regional Air Emissions Inventory for the Proposed Action (2002)**

Area	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Cobb County	20,872	22,492	129,676	25,972	17,573	3,892
Metropolitan Atlanta AQCR	161,849	150,101	890,752	178,961	165,459	34,875

Source: USEPA 2008

Dobbins ARB currently holds an approved synthetic minor air operating permit with the Georgia Department of Natural Resources (GADNR). This permit contains operational limits in order for emissions from the facility to remain below the Title V operating permit thresholds. Any new stationary sources added to Dobbins ARB would need to be evaluated as to whether they would affect compliance with this permit. In addition, new sources could need to be added to this permit through approval by GADNR. (Dobbins ARB 2011c)

## 3.2 Noise

### 3.2.1 Definition of the Resource

Sound is defined as a particular auditory effect produced by a given source, for example the sound of rain on a rooftop. Noise and sound share the same physical aspects, but noise is considered a disturbance while sound is defined as an auditory effect. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Noise can be intermittent or continuous, steady or impulsive, and can involve any number of sources and frequencies. It can be readily identifiable or generally nondescript. Human response to increased sound levels varies according to the source type, characteristics of the sound source, distance between source and receptor, receptor sensitivity, and time of day. How an individual responds to the sound source will determine if the sound is viewed as music to one's ears or as annoying noise. Affected receptors are



specific (e.g., schools, churches, or hospitals) or broad (e.g., nature preserves or designated districts) areas in which occasional or persistent sensitivity to noise above ambient levels exists.

### Noise Metrics and Regulations

Although human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibel (dBA) is used to characterize sound levels that can be sensed by the human ear. “A-weighted” denotes the adjustment of the frequency range to what the average human ear can sense when experiencing an audible event. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (USEPA 1981a). **Table 3-3** compares common sounds and shows how they rank in terms of the effects of hearing. As shown, a whisper is normally 30 dBA and considered to be very quiet while an air conditioning unit 20 feet away is considered an intrusive noise at 60 dBA. Noise levels can become annoying at 80 dBA and very annoying at 90 dBA. To the human ear, each 10 dBA increase seems twice as loud (USEPA 1981b).

**Table 3-3. Sound Levels and Human Response**

Noise Level (dBA)	Common Sounds	Effect
10	Just audible	Negligible*
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying Hearing damage (8 hours)
100	Garbage truck	Very annoying*
110	Pile drivers	Strained vocal effort*
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Source: USEPA 1981b and \*HDR extrapolation

### Federal Regulations

**OSHA Standards.** The Federal government has established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise. Under the Noise Control Act of 1972, the Occupational Safety and Health Administration (OSHA) established workplace standards for noise. The minimum requirement states that constant noise exposure must not exceed 90 dBA over an 8-hour period. The highest allowable sound level to which workers can be constantly exposed is 115 dBA and exposure to this level must not exceed 15 minutes within an 8-hour period. The standards limit instantaneous exposure, such as impact noise, to 140 dBA. If noise levels exceed these standards, employers are required to provide hearing protection equipment that will reduce sound levels to acceptable limits (29 CFR Part 1910.95).

**DOD Guidelines.** Sound levels, resulting from multiple single events, are used to characterize noise effects from aircraft or vehicle activity and are measured in Day-Night Average Sound Level (DNL). The DNL noise metric incorporates a “penalty” for nighttime noise events to account for increased annoyance. DNL is the energy-averaged sound level measured over a 24-hour period, with a 10-dBA penalty assigned to noise events occurring between 10:00 p.m. and 7:00 a.m. DNL values are obtained by averaging sound exposure levels over a given 24-hour period. DNL is the designated noise metric of the Federal Aviation Administration (FAA), U.S. Department of Housing and Urban Development (HUD), USEPA, and DOD for modeling airport environments.

According to the USAF, the FAA, and the HUD criteria, residential units and other noise-sensitive land uses are “clearly unacceptable” in areas where the noise exposure exceeds 75 dBA DNL, “normally unacceptable” in regions exposed to noise between 65 and 75 dBA DNL, and “normally acceptable” in areas exposed to noise of 65 dBA DNL or less. The Federal Interagency Committee on Noise developed land use compatibility guidelines for noise in terms of a DNL sound level (FICON 1992). For outdoor activities, the USEPA recommends 55 dBA DNL as the sound level below which there is no reason to suspect that the general population would be at risk from any of the effects of noise (USEPA 1974).

**State Regulations.** The State of Georgia does not have a comprehensive noise control regulation (State of Georgia 2011). Therefore, the sound level limits contained in the Cobb County or City of Marietta Code of Ordinances would apply to the Proposed Action.

**Local Regulations.** Dobbins ARB is located in Cobb County, and Site Alternative 4 is located within the Marietta city limits. Noise regulations for Cobb County are contained in Chapter 50, Article VII of the *Cobb County Code of Ordinances*. Per the ordinance, “loud noise” from construction activities (e.g., pile driver, pneumatic hammer, electric saws, and drills) are only permitted between 7:00 a.m. and 9:00 p.m., Monday through Saturday (Cobb County 2010).

Noise regulations for the City of Marietta are contained in Chapter 10-6 of the *Marietta Code of Ordinances*. Per the ordinance, operation of any sound-producing source cannot exceed the following limits (City of Marietta 2009). However, these sound level limits could be exceeded if a special administrative permit is obtained.

- At the boundary of a residential, public space, institutional, commercial, or business area, sound levels cannot exceed 65 dBA between 7:00 a.m. and 11:00 p.m., and 60 dBA between 11:00 p.m. and 7:00 a.m.
- At the boundary of a industrial or manufacturing area, sound levels cannot exceed 70 dBA at any time.

In addition, construction activities within 1,000 feet of any residential area are not permitted between 7:00 p.m. and 7:00 a.m. or anytime on Sundays. However, a permit may be granted for construction activities during these times if the city engineer determines that these activities would not impair the public’s health or safety (City of Marietta 2009).

### Construction Sound Levels

Building demolition and construction work can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. **Table 3-4** lists noise levels associated with common types of construction equipment. Construction equipment usually exceeds the ambient sound levels by 20 to 25 dBA in an urban environment and up to 30 to 35 dBA in a quiet suburban area.

**Table 3-4. Predicted Noise Levels for Construction Equipment**

<b>Construction Category and Equipment</b>	<b>Predicted Noise Level at 50 feet (dBA)</b>
<b>Clearing and Grading</b>	
Bulldozer	80
Grader	80–93
Truck	83–94
Roller	73–75
<b>Excavation</b>	
Backhoe	72–93
Jackhammer	81–98
<b>Building Construction</b>	
Concrete mixer	74–88
Welding generator	71–82
Pile driver	91–105
Crane	75–87
Paver	86–88

Source: USEPA 1971

### 3.2.2 Affected Environment

The ambient noise environment throughout Dobbins ARB is affected mainly by aircraft operations and automobile traffic, with military aircraft operations being the primary sound sources. Flying units at Dobbins ARB include the 94th Airlift Wing of AFRC, the Georgia Army National Guard (GAARNG), and the U.S. Army Reserve. In addition, aircraft from AFP-6 fly out of Dobbins ARB. Aircraft include the C-130, UH-60, and UH-72; and the C-5, and C-130 aircraft delivered by AFP-6. As shown on **Figure 3-1**, the 2011 DNL noise contours extend along the runway centerline to the east and west (Dobbins ARB 2011b). The 2011 DNL noise contours are directly south and west of the four alternative sites; no land within the alternative site boundaries is encompassed by the 2011 noise contours.

Vehicle use associated with military operations at Dobbins ARB consists of passenger, delivery trucks, and military vehicles. Passenger vehicles compose most of the vehicles present at Dobbins ARB and the surrounding community roadways. Roadways around the installation include South Cobb Drive to the north, Route 41 (Cobb Parkway) to the east, Atlanta Road to the west, and Windy Hill Road to the south. Atlanta Road borders Site Alternative 1 to the west; South Cobb Drive borders Site Alternative 1 to the north. South Cobb Drive borders Site Alternative 3 to the north, and Site Alternative 4 to the south. Within the installation boundary, Atlanta Avenue borders Site Alternative 2 to the south.

Site Alternative 1 is at the northwest corner of the installation, and Site Alternative 4 is outside the installation boundary to the north. Therefore, these site alternatives are bordered by potentially noise-sensitive land uses outside of the installation boundary. The land use west of Site Alternative 1 is a mix of businesses, industrial areas, and residential homes. Public/semi-public land use borders Site Alternative 1 to the north including the Cobb County Water Department. Site Alternative 4 is surrounded by public/semi-public land use to the north and east, which includes Life University, Southern Polytechnic State University, their associated facilities, and the Bright LIFE childcare and education center.

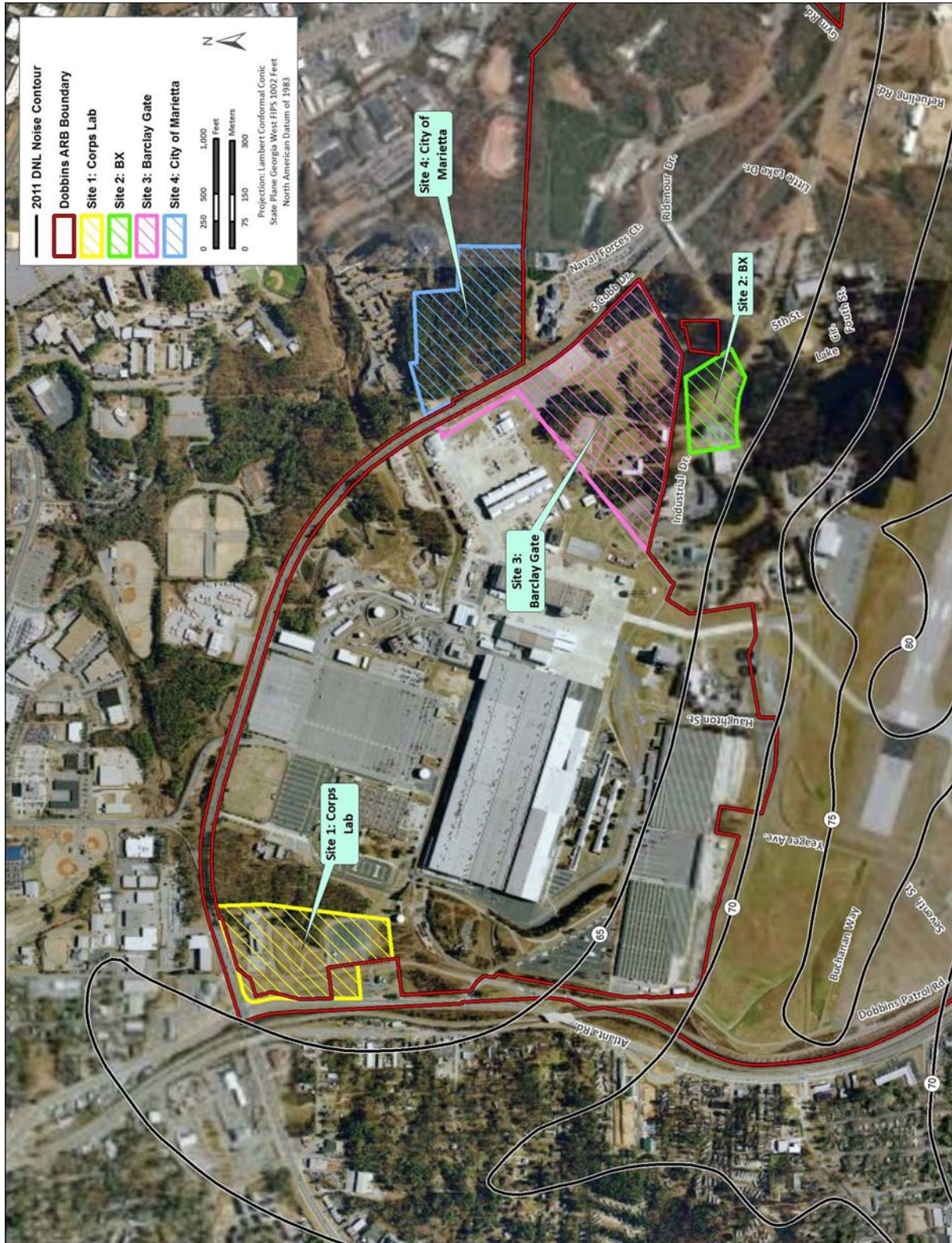


Figure 3-1. 2011 DNL Noise Contours at Dobbins ARB



Considering the military aircraft operations and vehicle traffic at and adjacent to Dobbins ARB, the ambient sound environment around the four site alternatives is likely to resemble a noisy urban residential area.

### 3.3 Land Use

#### 3.3.1 Definition of the Resource

The term “land use” refers to real property classifications that indicate either natural conditions or the types of human activity occurring on a parcel. In many cases, land use descriptions are codified in local zoning laws. There is, however, no nationally recognized convention or uniform terminology for describing land use categories. As a result, the meanings of various land use descriptions, “labels,” and definitions vary among jurisdictions.

Natural conditions of property can be described or categorized as unimproved, undeveloped, and natural or scenic area. There is a wide variety of land use categories resulting from human activity. Descriptive terms often used include residential, commercial, industrial, agricultural, institutional, and recreational.

Two main objectives of land use planning are to ensure orderly growth and compatible uses among adjacent property parcels or areas. Compatibility among land uses fosters the societal interest of obtaining the highest and best uses of real property. Tools supporting land use planning include written master plans/management plans and zoning regulations. According to AFI 32-7062, *Air Force Comprehensive Planning*, the site planning process must address potential noise impacts and consider the location of buildings. In appropriate cases, the locations and extent of proposed actions need to be evaluated for their potential effects on project site and adjacent land uses. The foremost factor affecting a proposed action in terms of land use is its compliance with any applicable land use or zoning regulations. Other relevant factors include matters such as existing land use at the project site, the types of land uses on adjacent properties and their proximity to a proposed action, the duration of a proposed activity, and its “permanence.”

#### 3.3.2 Affected Environment

Dobbins ARB is a compact installation bounded by South Cobb Drive to the north, Route 41 (Cobb Parkway) to the east, Atlanta Road to the west, and Windy Hill Road to the south. The dominant features on the northern side of the installation are the AFP-6 facilities. All of land within Site Alternative 3 and the majority of Site Alternative 1 are within AFP-6. Site Alternative 2 is within the Dobbins ARB installation boundary in the northern portion of the installation. Site Alternative 4 is adjacent to the northern installation boundary in the City of Marietta.

The eastern portion of Site Alternative 1 is owned by AFMC. AFMC leases property to AFP-6 and Cobb County. The land that is leased to AFP-6 is operated and maintained by Lockheed Martin. Lockheed Martin is not currently using any of the buildings on this site to perform maintenance on aircraft. The land that is leased to Cobb County is sub-leased to the Marietta Museum of History. This property accommodates the Aviation Wing of the Marietta Museum of History, has aircraft displays, and several trailers in a fenced-in area associated with the museum. Additional buildings on Site 1 include a former USACE laboratory facility, which the Georgia DOD uses for storage. A fitness trail runs through this property. The western portion of the property is within Dobbins ARB and is owned and maintained by AFRC. Approximately 5.8 acres in the northern portion is owned by the Georgia DOD.

Site Alternative 2 is adjacent to the existing BX facility. The BX is at the southwest corner of Site 2 between Industrial Drive and Atlantic Avenue. All of the property is owned by AFRC.



All of the property at Site Alternative 3 is owned by AFMC and operated by Lockheed Martin. There are numerous buildings on this site, some of which are used for storage and some are vacant. There are two trailers that are used as temporary explosive storage facilities on a parking lot at the north end of the site.

Site Alternative 4 consists of Wildwood Park and is owned and operated by the City of Marietta. The majority of the park is forested and there are several streams that run through the property. There are numerous walking trails throughout the park and a dog park at the entrance.

**On-Installation Land Use.** The on-installation land use was obtained from the 2010 Dobbins ARB General Plan (Dobbins ARB 2010a). The General Plan identifies 10 land use categories: administrative, aircraft operations and maintenance, airfield pavements, community commercial, community service, housing, industrial, medical, open space, and outdoor recreation. As shown on **Figure 3-2**, the Lockheed Martin facilities are adjacent to Dobbins ARB to the northwest. As such, Site Alternative 3 and the majority of Site Alternative 1 are designated as Lockheed Martin land use. The western portion of Site Alternative 2 is designed commercial, and the eastern portion is designated open space.

**Off-Installation Land Use.** The off-installation land use was obtained from the *2011 Air Installation Compatible Use Zone (AICUZ) Study for Dobbins ARB* (Dobbins ARB 2011b). The 2011 AICUZ Study identifies five land use categories: commercial, industrial, public/semi-public, recreational, and residential. As shown in **Figure 3-2**, the northern portion of Site Alternative 1 is not part of AFP-6, it is designated as public/semi-public. Site Alternative 4 is designated as recreational land use. Site Alternative 4 is surrounded to the north and east by public/semi-public land use, which includes Life University, Southern Polytechnic State University, their associated facilities, and the Bright LIFE childcare and education center. Dobbins ARB borders Site Alternative 1 to the west and south. On-installation land use to the west of Site 1 is designated Lockheed Martin, and to the south is designated administrative.

**Future Land Use.** According to the 2010 Dobbins ARB General Plan, future land use will continue to support current missions, and provide for potential expansion of missions and activities. Future land use at the installation is defined by functional uses, which allow for development within each land use category, and provide adequate infrastructure to support growth (Dobbins ARB 2010a). The future land use is shown on **Figure 3-3**.

The construction of a new commissary is one of the 13 “Planned, Programmed, and Recommended Projects” in the 2010 General Plan. The recommendations include constructing the proposed commissary at one of two locations: either at the intersection of South Cobb Drive and Atlanta Road, which encompasses the former USACE Lab (Site Alternative 1); or adjacent to the existing BX (Site Alternative 2). Site Alternative 1 is part of AFP-6; therefore, the General Plan does not make any future land use recommendations for this site. As discussed previously, the current land use within the Site Alternative 2 boundary is part commercial and part open space. The future land use shows this area being almost entirely commercial, with some open space in the eastern portion of the site.

Site Alternative 3 is part of AFP-6 and, as such, is not included in the future land use portion of the General Plan. Site Alternative 4 is outside the installation boundary within the City of Marietta. The *Marietta, Georgia Official Future Land Use Map* designates this parcel as parks/recreation. The future land use to the north and east of Site Alternative 4 is community service and institutional, which would be essentially the same as existing land use (City of Marietta 2010a).

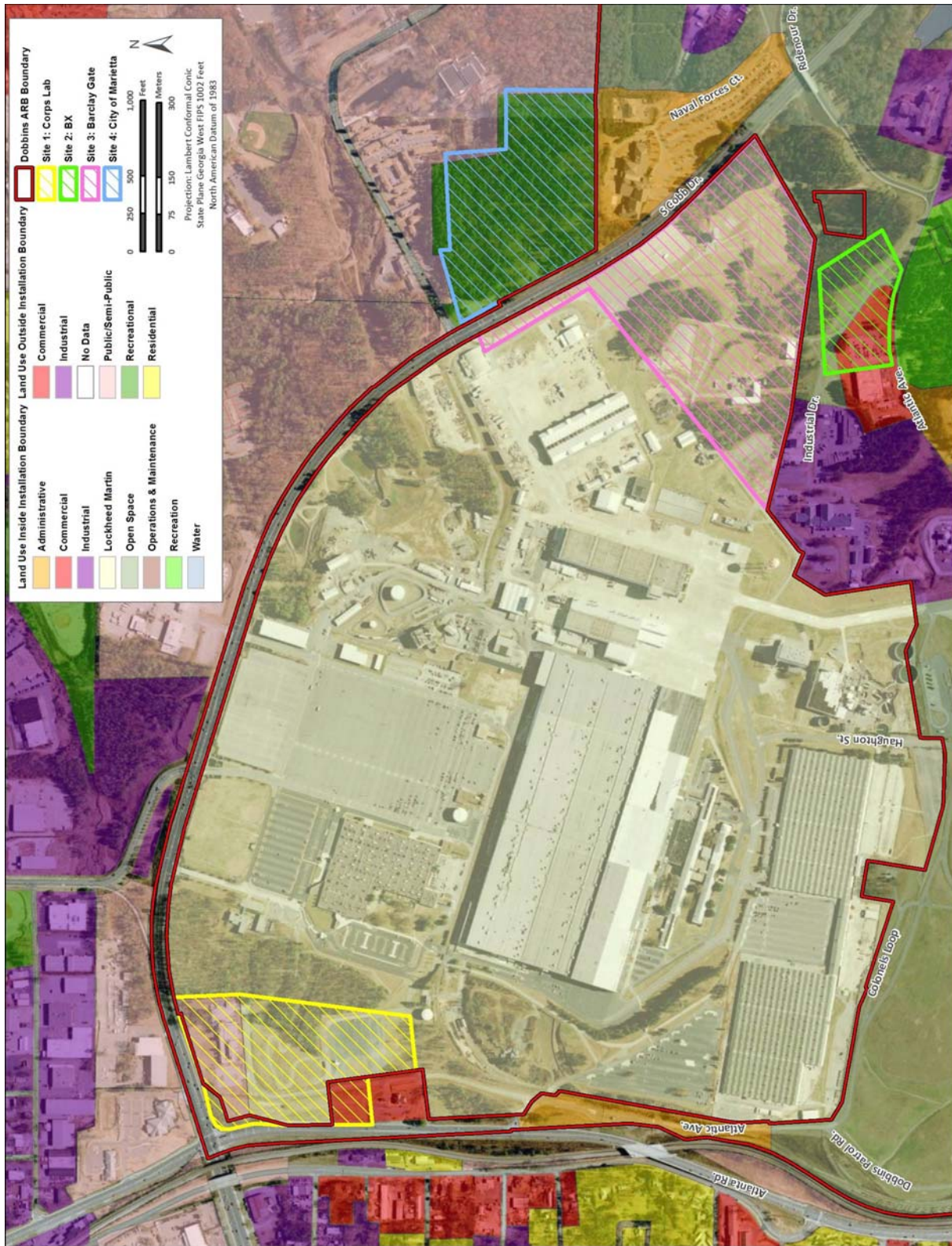


Figure 3-2. Current Land Use at Dobbins ARB



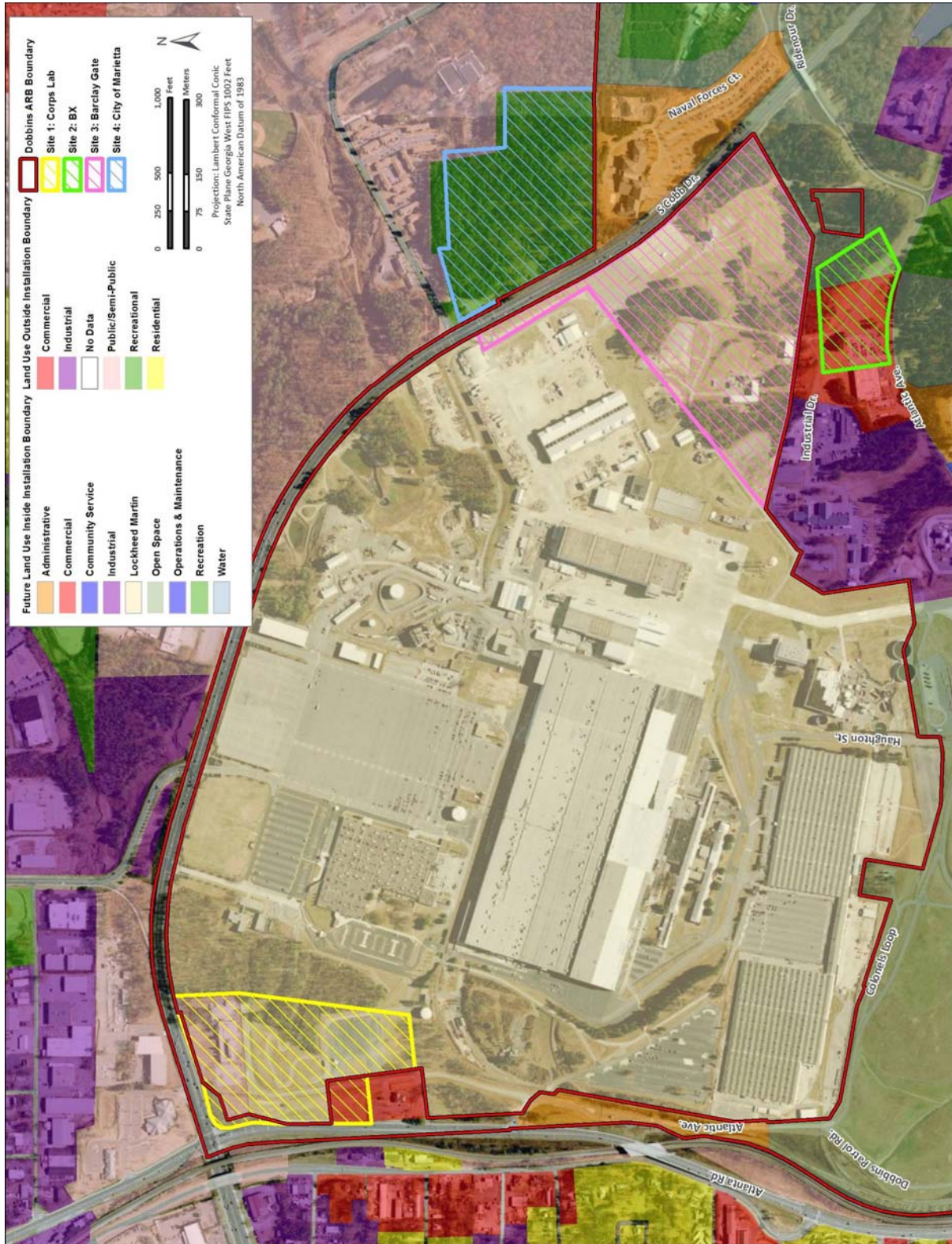


Figure 3-3. Future Land Use at Dobbins ARB

## 3.4 Geological Resources

### 3.4.1 Definition of the Resource

**Topography.** Topography refers to the general shape and arrangement of a land surface, including its elevation and the position of both natural and artificial features.

**Geology.** Geology is the study of Earth's composition and provides information on the structure of surface and subsurface features. Such information derives from field analysis based on observations of the surface and borings to identify subsurface composition.

**Soils.** Soils are the unconsolidated materials overlaying bedrock or other parent materials. Soils are usually described in terms of their complex type, slope, and physical characteristics. Differences among soil types in terms of their structure, elasticity, strength, shrink-swell potential, and erosion potential affect their abilities to support certain uses. In appropriate cases, soil properties must be examined for their compatibility with particular construction activities or types of land use.

**Prime Farmland.** Prime farmland is protected under the Farmland Protection Policy Act (FPPA) of 1981. Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. The land could be cropland, pasture, rangeland, or other land, but not urban built-up land or water. The intent of the FPPA is to minimize the extent that Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses.

**Geologic Hazards.** Geologic hazards are defined as a natural geologic event that can endanger human lives and property. Examples include earthquakes, landslides, rock falls, ground subsidence, and avalanches.

### 3.4.2 Affected Environment

#### Topography

Dobbins ARB is within the Central Uplands District of the Piedmont Physiographic Province, and the topography of the installation is gently to moderately rolling, with broad ridges dissected by several drainages. Elevations range from 950 feet above mean sea level along the eastern boundary to 1,100 feet above sea level along the western boundary (Dobbins ARB 2007c).

**Corps Lab Site.** The Corps Lab site is relatively level, with elevations about 1,100 feet above mean sea level.

**BX Site.** The BX Site is relatively level, with some rolling terrain and an elevation of 1,000 to 1,040 feet above mean sea level.

**Barclay Gate Site.** The Barclay Gate site is generally level, with some rolling terrain and an elevation of 1,000 to 1,040 feet above mean sea level.

**City of Marietta Site.** The City of Marietta Site is generally wooded, relatively level, with some steeper slopes. Elevations range from 1,000 to 1,070 feet above mean sea level (USGS 2011c)

## Geology

The installation and the alternative site locations are underlain by the Powers Ferry Geologic Formation. The formation consists of intercalated gneiss, schist, and amphibolites in decreasing abundance. It is estimated to be more than 3,290 feet thick and dates from the late Precambrian and early Paleozoic eras (500–600 million years ago) (USGS 2011a).

## Soils

The Natural Resources Conservation Service (NRCS) mapped soil on Dobbins ARB in the vicinity of the alternative site locations. Surface soils are predominantly micaceous silts and micaceous sandy silts derived from the weathering of underlying rock. The two main soil associations at the installation are the Madison-Gwinnett-Cecil and the Madison-Gwinnett-Pacolet Associations. Both are characterized by well-drained soils with a sandy loam and clay loam surface horizon and clayey to loamy subsurface horizon (Dobbins ARB 2007c).

**Figure 3-4** shows the locations of soils mapped on Dobbins ARB that underlie the alternative site locations. The following text describes the soil series relevant to the Proposed Action mapped on the installation, and the soil complexes underlying each proposed site.

*Appling.* The Appling series consists of very deep, well-drained, moderately permeable soils on ridges and side slopes of the Piedmont uplands. They are deep to saprolite and very deep to bedrock. They formed in residuum, weathered from felsic igneous and metamorphic rocks. Slopes range from 2 to 10 percent on site. The Appling series has a low shrink-swell potential.

*Madison.* The Madison series consists of well-drained, moderately permeable soils that formed in residuum weathered from metamorphic or igneous rocks high in mica content. They are very deep to bedrock and moderately deep to saprolite. They are on gently sloping to steep uplands in the Piedmont. Slopes range from 2 to 25 percent on site. The Madison series has a low shrink-swell potential.

*Pacolet.* The Pacolet series consists of very deep, well-drained, moderately permeable soils that formed in residuum weathered mostly from felsic igneous and metamorphic rocks of the Piedmont uplands. Slopes range from 10 to 25 percent on site. The Pacolet series has a low shrink-swell potential.

*Urban Land.* Urban land consists of areas where the original soil has been removed or altered during excavation and construction activities. Buildings, roads, parking lots, and residences are located in these areas.

**Corps Lab Site.** The primary soil complexes at the Corp Lab Site are the Urban land-Appling complex and the Urban land-Madison Complex.

**BX Site.** The primary soil complexes at the BX Site are the Madison-Pacolet complex and the Pacolet sandy clay loam complex.

**Barclay Gate Site.** The primary soil complexes at the Barclay Gate Site are the Madison-Pacolet complex and Urban land.

**City of Marietta Site.** The primary soil complexes at the City of Marietta Site are the Madison clay loam complex and Urban land.



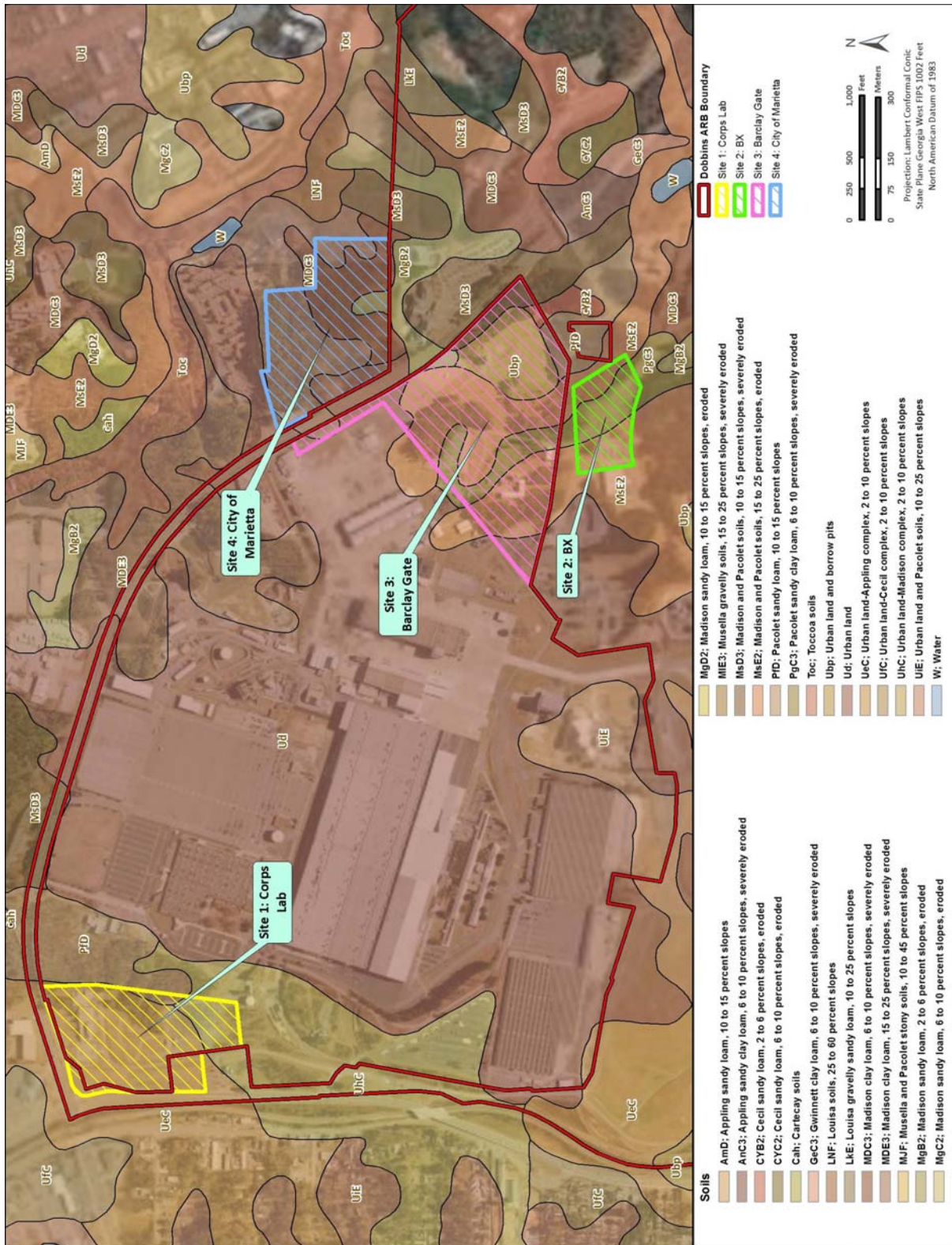


Figure 3-4. Mapped Soils Underlying the Proposed Commissary Sites at Dobbins ARB

Due to agricultural use prior to the establishment of the installation in 1942 and subsequent development, many of the native soil profiles on Dobbins ARB have been disturbed or destroyed. Much of the original topsoil has been eroded, exposing clayey subsoils (Dobbins ARB 2007c).

### **Prime Farmland**

Dobbins ARB contains no agricultural land and there are no parcels of prime or unique farmland adjacent to the installation (Dobbins ARB 2004); therefore, the FPPA documents do not apply.

### **Geologic Hazards**

Dobbins ARB is at minimal risk from geologic hazards such as volcanism and earthquakes, since Georgia lies on a passive continental margin with a stable transition between continental and oceanic crust. The U.S Geological Survey (USGS) produced seismic hazard maps based on current information about the frequency and intensity of earthquakes. The maps show the levels of horizontal shaking that have a 2 in 100 chance of being exceeded in a 50-year period. Shaking is expressed as a percentage of the force of gravity (percent g) and is proportional to the hazard faced by a particular type of building. In general, little or no damage is expected at values less than 10 percent g, moderate damage could occur at 10 to 20 percent g, and major damage could occur at values greater than 20 percent g. The 2008 National Seismic Hazard map produced by the USGS shows that Dobbins ARB has a seismic hazard rating of approximately 8 to 10 percent g (USGS 2011b), making the risk of damage from seismic activity minimal.

## **3.5 Water Resources**

### **3.5.1 Definition of the Resource**

Hydrology consists of the redistribution of water through the processes of evapotranspiration, surface runoff, and subsurface flow. Hydrology results primarily from (1) temperature and total precipitation that determine evapotranspiration rates, (2) topography that determines rate and direction of surface flow, and (3) soil and geologic properties that determine rate of subsurface flow and recharge to the groundwater reservoir.

Groundwater consists of subsurface hydrologic resources. It is an essential resource that functions to recharge surface water and is used for drinking, irrigation, and industrial processes. Groundwater typically can be described in terms of depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations. Surface water resources generally consist of wetlands, lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale.

Waters of the United States are defined within the Clean Water Act (CWA), as amended, and jurisdiction is addressed by the USEPA and the USACE. These agencies assert jurisdiction over (1) traditional navigable waters, (2) wetlands adjacent to navigable waters, (3) nonnavigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-around or have continuous flow at least seasonally, and (4) wetlands that directly abut such tributaries. Section 404 of the CWA authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredge or fill into waters of the United States including wetlands. Encroachment into waters of the United States and wetlands requires a permit from the state and the Federal government. An encroachment into wetlands or other “waters of the United States” resulting in displacement or movement of soil or fill materials has the potential to be viewed as a violation of the CWA if an appropriate permit



has not been issued by the USACE. In Georgia, the USACE has primary jurisdictional authority to regulate wetlands and waters of the United States.

A water body can be deemed impaired if water quality analyses conclude that exceedances of water quality standards, established by the CWA, occur. The CWA requires that states establish a Section 303(d) list to identify impaired waters and establish Total Maximum Daily Loads (TMDLs) for the sources causing the impairment. A TMDL is the maximum amount of a substance that can be assimilated by a water body without causing impairment.

The USEPA published the technology-based Final Effluent Limitations Guidelines (ELGs) and New Performance Standards for the Construction and Development Point Source Category on 1 December 2009 to control the discharge of pollutants from construction sites. The Rule became effective on 1 February 2010. After this date, all USEPA- or state-issued construction general permits were to be revised to incorporate the ELG requirements. The USEPA currently regulates large and small construction activity through the 2008 Construction General Permit (CGP), which will expire on 15 February 2012. A proposed new CGP would be finalized prior to the expiration of the 2008 CGP; therefore, all new construction sites would need to meet the requirements outlined in the proposed new CGP, including technology-based and water-quality-based effluent limits that apply to all discharges, unless otherwise specified in the CGP. Permittees must select, install, and maintain effective erosion- and sedimentation-control measures as identified and as necessary to comply with the proposed new CGP, including the following:

- Sediment controls, such as sediment basins, sediment traps, silt fences, and vegetative buffer strips
- Offsite sediment tracking and dust control
- Runoff management
- Erosive velocity control
- Post-construction stormwater management
- Construction and waste materials management
- Non-construction waste management
- Erosion control and stabilization
- Spill/release prevention.

Construction activities, such as clearing, grading, trenching, and excavating, result in the disturbance of soils and sediment. If not managed properly, disturbed soils and sediments can easily be washed into nearby water bodies during storm events, where water quality is reduced. Section 438 of the Energy Independence and Security Act (EISA) (42 U.S.C. 17094) establishes into law new stormwater design requirements for Federal construction projects that disturb a footprint of greater than 5,000 ft<sup>2</sup> of land. EISA Section 438 requirements are independent of stormwater requirements under the CWA. The project footprint consists of all horizontal hard surface and disturbed areas associated with project development. Under these requirements, predevelopment site hydrology must be maintained or restored to the maximum extent technically feasible with respect to temperature, rate, volume, and duration of flow. Predevelopment hydrology shall be modeled or calculated using recognized tools and must include site-specific factors such as soil type, ground cover, and ground slope. Site design shall incorporate stormwater retention and reuse technologies such as bioretention areas, permeable pavements, cisterns/recycling, and green roofs to the maximum extent technically feasible. Post-construction analyses would be conducted to evaluate the effectiveness of the as-built stormwater reduction features

(DOD 2010a). These regulations have been incorporated into applicable DOD Unified Facilities Criteria (UFC) in April 2010, which stated that low-impact development (LID) features would need to be incorporated into new construction activities to comply with the restrictions on stormwater management promulgated by EISA Section 438. LID is a stormwater management strategy designed to maintain site hydrology and mitigate the adverse impacts of stormwater runoff and nonpoint source pollution. LIDs can manage the increase in runoff between pre- and post-development conditions on the project site through interception, infiltration, storage, or evapotranspiration processes before the runoff is conveyed to receiving waters. Examples of the methods include bioretention, permeable pavements, cisterns/recycling, and green roofs (DOD 2010b). Additional guidance is provided in the USEPA's *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA 2009).

In addition, wetlands are protected under EO 11990, *Protection of Wetlands*, the purpose of which is to reduce adverse impacts associated with the destruction or modification of wetlands. This order directs Federal agencies to provide leadership in minimizing the destruction, loss, or degradation of wetlands. In furtherance of NEPA, agencies shall avoid undertaking or assisting in new construction in wetlands unless there is no practical alternative. Each agency will provide opportunity for early public review of plans and proposals for construction in wetlands, including those whose impact is not significant to require EIS preparation. The Deputy Assistant Secretary of the Air Force - Environment, Safety, and Occupational Health or another designated official must sign a Finding of No Practicable Alternative (FONPA) before any action within a Federal wetland may proceed as specified in Secretary of the Air Force Order 780.1. The recently revised AFI 32-7064 grants approval authority to the chairperson of the Headquarters AFRC Environmental Protection Committee for wetlands encroachment FONPAs. In preparing a FONPA, the installation must consider the full range of practicable alternatives that will meet justified program requirements, are within the legal authority of the U.S. Army, meet technology standards, are cost-effective, do not result in unreasonable adverse environmental impacts, and other pertinent factors. Once the practicality of alternatives has been fully assessed, only then should a statement regarding the FONPA be made into the associated FONSI or record of decision.

As a result of the above-mentioned state and Federal regulations, it is the responsibility of the USAF to identify jurisdictional waters of the United States (including wetlands) occurring on USAF installations that have the potential to be impacted by installation activities. Such impacts include construction of roads, buildings, runways, taxiways, navigation aids, and other appurtenant structures; or activities as simple as culvert crossings of small intermittent streams, rip-rap placement in stream channels to curb accelerated erosion, and incidental fill and grading of wet depressions.

Floodplains are areas of low-level ground along rivers, stream channels, or coastal waters. The living and nonliving parts of natural floodplains interact with each other to create dynamic systems in which each component helps to maintain the characteristics of the environment that supports it. Floodplain ecosystem functions include natural moderation of floods, flood storage and conveyance, groundwater recharge, nutrient cycling, water quality maintenance, and a diversity of plants and animals. Floodplains provide a broad area to inundate and temporarily store floodwaters. This reduces flood peaks and velocities and the potential for erosion. In their natural vegetated state, floodplains slow the rate at which the incoming overland flow reaches the main water body (FEMA 1986).

Floodplains are subject to periodic or infrequent inundation due to rain or melting snow. Risk of flooding typically hinges on local topography, the frequency of precipitation events, and the size of the watershed above the floodplain. Flood potential is evaluated by the Federal Emergency Management Agency (FEMA), which defines the 100-year floodplain. The 100-year floodplain is the area that has a 1 percent chance of inundation by a flood event in a given year. Certain facilities inherently pose too great a risk to be in either the 100- or 500-year floodplain, such as hospitals, schools, or storage buildings for

irreplaceable records. Federal, state, and local regulations often limit floodplain development to passive uses, such as recreational and preservation activities, to reduce the risks to human health and safety.

EO 11988, *Floodplain Management*, requires Federal agencies to determine whether a proposed action would occur within a floodplain. This determination typically involves consultation of FEMA Flood Insurance Rate Maps (FIRMs), which contain enough general information to determine the relationship of the project area to nearby floodplains. EO 11988 directs Federal agencies to avoid floodplains unless the agency determines that there is no practicable alternative.

### 3.5.2 Affected Environment

**Groundwater.** Groundwater under Dobbins ARB consists of a surficial water table and bedrock aquifers; however, the bedrock aquifers beneath the installation are generally not productive and contain a high concentration of minerals (Dobbins ARB 2010a). The aquifer beneath the sites is unconfined, characterized by three geologic strata (residual soils, underlying fractured bedrock, and the competent bedrock). The residual soils and underlying fractured bedrock provide the dominant pathway for groundwater flow. Average hydraulic conductivities in the vicinity are between 0.00005 to 0.002 feet per minute (USAF 2010). Groundwater in the northern Piedmont Physiographic Province occurs predominantly in joints and fractures in the bedrock and in the pore spaces of the overlying residual soils. Recharge is principally from rainfall that either seeps downward through the residuum or flows into openings in exposed rock (USAF 2010). Depth to groundwater changes from approximately 12 feet below ground surface on the eastern portion of the area (Site 1) to 60 feet below ground surface to the west (Site 3) (USAF 2010).

An overall groundwater plume for the AFP-6 Industrial Area sits underneath portions of Sites 2 and 4 and adjacent to Site 3, and is currently being more thoroughly defined. TCE and other VOCs are the most significant contaminants and remediation efforts began in 1999 with the installation of interim corrective measures. The remediation process involves nine vapor extraction wells, three dual-phase recovery wells northeast of Site 3, and seven recovery wells across the AFP-6 boundary where the groundwater has migrated off site (USAF 2010).

**Surface water.** Dobbins ARB is within the Rottenwood Creek and Poorhouse Creek watersheds, which drain into the Chattahoochee River approximately 3.5 miles southeast of the installation. There are 2 man-made lakes on the installation (Big Lake and Little Lake), 28 delineated streams and tributary stream reaches, 5 spill retention ponds, 3 sedimentation detention basins, and 4 stormwater retention basins. The spill retention ponds act as containment basins for potential petroleum, oil, and lubricants (POL) spills that could occur near the flight line, while the sedimentation basins are used for stormwater and sediment retention. The installation is drained throughout by a series of storm sewers and ditches. Stormwater exits through outfalls surrounding the installation boundary. The southern outfalls of the installation drain into Poorhouse Creek and the northern outfalls drain into Rottenwood Creek (Dobbins ARB 2007c).

A drainage ditch crosses the northwestern most portion of Site 1. No other surface water features occur within the site. No surface waters occur within Site 2; however, adjacent unnamed streams can be found to the east and southwest. Surface water from Site 3 drains via a small unnamed stream along the western border of the site into a culvert that directs drainage under the parking lot for Building 600. No other surface water features occur within the site (Dobbins ARB 2007c). An intermittent stream crosses Site 4 and is used to collect surface runoff from nearby properties. The stream only flows during storm events and no other surface waters are found on Site 4.

**Wetlands/Floodplains.** Dobbins ARB has 21 wetland areas totaling approximately 23 acres as determined in a 2009 wetland delineation. The wetlands are predominantly found along Rottenwood

Creek, Poorhouse Creek, and surrounding Big Lake and Little Lake (Dobbins ARB 2009a). **Figure 3-5** provides a map of the delineated wetlands and their proximity to the proposed development sites.

No wetlands are present within any of the proposed sites. The nearest wetlands to Sites 1 and 2 are adjacent to Big Lake, approximately 1 mile to the southeast and 0.1 mile to the south, respectively. The nearest wetlands found on installation from Sites 3 and 4 are associated with Little Lake approximately 0.1 and 0.4 miles, respectively to the southeast (Dobbins ARB 2009a).

The nearest off-installation wetlands to Site 4 are approximately 0.2 miles to the east and are associated with a lake near Life University. However, drainage patterns on the site flow southeast and no impacts would be expected on this water body. Therefore, impacts on this water body are not analyzed further in this document.

None of the proposed sites occur within the 100-year floodplain. Site 1 has no adjacent floodplains. Sites 2, 3, and 4 are approximately 0.4 miles northwest of the nearest floodplain (USAF 2010).

## 3.6 Biological Resources

### 3.6.1 Definition of the Resource

Biological resources include native or naturalized plants and animals and the habitats (e.g., grasslands, forests, and wetlands) in which they exist. Protected and sensitive biological resources include Endangered Species Act (ESA) - listed species (threatened or endangered) and those proposed for ESA listing as designated by the U.S. Fish and Wildlife Service (USFWS); state-listed threatened, endangered, or special concern species; migratory birds; and bald and golden eagles. Sensitive habitats include those areas designated by the USFWS as critical habitat protected by the ESA and as sensitive ecological areas designated by state or other Federal rulings. Sensitive habitats also include wetlands, plant communities that are unusual or limited in distribution, and important seasonal use areas for wildlife (e.g., migration routes, breeding areas, crucial summer and winter habitats).

The ESA (16 U.S.C. §1531 et seq.) establishes a Federal program to protect and recover imperiled species and the ecosystems upon which they depend. The ESA requires Federal agencies, in consultation with the USFWS, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. Under the ESA, “jeopardy” occurs when an action is reasonably expected, directly or indirectly, to diminish numbers, reproduction, or distribution of a species so that the likelihood of survival and recovery in the wild is appreciably reduced. An “endangered species” is defined by the ESA as any species in danger of extinction throughout all or a significant portion of its range. A “threatened species” is defined by the ESA as any species likely to become an endangered species in the foreseeable future. Candidate species are plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as threatened or endangered under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. The ESA also prohibits any action that causes a “take” of any listed species. “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.”

State-protected species in Georgia are protected under the Georgia Wildflower Preservation Act of 1973 and the Georgia Endangered Wildlife Act of 1973. The Rules and Regulations of the Georgia Department of Natural Resources (DNR), Wildlife Resources Division for the Protection of Endangered, Threatened, Rare, or Unusual Species (Chapter 391-4-10) establish the procedures to be followed in the protection of endangered species of plant and animal life, as authorized by these acts.



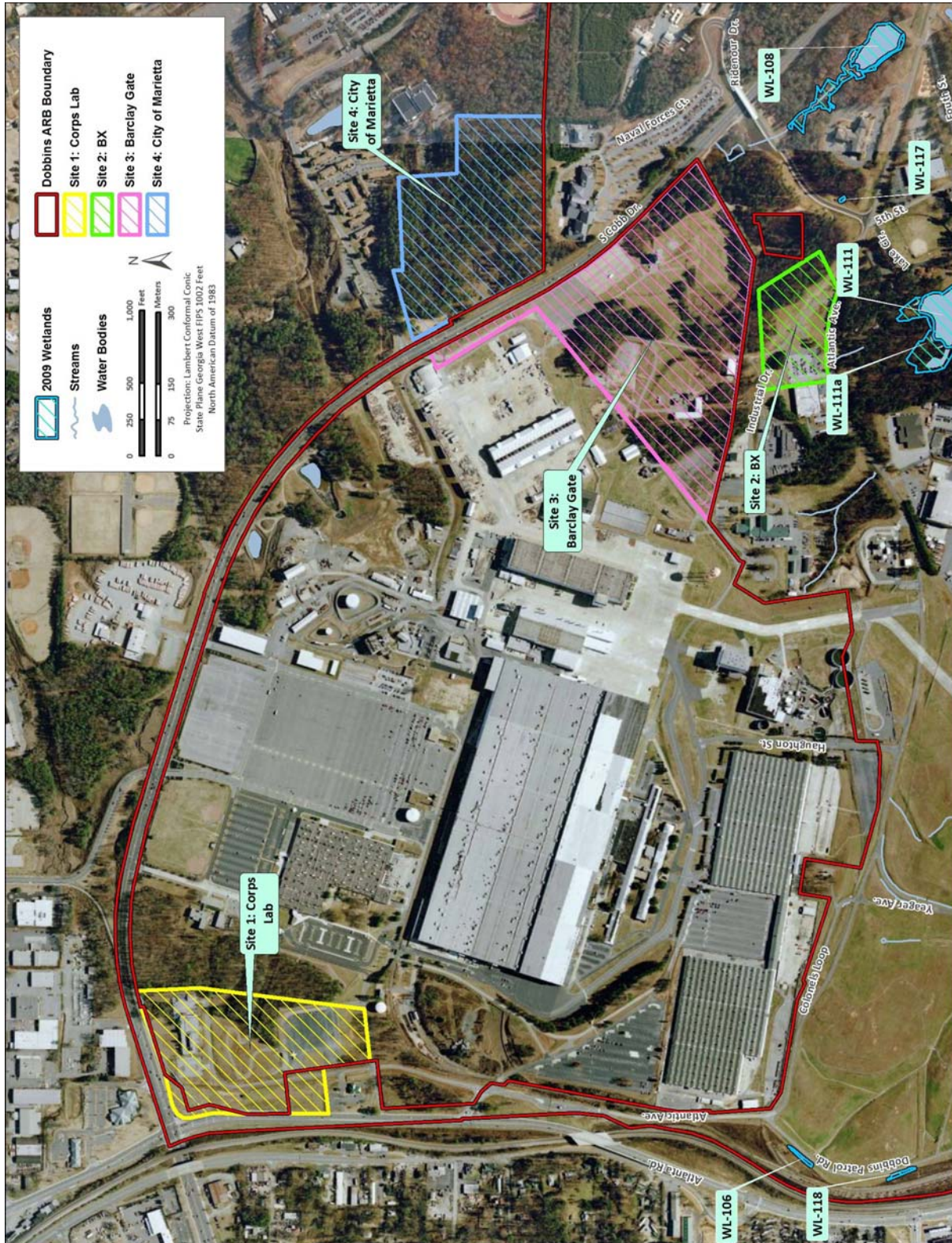


Figure 3-5. Wetlands and Stream Delineation Map for Dobbins ARB

The Migratory Bird Treaty Act of 1918 (16 U.S.C. 703–712), as amended, and EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, require Federal agencies to minimize or avoid impacts on migratory birds. Unless otherwise permitted by regulations, the Migratory Bird Treaty Act makes it unlawful to (or attempt to) pursue, hunt, take, capture, or kill any migratory bird, nest, or egg. If design and implementation of a Federal action cannot avoid measurable negative impacts on migratory birds, EO 13186 directs the responsible agency to develop and implement, within 2 years, a Memorandum of Understanding with the USFWS that shall promote the conservation of migratory bird populations.

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668c), as amended, which prohibits the “take” of bald or golden eagles in the United States. The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” For purposes of these guidelines, “disturb” means “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause: (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” based on the best scientific information available. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death, or nest abandonment.

### 3.6.2 Affected Environment

**Vegetation.** The majority of land on Dobbins ARB is either improved or semi-improved and is dominated by domestic grasses such as Bahia grass (*Paspalum notatum*) and Bermuda grass (*Cynodon dactylon*) (Dobbins ARB 2010a). Forested vegetation accounts for the vast majority of unimproved land and is primarily pine/pine hardwood forests. These forests are dominated by loblolly pine (*Pinus taeda*) though lesser amounts of short-leaf pine (*P. echinata*) and Virginia pine (*P. virginiana*) also occur (Dobbins ARB 2007a).

The majority of Site 1 is developed and in open space. The eastern-central portion of the site is forested.

The western and central portions of Site 2 consist of developed land and open areas dominated by maintained grasses and landscaping. The eastern portion is forested. According to the *2007–2011 Forest Management Plan* prepared for Dobbins ARB (Dobbins ARB 2011a), the western edge of forest stand DN-6 overlaps Site 2, as shown in **Figure 3-6** (Dobbins ARB 2011a). This stand consists of primarily loblolly pine and yellow poplar (*Liriodendron tulipifera*) with mixed hardwoods and shortleaf pine components. The health of DN-6 is considered good.

The majority of Site 3 is developed and in open space; however, various wooded areas occur throughout the site. According to the *Forest Management Plan* (Dobbins ARB 2011a), forest stand DN-6 also extends into Site 3. The portion of this forest stand was not delineated on Site 3 because it is not Dobbins ARB property.

The majority of Site 4 is forested, unimproved land that is primarily pine/pine hardwood forests. These forests are dominated by loblolly pine (*Pinus taeda*) with lesser amounts of short-leaf pine (*P. echinata*) and Virginia pine (*P. virginiana*). According to the *Forest Management Plan* (Dobbins ARB 2011a), the delineated forest stand adjacent to Site 4 to the south (stand DN-1) is a pine/hardwood stand consisting of primarily loblolly pine, yellow poplar, and other soft hardwoods with mixed hardwood and shortleaf pine components. Stand health is considered excellent (Dobbins ARB 2011a). It is assumed that forest conditions at Site 4 are very similar to the adjacent stand DN-1.



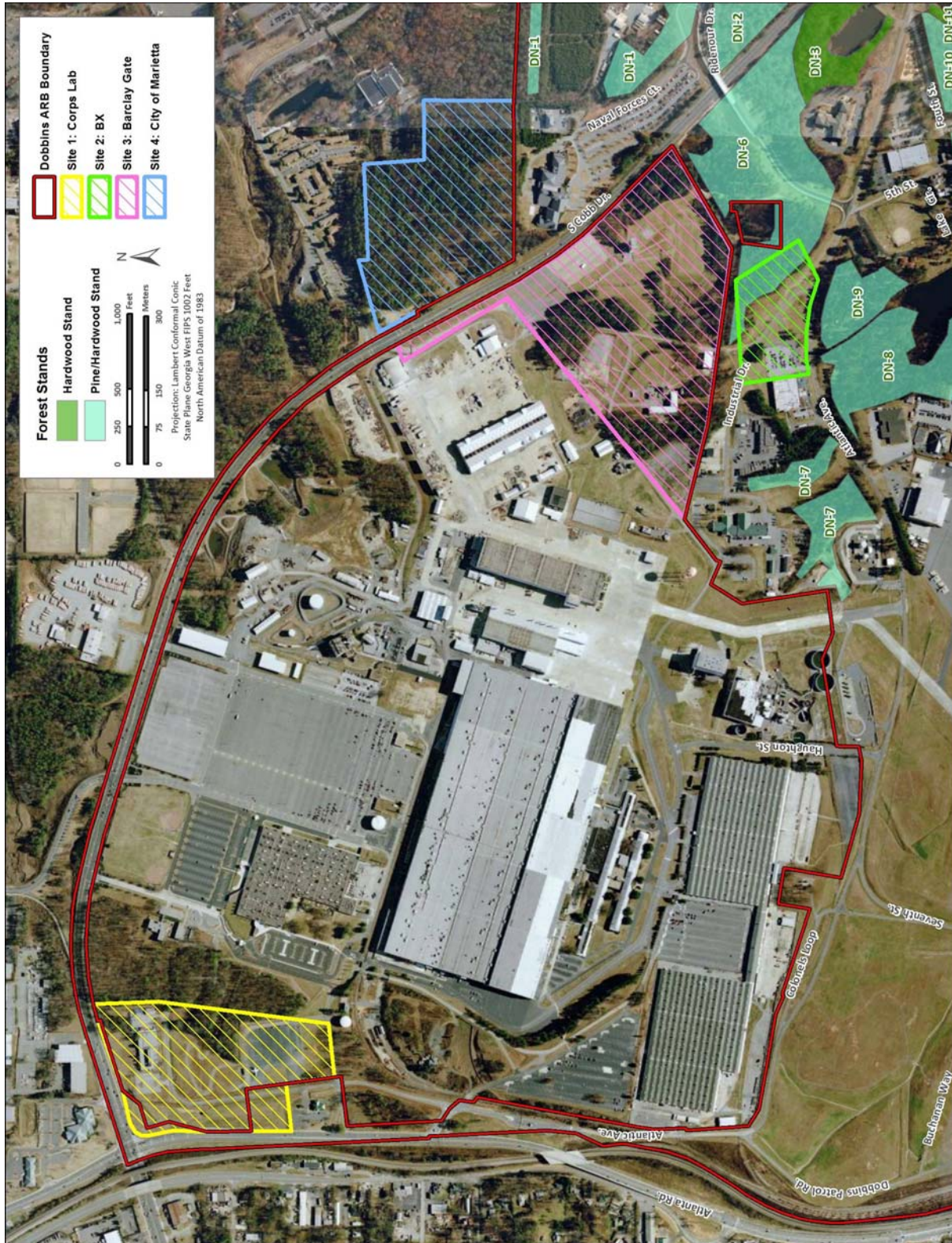


Figure 3-6. Forest Stands on Dobbins ARB

The most widespread and invasive plant species found on Dobbins ARB are privet (*Ligustrum sinensis* and *L. japonicum*), Japanese honeysuckle (*Lonicera japonica*), Chinese wisteria (*Wisteria sinensis*), mimosa (*Albizia julibrissin*), and Japanese stiltgrass (*Microstegium vimineum*). Autumn olive (*Elaeagnus umbellata*), English ivy (*Hedera helix*), princess tree (*Paulownia tomentosa*), sericea lespedeza (*Lespedeza cuneata*), multiflora rose (*Rosa multiflora*), and tree of heaven (*Ailanthus altissima*) are other less abundant, nonnative species that have been documented at Dobbins ARB (Dobbins ARB 2007a). Before the implementation of an installation-wide eradication program, kudzu (*Pueraria lobata*) was considered the primary nuisance species on the installation. Control efforts have been extremely successful and little kudzu was observed on the installation during 2004 field surveys. Continued monitoring and treatment will be required for the long-term control of this species, particularly along the shared Dobbins ARB/AFP-6 border and Route 280, where its presence is still extensive (Dobbins ARB 2007a).

**Wildlife.** The most abundant native birds in the vicinity of Dobbins ARB include the wild turkey (*Meleagris gallopavo*), northern bobwhite (*Colinus virginianus*), mourning dove (*Zenaidura macroura*), northern cardinal (*Cardinalis cardinalis*), tufted titmouse (*Baeolophus bicolor*), and eastern towhee (*Pipilo erythrophthalmus*). Canada geese (*Branta canadensis*), common grackles (*Quiscalus quiscula*), red-winged blackbirds (*Agelaius phoeniceus*), and rusty blackbirds (*Euphagus carolinus*) are also common native species. European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) are common nonnative bird species at Dobbins ARB (Dobbins ARB 2007a). Mammalian species that dominate the ecoregion include the white-tailed deer (*Odocoileus virginianus*), red fox (*Vulpes vulpes*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), eastern cottontail (*Sylvilagus floridanus*), and opossum (*Didelphina virginiana*) (Dobbins ARB 2007a). The eastern box turtle (*Terrapene carolina*), common garter snake (*Thamnophis sirtalis*), northern watersnake (*Nerodia sipedon*), and eastern kingsnake (*Lampropeltis getula*) are characteristic reptilian species. Commonly observed amphibians include spring peeper (*Pseudacris crucifer*) and chorus frog (*Pseudacris triseriata*) (Dobbins ARB 2007a).

**Protected and Sensitive Species.** No federally listed threatened, endangered, or candidate species are known to occur on Dobbins ARB. Six populations of pink ladyslipper (*Cypripedium acaule*), which is listed as unusual by the Georgia DNR and protected under the State of Georgia Wildflower Protection Act of 1973, have been documented on Dobbins ARB. An “unusual species” is defined by Georgia DNR as any resident species that exhibits special or unique features and because of these features deserves special consideration in its continued survival in the State (Georgia DNR Rules, 391-4-10.02). These pink ladyslipper populations range in size from less than 10 to more than 2,000 individuals on the installation and occur in open portions of the mature pine/pine hardwood stands on Dobbins ARB. A colony of pink ladyslippers was documented in the understory of the south-central portion of forest stand DN-6, just east of Ridenour Road (Dobbins ARB 2011a). Forest stand DN-6 overlaps portions of Site 2; however, no occurrences of pink ladyslipper have been documented within these sites. The known colony within stand DN-6 is approximately 500 feet west-southwest of Site 2 and 700 feet southwest of Site 3. No known pink ladyslipper populations are located within or in the vicinity of Site 1. Since Site 4 is currently owned by the City of Marietta, it is not known if populations of pink ladyslippers occur; however, due to existing forest conditions, it is likely that pink ladyslippers could occur within Site 4.

The U.S. Forest Service, in cooperation with Georgia DNR, recommends protecting populations of the pink ladyslipper that have more than 100 plants within a 50-foot radius. Five such populations of pink ladyslipper have previously been documented on Dobbins ARB (Dobbins ARB 2007a). According to the Forest Management Plan for Dobbins ARB, stands that have unique sites such as inclusions of pink ladyslipper colonies shall be carefully managed to promote the uniqueness of the area or protected where healthy stand conditions persist (Dobbins ARB 2011a). The Forest Management Plan states that all

management activities planned in these stands should be executed in such a manner as not to impact pink ladyslippers negatively (Dobbins ARB 2011a).

No known threatened or endangered species surveys have been conducted within Site 4. Therefore, it is not known if any federally or state-listed threatened, endangered, or candidate species or Georgia DNR special concern species occur within Site 4. **Table 3-5** lists threatened, endangered, candidate, and special concern species occurring in Cobb County with potential to occur within Site 4 based on existing habitats.

**Table 3-5. Federally and State-listed Species with Potential to Occur in Site 4**

Common Name	Scientific Name	Federal Status	State Status	General Habitat Requirements
<b>Animals</b>				
Highscale shiner	<i>Notropis hypsilepis</i>	NL	R	Flowing areas of small to large streams over sand or bedrock substrates as typified by streams in the southern edge of the Piedmont near the Fall Line
<b>Plants</b>				
Pink ladyslipper	<i>Cypripedium acaule</i>	NL	U	Upland oak-hickory-pine forests; primarily in acid soils of pine dominated forests
Indian olive	<i>Nestronia umbellula</i>	NL	R	Found in dry, open, upland forests of mixed hardwood and pine; often in transition areas between flatwoods and uplands
Bay starvine	<i>Schisandra glabra</i>	NL	T	Rich woods on stream terraces and lower slopes; alluvial communities
Georgia aster	<i>Symphotrichum georgianum</i>	C	T	Upland oak-hickory-pine forests and openings; adjacent to woodland borders and in openings; sometimes with <i>Echinacea laevigata</i> or over amphibolites

Sources: USFWS 2011a, USFWS 2011b, Georgia DNR 2011a, Georgia DNR 2011b, Dobbins ARB 2007b

Key:

E = listed as endangered by the USFWS or Georgia DNR

U = listed as unusual by Georgia DNR

T = listed as threatened by the USFWS or Georgia DNR

NL = not listed by the USFWS or Georgia DNR

R = listed as rare by Georgia DNR

The majority of birds on Dobbins ARB and the vicinity are migratory species as defined in 50 CFR 10.13 and are therefore protected under the Migratory Bird Treaty Act and EO 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*.

The bald eagle is not known to nest near Dobbins ARB but is transient through the area (Dobbins ARB 2007a). No large bodies of water suitable as bald eagle habitat occur within the vicinity of Dobbins ARB.



## **3.7 Cultural Resources**

### **3.7.1 Definition of the Resource**

Cultural resources is a term of art or an “umbrella term” for many heritage-related resources, including prehistoric and historic sites, buildings, structures, districts, objects, or any other physical evidence of human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason.

Several Federal laws and regulations govern protection of cultural resources, including the National Historic Preservation Act (NHPA) (1966), the American Indian Religious Freedom Act (1978), the Archaeological Resources Protection Act (1979), and the Native American Graves Protection and Repatriation Act (1990). Cultural resources are commonly subdivided into archaeological resources (prehistoric or historic sites where human activity has left physical evidence of that activity but no structures remain standing), architectural resources (buildings or other structures or groups of structures that are of historic architectural, or other significance), and traditional cultural resources (for example, traditional gathering areas).

The NHPA defines historic properties as properties eligible for or listed in the National Register of Historic Places (NRHP). The NRHP is the official listing of properties significant in U.S. history, architecture, or prehistory, and includes both publicly and privately owned properties. The NRHP list is administered by the National Park Service. Historic properties might be buildings, structures, prehistoric or historic archaeological sites, districts, or objects that are generally 50 years of age or older, are historically significant, and that retain integrity that conveys this significance. More recent resources, such as Cold War-era buildings, might warrant listing if they have the potential to gain significance in the future or if they meet “exceptional” significance criteria.

Section 106 of the NHPA requires agencies to take into account the effect of their undertakings on properties listed in or eligible for listing in the NRHP and to afford the ACHP a reasonable opportunity to comment on the undertaking.

### **3.7.2 Affected Environment**

Dobbins ARB occupies a 1,664-acre site between the cities of Marietta and Smyrna in Cobb County, Georgia. A portion of the installation consists of a runway that is shared with Lockheed Martin, which operates AFP-6. The site of Dobbins ARB and AFP-6 has been occupied since prehistoric eras, and was the site of several farms and communities as early as 1832 and until the establishment of the installation in the 1940s (Dobbins ARB 2007c)

Compliance with the NHPA, in consultation with the Georgia State Historic Preservation Office (GA SHPO) has resulted in the identification of a number of historic resources at Dobbins ARB and its associated facilities. Of the resources that predate the installation, the Bankston Rock House is listed in the NRHP and the Big Lake Dam, has been determined eligible for listing in the NRHP (Dobbins ARB 2007c). The Sibley-Gardner is an antebellum structure that has been determined not eligible for listing in the NRHP due to the loss of context created by the construction of AFP-6. Likewise, the Little Lake Dam has been determined ineligible (USAF 2005). The Mount Sinai Cemetery, dating to the 1890s, has not been evaluated for NRHP eligibility, but is treated as a sacred space (Dobbins ARB 2007c).

Several archaeological investigations have occurred on Dobbins ARB. These include reconnaissance surveys of both specific suspected archaeological sites and of construction sites for compliance with cultural resource laws. No surveys have identified any NRHP-eligible archaeological sites. Despite the

presence of other important Civil War-related sites in the Dobbins ARB vicinity, it is suspected that none exist on the installation due to the land disturbance over time by farming and construction (Dobbins ARB 2007c). No investigations have been undertaken but there is demonstrated concern that there might be archaeological resources related to the Sibley-Gardner house and possible occupation of the home site as a field hospital during the Civil War. Additionally, oral history relates the presence of an early spring near the house, which indicates prehistoric occupation. A sensitivity zone was defined in the *Integrated Cultural Resources Management Plan, Air Force Plant 6, 2006-2010* which is outside of the boundaries of the Corps Lab Site (USAF 2005).

Buildings older than 50 years of age on Dobbins ARB have been surveyed though not all have been evaluated for NRHP eligibility. Most of these buildings are located on the eastern end of the installation and would not be affected by the Proposed Action (Dobbins ARB 2007c). Though the proposed commissary would be constructed on Dobbins ARB, it would be in physical proximity to AFP-6. In consultation with the GA SHPO, the USAF has determined that an NRHP-eligible Bell Bomber Historic District exists on AFP-6, including eight contributing buildings (a ninth building was demolished in 2004). The district comprises the main manufacturing facilities and essential auxiliary buildings, such as the steam plant and water pumping station (USAF 2005).

Two small historic-era cemeteries have been found at Site Alternative 4. One cemetery is just north of the USAF property, behind the Navy Reserve Center. This cemetery has been surveyed and found to have three graves. Adjacent to it is a house site with foundation and chimney remnants visible. The other cemetery, which contains four graves, is centrally located at this site. Based on the single extant, non-historic, grave marker and census research, the cemetery might be that of an African-American family. They are both likely connected to the historic African-American community of Jonesville. As part of a proposal to construct a disc golf course on the western edge of the site, investigations were made to find another cemetery or set of unmarked graves that were said to have been located there. A pedestrian survey and surface probing were completed in May 2011 and no evidence of graves was found. The City of Marietta has marked the boundaries of the two known cemeteries on this site. Neither cemetery has been evaluated for eligibility for the NRHP (Cobb County 2011).

## 3.8 Infrastructure

### 3.8.1 Definition of the Resource

Infrastructure can be defined as the basic physical systems (e.g., utilities, water, and sewage) that enable a community to function. The infrastructure information provided herein was obtained from the *2010 Dobbins ARB General Plan* (Dobbins ARB 2010a) and the 2011 *Environmental Baseline Surveys* for the Corps Lab Site (Dobbins ARB 2011g), Barclay Site (Dobbins ARB 2011f), and the City of Marietta Site (Dobbins ARB 2011d). This section provides a brief summary of the infrastructure components that currently exist at the Dobbins ARB and the four site alternatives. The infrastructure components to be discussed in this EA include utilities (electrical, natural gas, liquid fuel, central heating and cooling, water supply, sanitary sewage/wastewater, stormwater, and communications systems), solid waste management, and transportation (existing roadways).

EO 13514, *Federal Leadership In Environmental, Energy, And Economic Performance*, dated October 5, 2009, directs Federal agencies to improve water use efficiency and management; implement high performance sustainable Federal building design, construction, operation, and management; and advance regional and local integrated planning by identifying and analyzing impacts from energy usage and alternative energy sources. EO 13514 also directs Federal agencies to prepare and implement a Strategic Sustainability Performance Plan to manage its greenhouse gas emissions, water use, pollution prevention, regional development and transportation planning, and sustainable building design; and promote

sustainability in its acquisition of goods and services. Section 2(g) requires new construction, major renovation, or repair and alteration of buildings to comply with the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings*. The CEQ regulations at 40 CFR 1502.16(e) directs agencies to consider the energy requirements and conservation potential of various alternatives and mitigation measures.

### 3.8.2 Affected Environment

**Electrical System.** The Georgia Power Company provides electrical power to Dobbins ARB. The power is supplied through the Lockheed Martin substation on the north side of AFP-6. Lockheed Martin solely owns the equipment from the reclosers and switching gear through the distribution equipment. Within the boundaries of the installation, Lockheed Martin acts as the purveyor of electricity to the Air Force Reserve and the Georgia Guard Bureau (Dobbins ARB 2010a).

Two primary electrical feeders enter AFP-6 at South Cobb Drive and feed the substation. A backup power supply is also provided, which enters AFP-6 from the northwest along Atlanta Road. The substation is designed to serve only the installation. No off-installation facilities are supplied electricity by this substation.

Two main feeder lines and an alternate feeder line enter the installation from Industrial Drive and serve facilities on Dobbins ARB through an overhead and underground distribution system. A network of underground and overhead electrical distribution lines traverses the east end of the runway and supplies the U.S. Army Reserve Training Center.

The electrical system was privatized with the Georgia Power Company in April 2004. The entire overhead system was upgraded under the privatization. The feeder line from Lockheed Martin that enters the installation from AFP-6 was also upgraded with replacement of the regulators. In addition to the electricity provided by the Georgia Power Company, the installation also maintains a series of diesel fuel-powered emergency generators at various buildings where power outages would seriously undermine the ability of the installation to complete its mission (Dobbins ARB 2010a).

According to the Georgia Power Company, peak electrical demand occurs in the summer months when total daily demand surpasses 37 megawatt-hours. Based on the current capacity of the substation, 38 percent of the substation's capacity is in surplus during the peak periods (Dobbins ARB 2010a).

Existing electrical infrastructure exists within the boundaries of Alternatives 1, 2, and 3 (Dobbins ARB 2010a).

The Georgia Power Company also provides electrical power to the City of Marietta. Currently Site Alternative 4 does not receive any electricity. However, electrical infrastructure exists in the populated areas adjacent to the site (City of Marietta 2006b).

**Natural Gas and Propane.** Natural gas is supplied to Dobbins ARB by Atlanta Gas Light Company. The natural gas main enters the installation via a 6-inch steel pipe near the main gate and distributes the natural gas through a limited-access, looped system. The natural gas distribution system consists of a network of underground gas mains ranging from 3 to 8 inches in diameter.

The Atlanta Gas Light Company can meet virtually any requirement for natural gas. However, during periods of particularly cold weather, the demand for natural gas is extremely high, which forces the Atlanta Gas Light Company to curtail supplies of natural gas to its industrial customers, including those facilities at Dobbins ARB that are provided interruptible service (Dobbins ARB 2010a).



Based on the Dobbins ARB General Plan dated 2010, Natural Gas Distribution Map, natural gas lines do not extend to the parcel of land that contains Site Alternative 1, the Corps Lab Site. Active natural gas lines traverse Site Alternative 2 and are also within the general vicinity of Site Alternative 3 (Dobbins ARB 2010a).

Gas South provides natural gas to the City of Marietta; no known pipelines are present within or at the Site (Dobbins ARB 2011d).

**Liquid Fuel.** The liquid fuels used at Dobbins ARB include jet propulsion number 8 (JP-8) aviation gasoline, unleaded gasoline, and diesel fuel. The fuels are stored in aboveground storage tanks (ASTs) and underground storage tanks (USTs), tank trucks, and bowsers. Tank trucks and bowsers are only used for temporary storage and transportation of fuels on a limited basis. Dobbins ARB storage tanks hold approximately 400,000 gallons of fuel. A Spill Prevention, Control, and Countermeasure (SPCC) Plan is in place and implemented to prevent and clean up spills from oil storage tanks.

Diesel fuel, which is used for both military vehicles and as a backup fuel source for emergency generators, is stored in a variety of ASTs dispersed throughout the installation that range in size from 300 to 10,000 gallons (Dobbins ARB 2010a). In addition, unleaded fuel is stored in one 10,000-gallon UST. Nearly 300,000 gallons of JP-8 are stored in two aboveground, vertical, fixed-roof tanks at the POL bulk fuels storage complex. No USTs at the installation are used to store JP-8.

Additionally, the installation has refueler trucks located at the refueler parking area that are used to transport JP-8 from the storage tanks to the flightline for aircraft refueling.

Liquid oxygen is stored in two ASTs at Building 990, near the main gate of the installation. The total capacity of these tanks is 1,000 gallons. No other supplies of liquid oxygen or nitrogen are kept on-installation (Dobbins ARB 2010a).

No active ASTs or USTs are present within Site Alternative 1. Tanks formally existed at the site and have been removed or closed in accordance with Georgia Environmental Protection Division. No known liquid fuel ASTs or USTs exist within the boundaries of Site Alternatives 2 and 4. Site Alternative 3 contains two existing, inactive 3,000- and 8,000-gallon fuel oil ASTs, located at Building B-64 and one active 2,000-gallon fuel oil AST existing at Building B-90. For more information on USTs and ASTs see the *Environmental Baseline Survey* for the Corps Lab Site (Dobbins ARB 2011g) and the City of Marietta Site (Dobbins ARB 2011d), and the *Environmental Baseline Survey* prepared for the Barclay Site (Dobbins ARB 2011f). An Environmental Baseline Survey (EBS) was not prepared for the BX Site.

**Central Heating and Cooling.** No central heating or cooling plant exists at Dobbins ARB. The majority of the buildings on the installation are heated by natural gas and some electric. A central (steam) heating plant formerly serviced the majority of Dobbins ARB but was demolished more than a decade ago (Dobbins ARB 1999).

**Water Supply System.** The Cobb County-Marietta Water Authority (CCMWA) provides potable drinking water to the Dobbins ARB through a contract agreement with Lockheed Martin. According to the Dobbins ARB General Plan dated June 2010, the CCMWA has two surface water treatment facilities: (1) the Quarles Treatment Plant located on Lower Roswell Road at the Chattahoochee River, and (2) the Wyckoff Treatment Plant located on Mars Hill Road in the northwest corner of Cobb County. The Quarles plant draws its water from the Chattahoochee River and the Wyckoff plant draws its water from Lake Allatoona. Collectively, these two plants can provide a maximum of 136 million gallons per day (MGD) of water to residential, commercial, and industrial customers in Cobb County. CCMWA also has nine water storage tanks dispersed throughout the county with a total capacity of 37 million gallons.

Potable drinking water is supplied to the Dobbins ARB through a 20-inch steel water main near the main entrance to a looped supply system. The water distribution system was originally constructed between 1954 and 1956 and consists mostly of cast-iron pipes ranging in size from 2 to 16 inches in diameter. Potable water is provided to the installation at an average of 110 to 120 pounds per square inch (psi), but pressures can be as high as 150 psi.

Upgrades to the potable water system at the installation have included the replacement of system components that have degraded, including (1) the replacement of the old cast-iron pipes with polyvinyl chloride (PVC) piping at various locations; (2) replacing several distribution mains, valves, branch lines, and fittings; and (3) the extension of dead-end branch lines to form a looped supply system. Other projects have replaced worn system components and water valves on the 18-inch water mains, and extended water service into areas north of South Cobb Drive that are proposed for new construction.

Existing and projected demands for potable water at the installation will continue to be satisfied by the county's potable water system (Dobbins ARB 2010a). The water distribution system is adequate to support all existing and future requirements. The CCMWA will continue to provide high-quality water to the installation through the lease with Lockheed Martin and meet the installation's water requirements for consumption and fire-fighting purposes.

Two active water main lines exist within the boundaries of Site Alternative 1. One line runs north to south along the western boundary and the other line runs northeast to southwest along the northwestern boundary (Dobbins ARB 2010a).

Three active water main lines exist within Site Alternative 2 and within the general vicinity of Site Alternative 3, all running generally southeast. In addition, numerous water hydrants and fire connections exist just south of the boundary of Site Alternative 2 (Dobbins ARB 2010a).

The CCMWA supplies water to the City of Marietta, including the populous areas surrounding the vicinity of Site Alternative 4. However, no potable water is currently supplied to Site Alternative 4 (City of Marietta 2006c).

**Sanitary/Sewer Wastewater System.** Wastewater generated at Dobbins ARB is treated at the tertiary sewage treatment plant located on the southwest side of the installation and to the west of the Georgia Guard Bureau. The wastewater treatment plant is operated by AFP-6 and has a maximum treatment capacity of 7 MGD of wastewater and a historic average daily flow of 1.1 MGD.

The installation's wastewater collector system is Government-owned and -operated, and consists mostly of vitrified clay pipes ranging in size from 6 to 10 inches in diameter, with some newer collection lines constructed of reinforced concrete pipe. Sewage is transported to the treatment plant via a network of six lift stations aligned along the collection system adjacent to the north side of the runway. The few recent upgrades to the system have been those associated with the construction of new buildings; in which case PVC piping was used in place of vitrified clay or reinforced concrete piping (Dobbins ARB 2010a).

The treated wastewater is discharged to Nickajack Creek, approximately 8 miles southwest of the installation. Nickajack Creek is a tributary to the Chattahoochee River. Wastewater from U.S. Army Reserve facilities discharge directly into a collector line of the Cobb County sanitary sewer system that passes through the eastern edge of the installation.

No industrial wastewater treatment plant is located on Dobbins ARB. The only available industrial wastewater pre-treatment occurring on the installation is through oil/water separators that are located at various maintenance shops and in areas where petroleum-based products are used (Dobbins ARB 2010a).

The runoff from these separators is discharged to the sanitary sewer system or to the stormwater drainage system.

Industrial wastewater is pre-treated at a wastewater treatment plant operated by Lockheed Martin and is located at AFP-6. The Lockheed Martin industrial wastewater treatment plant system services only the GAARNG hangar (Building 555) and the former remediation system at the Bulk Fuels Storage facility. These lines discharge to the Lockheed Martin Industrial Treatment Plant, which in turn discharges to the Tertiary Treatment Plant. All other waste lines on Dobbins ARB discharge directly to the Tertiary Treatment Plant through the sanitary sewer system. Lockheed Martin/AFP-6 operates the wastewater treatment plant under Georgia National Pollutant Discharge Elimination System (NPDES) Permit No. 0001198 (Dobbins ARB 2010a).

The installation's wastewater collection system currently exists within the vicinity of Site Alternatives 1, 2, and 3. An active sanitary sewer line exists along the western boundary of Site Alternative 1 and an active sanitary sewer line exists along or close to the western boundary of Site Alternative 2 and within the general vicinity of Site Alternative 3 (Dobbins ARB 2010a).

The City of Marietta is serviced by the CCMWA. The CCMWA operates more than 275 miles of wastewater collection pipe and one wastewater pump station (City of Marietta 2006c). However, because Site Alternative 4 is undeveloped, the Site is not currently serviced or linked into the city's system.

**Stormwater Sewer System.** The watersheds associated with the Dobbins ARB surface drainage system include Rottenwood Creek watershed in the northern portion of the installation and the Poorhouse Creek watershed in the southern portion of the installation (Dobbins ARB 2010a).

The stormwater drainage system at the Dobbins ARB consists of culverts, man-made ditches, and natural drainageways, which transport the collected water to one of nine outfalls. Eight of the nine outfalls (outfalls 001 through 008) discharge to a separate municipal storm sewer system or a natural drainage way. Outfalls 001, 003, 004, and 005 are located on the north side of the installation and eventually discharge into Rottenwood Creek. Outfall 002 discharges into the municipal storm sewer and is located on the east side of the installation near the main entrance. Outfalls 006, 007, and 008 are on the south side of the installation and eventually discharge into Poorhouse Creek. Outfall 009 discharges directly to Poorhouse Creek itself. The piping network for the installation is constructed of metal, vitrified clay, concrete, or reinforced concrete (Dobbins ARB 2010a).

Stormwater discharges from areas where industrial activities are conducted are currently authorized by the facility's NPDES Permit dated July 2011. As required by the NPDES Permit, Dobbins ARB drafted and implements a Stormwater Pollution Prevention Plan (SWPPP), which includes an assessment of the installation's potential to release contaminants into the drainage system and a series of procedures required to minimize contaminants entering stormwater. In addition, all on-installation construction complies with state and local regulations concerning stormwater detention for development.

Site Alternative 1 has existing storm sewer lines, culverts, and a storm sewer open drainage line which run north to south and are mostly located along the western and northwestern boundaries. Site Alternative 2 has an existing storm sewer line which runs northwest to southeast within the western portion of the site. Storm sewer culverts and a storm sewer line that run in a west-to-east direction are present within the northern portion of Site Alternative 2 near the intersection of 6th Street and Industrial Drive. Although no stormwater drainage systems are in the immediate area of Site Alternative 3, an existing infrastructure network exists on its western boundary (Dobbins ARB 2010a).

The City of Marietta currently has a progressive stormwater management program implemented to eliminate nonpoint source pollution. An unpaved gully exists and flows southwest to northeast across

Site Alternative 4 (Dobbins ARB 2011d). The gully discharges low volume, infrequent, or short duration flow.

**Communications System.** The communications system at Dobbins ARB includes the current installation-level Command, Control, Communications, Computer, and Information (C4I) system infrastructure (Dobbins ARB 2010a). The C4I is a blueprint to provide a installation-wide network. Currently, communications at Dobbins ARB are provided by a series of copper and fiber optic cable networks.

The existing copper cable plant is owned by the Government and managed/maintained by an operations and maintenance contractor. It is a mix of underground cables installed in conduit and direct buried cables. Multimode cable is installed to most buildings within the AFRC community. The fiber backbone allows network services to be extended to most major C4I users, allowing ample growth into high-speed, bandwidth-intensive applications. This infrastructure improves bandwidth and provides higher reliability of the transport network. All buildings on Dobbins ARB are connected through fiber optic cables. However, some buildings currently require additional fiber optic strands to support their missions due to high usage.

Existing cable facilities between the Dobbins ARB and Lockheed Martin are more than 30 years old. Several cuts of the air core copper cable have made the direct connection between the USAF facilities and the Lockheed Martin facilities difficult. The interconnecting cable is owned by AT&T, but was recently abandoned. AT&T now uses other cable to interconnect these two sites (Dobbins ARB 2010a).

Voice communications at Dobbins ARB are controlled by the installation Dial Central Office (DCO), which provides point-to-point connectivity between users on-installation and the long-haul networks. The communications system uses a MSL-100 telephone switch to provide administrative telephone and operator service to Dobbins ARB, hot lines, conferencing capability, and advanced digital features, such as Integrated Service Digital Network (ISDN). The telephone switch is an MSL-100 that has the capability of providing up to 10,000 telephone lines. Only 4,800 telephone lines are currently in service (Dobbins ARB 2010a).

Dobbins ARB provides navigation aids through the use of the AN/FRN-45 Tactical Air Navigation system, which is augmented by a dual-channel AN/GPN-20 Airport Surveillance Radar with a tower-mounted antenna and the Mark 20A Instrument Landing Systems and an AN/FPN-62 Precision Approach Radar. The tactical air navigation system generates a radio beacon that pilots use to accurately determine heading and distance from the installation during terminal and en-route phases of flight. The 20A Instrument Landing Systems and the AN/FPN-62 Precision Approach Radar systems emit signals that are used as horizontal and vertical guidance information for aircraft on final approach. Dobbins ARB also employs the Meteorological/Navigational cable system that interconnects the indicators and systems that provide weather and navigational information in support of installation operations.

All buildings on the installation and within Site Alternatives 1, 2, and 3 have the infrastructure needed for the communications system (i.e., fiber optic cable and telephone lines) (Dobbins ARB 2010a).

The major communications providers to the City of Marietta include AT&T, BellSouth, and MicroCorp which consists of a large distribution network of more than 1,500 Telecommunication Agents. Site Alternative 4 is forested land with no installed communications systems (Dobbins ARB 2011d, MicroCorp 2011).

**Solid Waste Management.** There are currently no active landfills located at Dobbins ARB. Municipal solid waste generated at the installation is discarded into waste receptacles and dumpsters located

throughout the facility. Solid waste generated at the installation is collected and transported to state-permitted municipal landfills by a private hauler. Solid waste collection disposal in Cobb County involves both the public and private sector (Dobbins ARB 1999). Private commercial haulers and county municipalities collect solid waste and offer curbside recycling throughout the county. The remaining solid waste that is generated in the county is temporarily stored in private transfer stations and subsequently transported to county landfills for disposal.

Dobbins ARB manages a comprehensive recycling program to reduce the amount of solid waste generated. Recyclable items are collected in separate receptacles than solid waste and transported to the installation's Recycling Center for processing. Recyclable items include paper, aluminum cans, cardboard, wood, fiberboard, scrap metal, tires, and polystyrene. Construction and demolition wastes are separated from the solid waste stream and recycled at the installation (Dobbins ARB 2011g).

The installation operated an on-installation landfill from the 1940s until 1974. This landfill is now considered an IRP site and is located within the boundaries of Site Alternative 1. This IRP site, known as Landfill 01 (or LF-01) had soil and groundwater contamination from the landfilling of waste, but is currently closed with No Further Action required (Dobbins ARB 2011g).

Solid waste services are available throughout the installation; therefore these services are available at Site Alternatives 1, 2, and 3.

Solid wastes generated at Site Alternative 4 are collected by a private contractor for offsite disposal at a municipal landfill. Various trash bins are located around picnic areas and a dog park at Site Alternative 4 (Dobbins ARB 2011d).

**Transportation.** Roads within Dobbins ARB that would be used to access the sites include Atlantic Avenue, Industrial Drive, and Gym Road. Atlanta Avenue and Gym Road are primary transportation routes on the installation. Access to most of the facilities on Dobbins ARB is provided by secondary roads that connect to Atlanta Avenue. Industrial Drive is a tertiary road; these roads have the lowest traffic volumes and speeds (Dobbins ARB 2010a).

There are two major roadways around the alternative site locations; Atlanta Road and South Cobb Drive. Atlanta Road is directly west of Site 1 and provides access to the Georgia National Guard facilities and Lockheed Martin. South Cobb Drive is north and east of Sites 1, 2, and 3 and south of Site 4. Atlanta Road northwest of the installation (State Route 5) is considered a principal arterial roadway (Cobb County 2008). Principal arterials connect activity centers (such as towns) and carry large volumes of traffic at moderately high speeds. Atlanta Road southwest of Site 1 and South Cobb Drive are considered minor arterial roadways. Minor arterials are continuous routes through urban areas that connect town centers, corridors, main streets, and neighborhoods.

Access to Dobbins ARB from the surrounding region is provided by several major roadways. Interstate- (I) 75 is approximately 1 mile east of the installation and connects to Cobb Parkway Southeast (US 41) and downtown Atlanta. I-285 runs east-west and is adjoined to I-75. I-285 is connected to I-85 on the east and I-20 on the west. Atlanta Road connects to South Cobb Drive and Windy Hill Road, both of which have access to I-75. The main gate on the installation is on South Cobb Drive and Cobb Parkway Southeast.

In 2008, the *Cobb County 2030 Comprehensive Transportation Plan* assessed existing transportation conditions and projected future needs in the region (Cobb County 2008). Several methods were used to evaluate the roadway system. One of the methods assesses the roadway capacity during peak traffic hours. According to the Plan, the assessment indicated that traffic can move freely during peak hours on

South Cobb Drive, portions of Delk Road, and Atlanta Road (southwest of the installation) under the existing conditions (Cobb County 2008). In this Plan, 2005 baseline traffic data were used for existing conditions. The assessment on Atlanta Road (State Route 5) adjacent to the Site 1, portions of Delk Road, and most of I-75 indicated that vehicle speed and freedom of movement declines slightly due to increasing volume.

### 3.9 Hazardous Materials and Wastes

#### 3.9.1 Definition of the Resource

Hazardous substances include both hazardous materials and hazardous waste. A hazardous substance, pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §9601(14)), is defined as “(A) any substance designated pursuant to Section 1321(b)(2)(A) of Title 33; (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, (42 U.S.C. §6921); (D) any toxic pollutant listed under Section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. §7412); and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator of USEPA has taken action pursuant to Section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).”

Hazardous materials are defined by 49 CFR 171.8 as “hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions” in 49 CFR Part 173. Transportation of hazardous materials is regulated by the U.S. Department of Transportation regulations within 49 CFR Parts 105–180.

RCRA defines a hazardous waste in 42 U.S.C. §6903, as “a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.”

The Toxic Substances Control Act (TSCA) of 1976 provides USEPA with authority to require reporting, record-keeping and testing requirements, and issue restrictions relating to chemical substances or mixtures. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and LBP. Special hazards are those substances that might pose a risk to human health but are not regulated as contaminants under the hazardous wastes statutes.

#### 3.9.2 Affected Environment

Several hazardous waste-type management plans exist and are implemented at Dobbins ARB. These plans and instructions include the following:

- The Hazardous Waste Management Plan
- SWPPP for Municipal and Industrial Activities



- Integrated Pest Management Plan
- AFI, 401, Managing Radioactive Materials in the U.S. Air Force which implements AFPD 40-2, Radioactive Material-Non-Nuclear Weapons
- Air Force Technical Order 00.110N22, Radioactive Waste Disposal
- AFI 32-7042, Solid and Hazardous Waste Compliance
- AFI 32-1052, Facilities Asbestos Management
- Dobbins ARB Asbestos Operations and Management Plan
- Dobbins ARB Lead Based Paint Management Plan.

The information discussed in this EA will be limited to the information contained in the recently completed ESB reports for the following:

- Site Alternative 1 – The Corps Laboratory Site
- Site Alternative 3 – The Barclay Gate Site
- Site Alternative 4 – The City of Marietta Site.

The EBSs were conducted in accordance with the guidelines set forth in AFI 32-7066 with additional guidance provided by ASTM D6008-96 and ASTM E1527-05. Detailed information can be obtained in the EBS reports for each site investigated. An EBS was not conducted on Site Alternative 2.

In addition, Hazardous Waste information regarding Site Alternative 2, was obtained from the EBS completed for the adjacent AFP-6 property in 2010 (Dobbins ARB 2010a).

### Hazardous Materials and Petroleum Products

AFI 32-7086, *Hazardous Materials Management*, creates procedures and standards that govern the management of hazardous materials throughout the USAF and establishes roles, responsibilities, and requirements for a hazardous materials management program. Two plans, *USAF Management Action Plan* and the *Hazardous Materials Emergency Planning and Response Plan* for Dobbins ARB are currently established to describe the procedures and instruction in managing hazardous waste spills.

**Site Alternative 1.** No hazardous materials or petroleum products were observed at this site. Building interiors were not inspected due to access restrictions; however, each building is assumed to contain limited quantities of hazardous materials (e.g., household cleaners, oils, lubricants, and solvents) based on known building uses. Numerous hazardous materials were historically stored from 1969 until 1999 at the full-service analytical and materials testing laboratory at the former USACE Laboratory facility. There is no evidence of the past or present use of hazardous materials within any other building at Site Alternative 1 (Dobbins ARB 2011g).

**Site Alternative 2.** No hazardous materials or petroleum products were observed at this site. Therefore, no known hazardous material or petroleum product concerns are associated with this site (Dobbins ARB 2010a).

**Site Alternative 3.** No known hazardous materials or petroleum products are currently used or stored at this site. Former operations at the onsite buildings likely required the use of moderate quantities of hazardous materials. Building B-64 formerly was used as an avionics testing facility, and Building B-90 formerly was used for stripping radomes. Several chemicals such as acetone, toluene,

dimethylformamide, TCE, naphtha, and polyurethane paint thinner have been documented as being historically used at Site Alternative 3 (Dobbins ARB 2011f).

**Site Alternative 4.** No hazardous materials or petroleum products were observed at this site. As the site was historically vacant land and might have been used at one time as residential property, and is currently used as a public park, it is unlikely that there are hazardous material or petroleum product concerns associated with the site (Dobbins ARB 2011d).

## Hazardous and Petroleum Wastes

A Hazardous Waste Management Plan is implemented at Dobbins ARB for the proper management of hazardous and other regulated wastes generated on its installation. This plan provides waste programs management policies and procedures for the proper management of hazardous and other wastes generated during installation operations. The *Hazardous Waste Management Plan*, in conjunction with the installation's *Spill Prevention, Control, and Counter Measure Plan* (Dobbins ARB 2010c) and *Stormwater Pollution Prevention Plan for Municipal and Industrial Activities* (Dobbins ARB 2010d), provides guidance in reducing the amount of hazardous wastes generated and properly managing hazardous wastes to avoid environmental contamination.

Dobbins ARB operates as a large-quantity generator (LQG) of hazardous waste under RCRA. LQGs generate more than 1,000 kilograms (kg) of hazardous waste, or more than 1 kg of acutely hazardous waste, per month. Hazardous wastes that might be present at the Dobbins ARB include asbestos and lead-based paint (LBP), radon, regulated wastes, petroleum products, and solid wastes (Dobbins ARB 2011g).

**Site Alternative 1.** No hazardous wastes were observed; however, small quantities of hazardous wastes are present at the existing, onsite buildings at Site Alternative 1. These limited quantities are assumed to be disposed of in accordance with Federal, state, and local regulations and would not pose a threat to the environmental condition of the Corps Laboratory Site.

Moderate quantities of hazardous wastes were generated from 1969 to 1999 at the USACE Laboratory. At the time the laboratory was closed, the majority of the remaining waste was removed from the property for proper disposal. However, a substance identified as sodium salt of an organic acid, is still present in Room E139 of the former USACE Laboratory. A GAARNG memorandum recommended profiling, characterization, and disposal of this waste.

A 180-day hazardous waste storage area was historically located within the loading dock area outside of the USACE Laboratory and was used for the storing of hazardous wastes generated on site during operation. Chemicals including PCBs, pesticides, semi-volatile organic compounds (SVOCs), VOCs, and heavy metals were temporarily stored here and contaminated the soil and concrete as solvents leaked from storage drums prior to offsite disposal. The area has been remediated and is considered closed (Dobbins ARB 2011g).

A concrete acid neutralization pit (laboratory sump), located on the exterior west side of the USACE Laboratory, contained unknown materials. Elevated concentrations of heavy metals (mercury, antimony, barium, lead, silver, and thallium) were found in the sludge from the pit and in surrounding soils. The acid pit, its contents, and surrounding soils were removed in 2002, but confirmation soil sampling following the excavation identified mercury concentrations above the Georgia DNR threshold levels (Dobbins ARB 2011g).

A November 2002 hazardous waste investigation at the USACE Laboratory identified trace levels of PCBs (Aroclor 1254), organochlorine pesticides (components of chlordane), and heavy metals (cadmium, chromium, cobalt, and lead) on surfaces within the analytical laboratory physical testing areas, and in the basement on the walls, floors, and countertops. Chromium and lead were detected on every floor of the facility; lead was detected inside the buildings heating, ventilation, and air conditioning (HVAC) system ductwork, and the sink traps were found to contain materials contaminated with heavy metals (i.e., lead and mercury) and polynuclear aromatic hydrocarbons. All surfaces were professionally cleaned. Post-cleaning wipe samples from most surfaces were found to be below the Georgia DNR threshold levels; however, samples taken from the building's HVAC system still showed elevated levels of lead. A 2010 GAARNG memorandum recommends that all surfaces be professionally cleaned again and, in places, appropriately sealed with paint, carpeting, or tiles (GAARNG 2010).

The former USACE Laboratory contained two sumps, located in Rooms 131 and 148, that accumulated sludge. Sludge samples were taken from the sumps and were found to contain elevated levels of barium, manganese, mercury, and thallium. There is no record of sludge removal or cleanup of either sump. A 2010 GAARNG memorandum indicated the sludge remaining in the sumps should be managed as a hazardous waste until analytical tests show otherwise.

A solid waste management unit (SWMU)-23 associated with Building B-68 at AFP-6 is approximately 500 feet east of Site Alternative 1. The building contained floor, roof, sink, and eye wash station drains that discharged into a wooded area behind the building contaminating the soils with petroleum hydrocarbons and lead. Sampling and analysis of soils at the discharge point indicated high levels of total petroleum hydrocarbons and 15 parts per million (ppm) of lead by the toxicity characteristic leaching procedure. The estimated area of soil affected by this discharge was approximately 800 cubic feet. Lockheed Martin prepared a Corrective Action Plan (CAP) for over-excavating the area and then collecting samples to determine whether any further remediation was necessary. The CAP also included terminating or sealing the drains in the building. The CAP was implemented and completed in 1998. Lockheed Martin received a No Further Action letter from Georgia DNR in April 1998 (Dobbins ARB 2011g).

**Site Alternative 2.** No hazardous wastes or petroleum products are known to historically or currently be generated or stored at this site (Dobbins ARB 2010a).

**Site Alternative 3.** No hazardous wastes or petroleum products are currently generated or stored at this site. Former operations of the buildings located within Site Alternative 3 generated moderate quantities of hazardous wastes. It is assumed these wastes were properly stored and managed for offsite disposal (Dobbins ARB 2011f).

**Site Alternative 4.** No hazardous wastes or petroleum products were observed or have been known to be used at this site (Dobbins ARB 2011d).

## Environmental Restoration Programs

The Defense Environmental Restoration Program (DERP) was formally established by Congress in 1986 to provide for the cleanup of DOD properties at active installations, BRAC installations, and formerly used defense sites (FUDS) throughout the United States and its territories. The three restoration programs under the DERP are the IRP, Military Munitions Response Program (MMRP), and Building Demolition/Debris Removal (BD/DR). The IRP requires each installation to identify, investigate, and clean up contaminated sites. The MMRP addresses nonoperational military ranges and other sites that are suspected or known to contain unexploded ordnance, discarded military munitions, or munitions constituents. BD/DR involves the demolition and removal of unsafe buildings and structures. Eligible

DERP sites include those contaminated by past defense activities that require cleanup under CERCLA, as amended by the Superfund Amendments and Reauthorization Act, and certain corrective actions required by RCRA. Non-DERP sites are remediated under the Compliance-Related Cleanup Program (CRP).

Dobbins ARB has ten IRP sites, six of which are closed and are designated as No Further Action Planned to Industrial Levels. Of the remaining four sites, two lack State concurrence and two sites are in the beginning stages of the investigation process. Based on the information found within the EBSs, none of these ten IRP sites are within the boundaries of the four site alternatives. No MMRP or BD/DR sites occur at Dobbins ARB at the time of this study (Dobbins ARB 2011g).

AFP-6 has 75 SWMUs, IRPs, and other historical release sites. Eighteen of the 75 sites are closed and are designated as No Further Action required. The remaining sites are currently undergoing remedial investigation, are under further investigation, or require corrective action (Dobbins ARB 2011d).

**Site Alternative 1.** Two IRP sites are located on AFP-6 property adjacent to Site 1. SWMU 23, also known as the B-68 Drain Pipe Area, has a status of No Further Action. SWMU 62, also known as the B-70 Pit Under Railroad Tracks, also has a status of No Further Action. SWMUs 23 and 62 sites are located approximately 250 to 300 feet east and southeast of Site 1, respectively. The nearest IRP site, known as ST-08, is located approximately 0.5 miles southeast of Site 1. This site currently has a No Further Action required status.

In addition, an approximately 100-foot diameter TCE plume present in the surficial aquifer is present in the southeast corner of Site 1, based on a 2008 plume map generated for AFP-6 (Dobbins ARB 2011g).

**Site Alternative 2.** An EBS was not conducted for this site. The AFP-6 property is just north of Site Alternative 2. There is an environmental concern in an area with groundwater contamination found on the eastern boundary of Site Alternative 2 (Dobbins ARB 2010e). The plume originated from AFP-6. TCE concentrations exceeding maximum contaminant level of 5 micrograms per liter ( $\mu\text{g/L}$ ) were found in the surficial aquifer. Other contaminants within the plume include VOCs, SVOCs, and metals. Further investigation of the extent of groundwater contamination is required and remedial actions to treat this groundwater plume are ongoing (Dobbins ARB 2011f). The depth to groundwater in the surrounding area is about 5.5 feet below ground surface (Dobbins ARB 2010e).

The nearest IRP site is SWMU 78, located approximately 250 feet north of Site 2 within the boundaries of AFP-6 (Dobbins ARB 2011d). SWMU 78 is a former sanitary sludge disposal area that is still under investigation,

**Site Alternative 3.** Six SWMUs associated with the AFP-6 property are found within Site 3 (SWMU 1, 3, 5, 29, 32, and 78).

- SWMU 1 is a site where an underground storage vault leaked laboratory wastes resulting in contaminated soil. The Georgia Environmental Protection Division has determined that No Further Action is required at this SWMU.
- SWMU 3 is a site where metal hydroxide sludge and other waste materials from Buildings B-90 and B-91 were landfilled. Site investigations identified soil and groundwater contamination, and a groundwater pump-and-treat system was installed as an interim corrective measure to prevent the migration of the groundwater plume. Further investigations and remedial action are required.
- SWMU 5 contains a septic tank leach field for a restroom in Building B-90 that likely received hazardous waste chemicals. While no known releases of any hazardous chemicals have been documented, this facility was formerly used for stripping radomes. Several chemicals such as

acetone, toluene, dimethylformamide, TCE, naphtha, and polyurethane paint thinner were formerly used at this facility and might have been disposed of through the field. Site investigations have identified soil and groundwater contamination emanating from the leach field. The site is currently undergoing remedial action.

- SWMU 29 is a former landfill that was in operation from 1951 to 1971 for the disposal of miscellaneous construction rubble. Moderate quantities of sealants, paints, and adhesives are suspected to have been disposed of in this area from 1970 to 1972. A determination of No Further Action required for SWMU 29 was made because of its proximity to SWMU 3 (USAF 1994). The monitoring wells used for SWMU 3 also monitor contaminants at SWMU 29; therefore, the two sites were consolidated to use the existing monitoring wells (Dobbins ARB 2010e). Due to the VOC-contaminated groundwater below SWMU 29, corrective action, including injection of emulsified oil substrate into the overburden coupled with monitored natural attenuation and land use controls is required under the Hazardous Waste Facility Permit (HW-034[D]) (GAEPD 2009).
- SWMU 32 contained a former UST fuel line that released diesel fuel in 1992. The investigation determined that soil and groundwater contamination was present. Annual groundwater monitoring has been completed to demonstrate that the natural attenuation of benzene, xylene, and polycyclic aromatic hydrocarbons (PAHs) is adequate to remediate the petroleum contaminants. Additional corrective actions for the VOC contamination included air spraying, soil vapor extraction, chemical injections, and land use controls. As a result of the 2009 annual groundwater monitoring report, a request of a No Further Action required status has been submitted to the Georgia Environmental Protection Division. Contamination was only found in 2 of 16 monitoring wells.
- SWMU 78 is a site where an aerobically digested sludge generated at the AFP-6 WWTP has been transported for ultimate disposal. Sludge disposal is currently managed through a state- and USEPA-approved plan required by AFP-6's NPDES permit (Dobbins ARB 2010e). Subsurface investigations have not identified constituent concentrations in soil or groundwater above regulatory thresholds; however, the SWMU remains an IRP site pending further consideration.

Two SWMUs (SWMU 14 and 89) are on an adjacent property approximately 80 feet to the north of this site.

- SWMU 14 (B-80 Fuel Oil Storage Tank Spill Area) is a former AST site where a release of approximately 20 gallons of fuel oil occurred in 1993 after a regulator valve on the AST failed resulting in soil contamination. The contamination was subsequently excavated and the area backfilled with clean material. Although a No Further Action status has not been issued, remedial action has occurred at this SWMU, and there is no evidence of environmental contamination remaining from this release.
- SWMU 89 (TCE Contamination at B-80 Fuel Spill Area), where, during the investigation of SWMU 14, elevated levels of TCE were detected in groundwater samples. The source of this TCE contamination is not known but was determined to be separate from the release addressed under SWMU 14. Further investigation and remedial action are required for this SWMU. It is noted that SWMU 89 is located within the 2008 mapped boundaries of the IRP-GWPLUM plume discussed as follows.

In addition, two plumes originating at AFP-6 extend beneath portions of this site.

- A large plume composed of several smaller, comingled plumes emanating from multiple contamination sources occurs in the AFP-6 Industrial Area and extends beneath the northern



portion of Site 3. The plume exists in both the surficial aquifer and the bedrock aquifer. The primary contaminant of concern within the plume is TCE. Other contaminants within the plume include benzene and other VOCs, base neutral acids, and metals. TCE concentrations range from 5 µg/L to 10,000 µg/L within the plume. A plume isoconcentration map dated 2011 identifies TCE present in both the overburden and bedrock aquifers beneath the northern portion of Site 3 at concentrations ranging between 5 µg/L and 100 µg/L. The plume does not appear to extend beneath the southern portion of Site 3. Further investigation of the extent of groundwater contamination in the bedrock aquifer and the upgradient extent of contamination in the surficial aquifer are required. Remedial actions to treat this extensive groundwater plume are ongoing.

- A smaller TCE plume is present south of the Site 2 boundary and extends approximately 50 feet into the southern portion of the site. This plume is also present in the surficial and bedrock aquifers with concentrations likely in the 5 µg/L and 20 µg/L within the boundaries of the site (Dobbins ARB 2011f).

**Site Alternative 4.** No listed IRP, MMRP, or CRP sites are associated with Site Alternative 4. All of the eight IRP sites located at Dobbins ARB are at least 0.9 miles from this site and are not expected to impact it. None of the neighboring AFP-6 associated SWMUs are within the boundaries of this site. The nearest are SWMU-28 (B-58 Wingseal Facility Spill) and SWMU-14/89 B-80 Fuel Oil Storage Tank Spill Area and TCE Contamination at B-80 Fuel Spill Area, respectively), located approximately 260 feet to the west. These SWMUs contribute to an overall contaminated groundwater plume that has migrated from AFP-6 under this site. Remedial actions are currently underway. A plume is a concentration map based on plume-wide data collected in 2011 listed concentrations of TCE beneath the site in the 5 to 100 µg/L range (Dobbins ARB 2010e). Five monitoring wells are located on Site 4 property. The monitoring wells were installed in 1999 as part of the monitoring program for the plume migrating from the AFP-6 property (Dobbins ARB 2011d).

## Asbestos-Containing Materials

According to the USEPA, asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Asbestos is regulated by USEPA under CAA, TSCA, and CERCLA. USEPA has established that any material containing more than 1 percent asbestos by weight is considered an asbestos-containing material (ACM). Friable ACM is any material containing more than 1 percent asbestos, and that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is any ACM that does not meet the criteria for friable ACM.

USEPA and OSHA regulate the remediation of ACM. Emissions of asbestos fibers to ambient air are regulated by Section 112 of the CAA (42 U.S.C. 7401–7671g), as promulgated by 40 CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants).

AFI 32-1052, *Facilities Asbestos Management*, provides the direction for asbestos management at USAF installations. It requires installations to develop an asbestos management plan for the purposes of maintaining a permanent record of the status and condition of ACM in installation facilities, and documenting asbestos management efforts. In addition, the instruction requires installations to develop an asbestos operating plan detailing how the installation accomplishes asbestos-related projects. The *Dobbins ARB Asbestos Operations and Management Plan* was last revised in September 2009 (Dobbins ARB 2009b).

**Site Alternative 1.** Non-friable ACM is present within the former USACE Laboratory within insulation and floor tiles. The ACM is in good condition and does not present a risk to health and safety if left undisturbed. Some of the underground piping and utility conduits that traverse Site Alternative 1 have the

potential to contain ACM. Any potential asbestos unearthed during future development would be disposed of in accordance with established procedures prescribed in the installation's *Asbestos Operations and Management Plan*, and in accordance with local, state, and Federal regulations.

**Site Alternative 2.** No buildings or structures are present at this site. However, there is potential to encounter ACM in the underground utility infrastructure that could currently extend into Site 2 (Dobbins ARB 2010a, Dobbins ARB 2011f).

**Site Alternative 3.** ACM is present at Building B-64 within the chilled and hot water piping systems, insulation, ductwork, hot water fittings, roof fittings, and wallboard. Buildings B-63, B-90, and T-606 are assumed to contain ACM due to their age. Underground utility infrastructure at the Site 3 also has the potential to contain ACM based on the construction age (Dobbins ARB 2011f).

**Site Alternative 4.** There are no structures located on this site except for picnic pavilions, which were not constructed with potential ACM (Dobbins ARB 2011d).

### Lead-Based Paint

According to the USEPA, lead is a toxic metal that was used for many years in paint and other products. LBP was commonly used until banned in 1978 by the Federal government. Therefore, it is assumed that all structures constructed prior to 1978 could contain LBP.

USAF policy and guidance establishes LBP management at USAF facilities. The policy incorporates by reference the requirements of 29 CFR 1910.120, 29 CFR Part 1926, 40 CFR 50.12, 40 CFR Parts 240 through 280, the CAA, and other applicable Federal regulations. In addition, the policy requires each installation to develop and implement a facility management plan for identifying, evaluating, managing, and abating LBP hazards. The Residential Lead-Based Paint Hazard Reduction Act of 1992, Subtitle B, Section 408 (commonly called Title X) regulates the use and disposal of LBP on Federal facilities. Federal agencies are required to comply with applicable Federal, state, and local laws relating to LBP activities and hazards. *Dobbins ARB Lead Based Paint Management Plan* is implemented on installation and describes procedures for managing any LBP identified at the installation (Dobbins ARB 2007c).

**Site Alternative 1.** Based on a 1997 survey, LBP is present at the former USACE Laboratory on some steel support columns, I-beams, doorframes, column edgings, and stair components, but is considered in good shape and does not require abatement if not disturbed (USACE 1997). The other buildings present within Site Alternative 1 are unlikely to contain LBP because no other buildings or trailers were constructed prior to 1978 (Dobbins ARB 2011g).

**Site Alternative 2.** There are no buildings or structures at Site Alternative 2. Therefore, LBP is not a concern.

**Site Alternative 3.** A LBP survey has not been conducted; however, the potential exists that LBP is present at Buildings B-63, B-64, B-90, and T-606 because these facilities were constructed prior to 1978 (Dobbins ARB 2011f).

**Site Alternative 4.** The only structures at Site 4 are picnic pavilions. No LBP survey has taken place at this site, but the pavilions did not appear to be painted, so LBP is unlikely to be a concern (Dobbins ARB 2011d).

## Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are a group of chemical mixtures used as insulators in electrical equipment such as transformers and fluorescent light ballasts. Federal regulations govern items containing 50 to 499 ppm of PCBs. Chemicals classified as PCBs were widely manufactured and used in the United States throughout the 1950s and 1960s. PCB-containing oil is typically found in older electrical transformers and light fixtures (ballasts). Transformers containing greater than 500 ppm of PCBs, between 50 and 500 ppm of PCBs, and less than 50 ppm of PCBs are considered PCB, PCB-contaminated, and non-PCB, respectively.

**Site Alternative 1.** There is no evidence of PCB contamination at Site Alternative 1. There is potential for electrical equipment pre-dating 1985 at the former USACE Laboratory to contain PCBs. The 2003 EBS of the former USACE Laboratory stated that the older transformers of the facility were tested for PCBs and found to contain no detectable levels of PCBs. Transformers installed after 1992 were assumed to be non-PCB and were not tested (Dobbins ARB 2011g). Most electrical equipment at the former USACE Laboratory was not tested to determine if they contained PCBs. Therefore, a 2010 GAARNG memorandum recommended that the oils and fluids of all electrical equipment, except transformers, be tested for PCBs (USACE Savannah District 2003, GAARNG 2010).

**Site Alternative 2.** No electrical equipment is present at this site; therefore, no PCB contamination is expected to be present associated with Site Alternative 2 (Dobbins ARB 2010a).

**Site Alternative 3.** No known PCB-containing electrical equipment remains at Site 3. PCB-containing transformers and capacitors were previously present in an electronics laboratory of Building B-64, but were removed and disposed of. There is no evidence of PCB contamination at this site (Dobbins ARB 2011f).

**Site Alternative 4.** No electrical equipment or transformers are located at Site 4; therefore, no PCB contamination is expected to be present associated with Site Alternative 4 (Dobbins ARB 2011d).

## Radon

Radon is a naturally occurring radioactive gas found in soils and rocks. It comes from the natural breakdown or decay of uranium. Radon has the tendency to accumulate in enclosed spaces that are usually below ground and poorly ventilated (e.g., basements). Radon is an odorless, colorless gas that has been determined to increase the risk of developing lung cancer. In general, the risk increases as the level of radon and length of exposure increase.

USEPA has established a guidance radon level of 4 picoCuries per liter (pCi/L) in indoor air for residences; however, there have been no standards established for commercial structures. Radon gas accumulations greater than 4 pCi/L are considered to represent a health risk to occupants. The USEPA-designated radon potential in Cobb County, Georgia, is Radon Zone 1, which has the highest potential for radon above 4 pCi/L (Dobbins ARB 2011g).

Dobbins ARB and AFP-6 have been surveyed for indoor radon. All radon samples taken during the surveys were below 4 pCi/L, so the surveys concluded that there is a low probability of indoor radon exceeding 4 pCi/L (Dobbins ARB 2011d, f, and g).

## Pesticides

Pest management practices at Dobbins ARB are addressed in the installation's *Integrated Pest Management Plan* (Dobbins ARB 2010b). Dobbins ARB's pest management practices mainly focus on controlling mosquitoes, yellow jackets, wasps, honey bees, fire ants, cockroaches, spiders, ants, termites, nuisance weeds, Canada geese, mice, and rats. Chemicals used for pest management are stored and mixed in Building 509 of the installation's Civil Engineering complex. Dobbins ARB consider pesticides to be hazardous materials and, as such, they are subject to all regulations of hazardous materials (Dobbins ARB 2010b).

**Site Alternative 1.** Minimal amounts of pesticides are assumed to have been used at Site 1 to control nuisance pests. The former USACE Laboratory included a pesticides testing area, and all pesticides at the former USACE Laboratory are assumed to have been disposed of with other hazardous materials when the facility was closed. No known environmental contamination resulting from pesticide usage or storage has been identified (Dobbins ARB 2011g).

**Site Alternative 2.** It is assumed that minimal amounts of pesticides are used to control nuisance pests within Site Alternative 2 (Dobbins ARB 2011d).

**Site Alternative 3.** Minimal amounts of pesticides are assumed to be used at Site 3 to control nuisance pests. No storage or mixing of pesticides has been documented at the site. No known concerns with pesticide usage or storage have been identified (Dobbins ARB 2011f).

**Site Alternative 4.** The City of Marietta Parks Department reported that minimal amounts of pesticides are used at this site to control nuisance pests. No known issues with pesticide usage or storage have been identified (Dobbins ARB 2011d).

## 3.10 Safety

### 3.10.1 Definition of the Resource

A safe environment is one in which there is no, or an optimally reduced, potential for death, serious bodily injury or illness, or property damage. Human health and safety address (1) workers' health and safety during demolition activities and facilities construction, (2) public safety during demolition and construction activities and during subsequent operations of those facilities, and (3) aircraft and flight safety. Aircraft safety focuses on matters such as the potential for aircraft mishaps, airspace congestion, bird-aircraft strike hazards, munitions handling and use, flight obstructions, weather, and fire risks (Dobbins ARB 1999).

Construction site safety requires adherence to regulatory requirements imposed for the benefit of employees. It includes implementation of engineering and administrative practices that aim to reduce risks of illness, injury, death, and property damage. The health and safety of onsite military and civilian workers are safeguarded by numerous DOD and military branch specific regulations designed to comply with standards issued by OSHA, USEPA, and state occupational safety and health agencies. These standards specify health and safety requirements, the amount and type of training required for workers, the use of personal protective equipment (PPE), administrative controls, engineering controls, and permissible exposure limits for workplace stressors.

### 3.10.2 Affected Environment

**Contractor Safety.** Worker and public safety is a key issue at any construction site and military installation. All contractors performing construction activities at Dobbins ARB are responsible for

following ground safety regulations and worker compensation programs and are required to conduct construction activities in a manner that does not pose any risk to its workers or installation personnel. An industrial hygiene program addresses exposure to hazardous materials, use of PPE, and availability of Material Safety Data Sheets. Industrial hygiene is the responsibility of contractors. Contractor responsibilities are to review potentially hazardous workplace operations; to monitor exposure to workplace chemical (e.g., asbestos, lead, hazardous material), physical (e.g., noise propagation), and biological (e.g., infectious waste) agents; to recommend and evaluate controls (e.g., ventilation, respirators) to ensure personnel are properly protected or unexposed; and to ensure a medical surveillance program is in place to perform occupational health physicals for those workers subject to any accidental chemical exposures (Dobbins ARB 1999).

**Fire Hazards and Public Safety.** The Dobbins Fire and Emergency Services provides fire, rescue, HAZMAT, and medical services at the installation in compliance with AFI 32-2001. In addition to Dobbins ARB Fire and Emergency services, private outside contractors could be called in to provide emergency services for HAZMAT spill-related incidents but only after the initial Dobbins ARB services' response. The 94th Security Forces Squadron handles security and police duties at the installation in accordance with AFI 31-201 and AFI 31-101. Other Federal agencies and local municipalities may assist the 94th Security Forces Squadron but only if needed. Individuals, supervisors, managers, and commanders are expected to give full support to safety efforts. Safety awareness and strict compliance with established safety standards are expected. In the event of a mishap, the installation will investigate the incident, document lessons learned, and take corrective action. The installation enforces strict security policies and enforcement procedures and is fully enclosed by a chain-link fence (Dobbins ARB 1999).

Site Alternative 4 is outside the boundaries of the Dobbins ARB and is owned by the City of Marietta. The City of Marietta, Marietta Fire Department, and the Marietta Police Department currently handle public safety at Site Alternative 4.

**Explosives and Munitions Safety.** Explosive safety zone/clearance zones must be established around facilities used for the storage, handling, or maintenance of munitions. Air Force Manual 91-201, *Explosives Safety Standards*, establishes the size of the clearance zones based on quantity-distance criteria or the category and weight of the explosives contained within the facility.

Explosive safety zones currently exist at Dobbins ARB. The largest safety zone is south of the runway at AFP-6. In addition, a 200-foot clear zone for Explosive Site 01 (Above Ground Magazine) at AFP-6 partially overlaps the Site Alternative 3 (Dobbins ARB 2011f). The Above Ground Magazine is a 28-foot-by-13-foot explosives storage container located on a parking lot at the north end of the Site Alternative 3 and used for the temporary storage of explosives, including those used in aircraft seat ejector systems, in support of inbound and outbound shipment activities. None of the other three proposed sites (Site Alternatives 1, 2, and 4) are located within explosive safety zones at Dobbins ARB (Dobbins ARB 2010a; Dobbins ARB 2011d, f, and g).

**Protection of Children.** Since children can suffer disproportionately (i.e., more so than adults due to physiological and behavioral differences) from environmental health risks and safety risks, EO 13045, Protection of Children from Environmental Health Risks and Safety Risks was signed by President Clinton in 1997. The intent of EO 13045 was to prioritize the identification and assessment of environmental health risks and safety risks that could affect children and to ensure that Federal agencies' policies, programs, activities, and standards address environmental health and safety risks to children.

Children live in the vicinity of Dobbins ARB. The facility has taken precautions to prevent children from unknowingly gaining access to the installation and to construction sites. There is no military family housing on the installation and therefore, no children reside on the installation. Children could be on the



installation as visitors of family members and guests of Reservists and installation employees. Children must be under adult supervision while visiting Dobbins ARB. A small playground is located at the Big Lake Recreation Area for children's use.

### 3.11 Socioeconomics and Environmental Justice

#### 3.11.1 Definition of the Resource

**Socioeconomic Resources.** Socioeconomics is defined as the basic attributes and resources associated with the human environment, particularly characteristics of population and economic activity. Regional birth and death rates and immigration and emigration affect population levels. Economic activity typically encompasses employment, personal income, and industrial or commercial growth. Changes in these fundamental socioeconomic indicators typically result in changes to additional socioeconomic indicators, such as housing availability and the provision of public services. Socioeconomic data at county, state, and national levels permit characterization of baseline conditions in the context of regional, state, and national trends.

Demographics, employment characteristics, and housing occupancy status data provide key insights into socioeconomic conditions that might be affected by a proposed action. Demographics identify the population levels and the changes in population levels of a region over time. Demographics data might also be obtained to identify a region's characteristics in terms of race, ethnicity, poverty status, educational attainment level, and other broad indicators. Data on employment characteristics identify gross numbers of employees, employment by industry or trade, and unemployment trends. Data on personal income in a region can be used to compare the "before" and "after" effects of any jobs created or lost as a result of a proposed action. Housing statistics provide baseline information about the local housing stock, the percentage of houses that are occupied, and the ratio of renters to homeowners. Housing statistics allow for baseline information to evaluate the impacts a proposed action might have upon housing in the region.

In appropriate cases, data on an installation's expenditures in the regional economy help to identify the relative importance of an installation in terms of its purchasing power and influence in the job market.

Socioeconomic data shown in this section are presented at census tract, city, county, state, and national levels to characterize baseline socioeconomic conditions in the context of regional and state trends.

**Environmental Justice.** EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that Federal agencies' actions substantially affecting human health or the environment do not exclude persons, deny persons benefits, or subject persons to discrimination because of their race, color, or national origin. The EO was created to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of Federal, state, tribal, and local programs and policies.

Consideration of environmental justice concerns includes race, ethnicity, and the poverty status of populations in the vicinity of a proposed action. Such information aids in evaluating whether a proposed action would render vulnerable any of the groups targeted for protection in the EO.

### 3.11.2 Affected Environment

For the purposes of this socioeconomic analysis, five different spatial levels are used: (1) Region of Influence (ROI), defined as the census tracts including Dobbins ARB and those surrounding the four alternative site locations, which include tracts 304.12, 304.14, 308, 309.02, 310.01, and 311.13; (2) the City of Marietta; (3) Cobb County, the county within which Dobbins ARB is located; (4) Atlanta-Sandy Springs-Marietta 27 Metropolitan Statistical Area (MSA); and (5) the State of Georgia. **Figure 3-7** illustrates the area of the ROI.

The ROI best illustrates the socioeconomic characteristics for the areas adjacent to the alternative site locations and the geographic areas where most impacts from the Proposed Action would occur. The City of Marietta, Cobb County, and the Atlanta-Sandy Springs-Marietta MSA represent the areas where the users of the proposed commissary reside and could also be affected by the Proposed Action; therefore, they are included in the analysis. Data for the State of Georgia provide baseline comparisons for the spatial levels. Data for the United States are included to provide an additional baseline level for comparison.

**Demographics.** 2000 and 2010 population data for the five spatial levels are presented in **Table 3-6**. All of the spatial levels have population increase rates considerably higher than the United States baseline with the exception of the City of Marietta, which actually had a population decrease. Cobb County's population growth can be attributed to a tremendous growth in residential and commercial activity, direct access to four interstates (I-75, I-20, I-285, and I-575), and investments in educational facilities (Dobbins ARB 2010a).

**Table 3-6. Population Data for 2000 and 2010**

	2000	2010	Percent Change
ROI	N/A	22,696	N/A
The City of Marietta	58,748	56,579	-3.7%
Cobb County	607,751	688,078	13.2%
Atlanta-Sandy Springs-Marietta MSA	4,247,981	5,268,860	24.0%
Georgia	8,186,453	9,687,653	18.3%
United States	281,421,906	308,745,538	9.7%

Sources: U.S. Census Bureau 2010c, U.S. Census Bureau 2010d, U.S. Census Bureau 2010e, U.S. Census Bureau 2010f, Harvard 2010

**Employment Characteristics.** As of 2010, the percentage of persons employed in the armed forces was 0.8 percent in the ROI, 0.3 percent in the City of Marietta, 0.2 percent in Cobb County, 0.2 percent in the Atlanta-Sandy Springs-Marietta MSA, 0.8 percent in Georgia, and 0.5 percent in the United States. Interestingly, the percent of persons employed by the armed forces is the lowest in Cobb County despite the existence of Dobbins ARB. Construction is the most prevalent occupation in the ROI. For the City of Marietta, Cobb County, and the Atlanta-Sandy Springs-Marietta MSA, the most common occupations are professional, scientific, management, administrative, and waste management services. Retail sale is the most prevalent occupation in Georgia and the United States (U.S. Census Bureau 2010b). **Table 3-7** contains 2010 information regarding employment by industry.



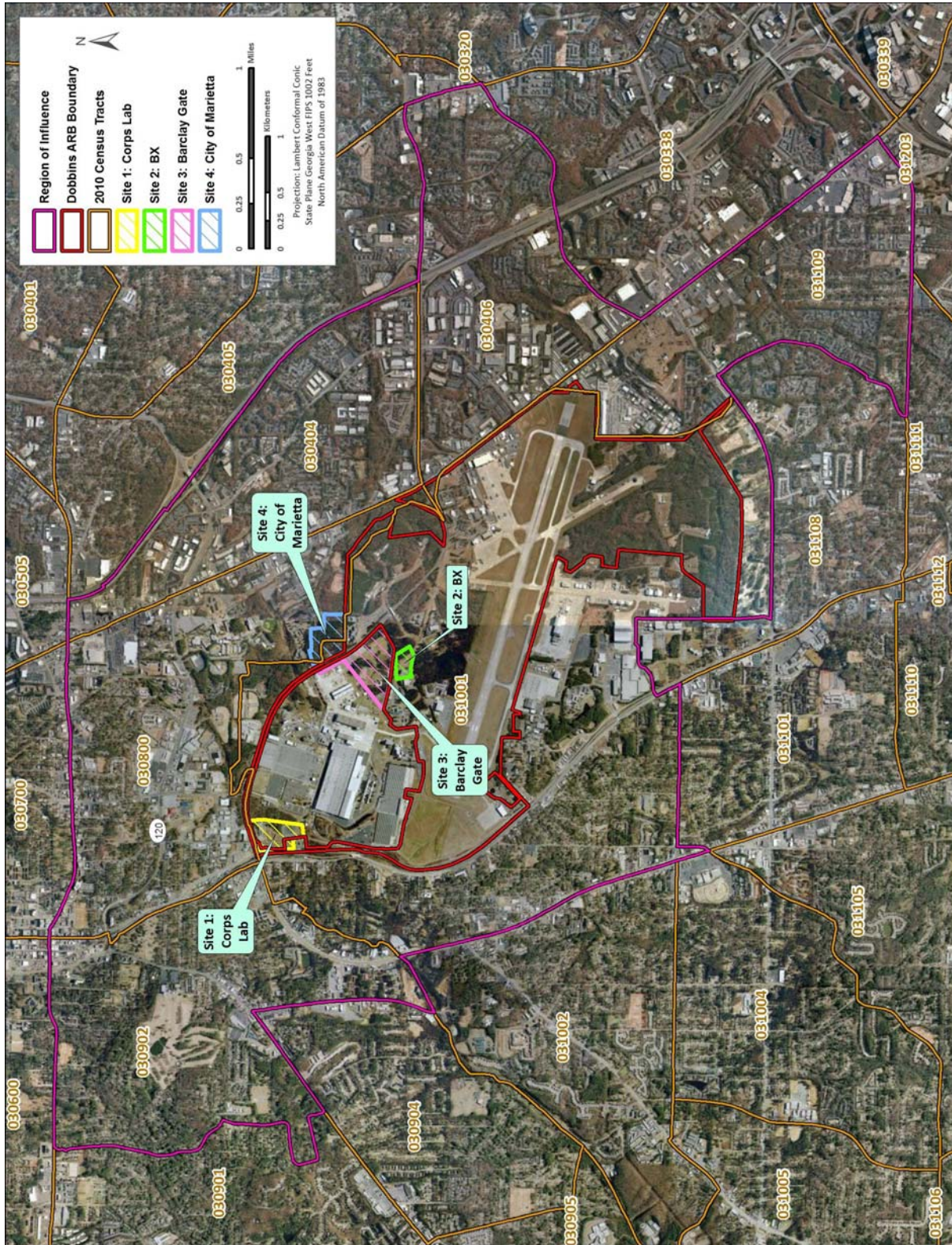


Figure 3-7. Socioeconomic and Environmental Justice Region of Influence for the Proposed Action

**Table 3-7. Overview of Employment by Industry, 2010**

Employment Types	ROI	The City of Marietta	Cobb County	Atlanta-Sandy Springs-Marietta MSA	Georgia	United States
Percent of population 16 years and over in the labor force	75.2%	73.6%	72.8%	70.1%	65.5%	65%
Percent of population 16 years and over in labor force employed within the armed forces	0.8%	0.3%	0.2%	0.2%	0.8%	0.5%
Construction	16.5%	13.0%	7.9%	7.9%	7.9%	7.1%
Manufacturing	8.0%	8.0%	8.3%	9.0%	11.2%	11.0%
Wholesale trade	1.8%	2.4%	4.0%	3.9%	3.4%	3.1%
Retail trade	14.9%	12.6%	11.8%	11.8%	11.7%	11.5%
Transportation and warehousing, and utilities	3.9%	4.7%	5.4%	6.6%	6.1%	5.1%
Arts, entertainment, recreation, accommodation, and food services	9.1%	9.8%	8.0%	8.2%	8.3%	8.9%
Other services (except public administration)	5.0%	4.3%	4.7%	4.9%	4.9%	4.9%
Public administration	1.9%	4.0%	3.6%	4.5%	5.3%	4.8%
Agriculture, forestry, fishing and hunting, and mining	0.1%	0.3%	0.2%	0.3%	1.2%	1.9%
Manufacturing	7.95%	8.0%	8.3%	9.0%	11.2%	11.0%
Information	3.6%	2.8%	3.9%	3.6%	2.7%	2.4%
Finance, insurance, real estate, and rental and leasing	5.4%	7.2%	8.6%	7.8%	6.6%	7.0%
Professional, scientific, management, administrative, and waste management services	16.1%	14.0%	15.7%	13.3%	10.7%	10.4%

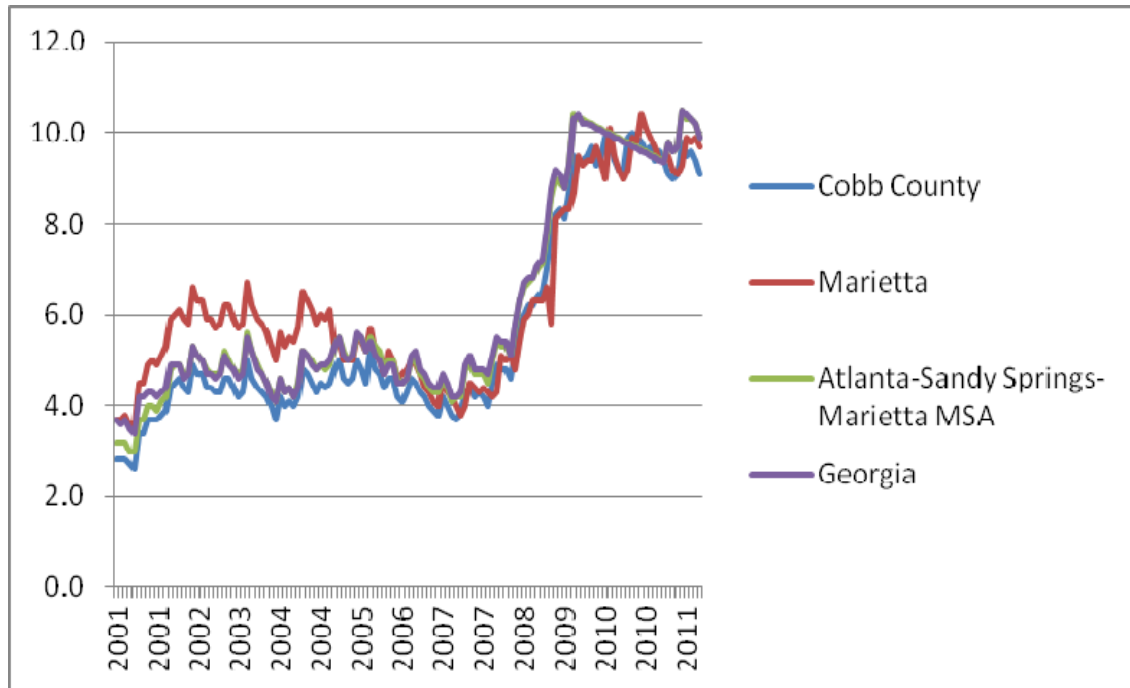
Source: U.S. Census Bureau 2010b

As of October 2010, Dobbins ARB has an estimated annual economic impact of \$181,712,924 on the region. It has an average annual payroll of \$93,841,157, annual expenditures of \$39,403,533, and the estimated annual value of jobs created is \$48,468,234. The installation is responsible for 2,547 direct and 878 indirect employees. Indirect jobs are estimated nonactive duty positions created by the installation (Dobbins ARB 2010f). Additionally, Dobbins ARB makes a considerable contribution to the local economy through direct employment and purchases from local businesses. In 2005, 88 percent of the total payroll was spent within a 50-mile radius of the installation (Dobbins ARB 2010a).

As of 2010, the average unemployment rate for the ROI was 7.33 percent (U.S. Census Bureau 2010b). The City of Marietta has had higher than baseline (i.e., Georgia) unemployment rates from 2001 to 2004. From 2004 to 2007, the City of Marietta had unemployment rates on par with the baseline, and from 2007 to 2011 their unemployment rates have been generally slightly lower than the baseline. The City of Marietta surpassed the 10 percent unemployment mark in February, September, and October 2010. Cobb



County has generally maintained unemployment rates slightly lower than the baseline for the past decade. Unemployment rates (not seasonally adjusted) in the Atlanta-Sandy Springs-Marietta MSA and Georgia have been tightly aligned for the past decade. The monthly unemployment rates for the Atlanta-Sandy Springs-Marietta MSA and Georgia have been intermittently higher than 10 percent since June 2009. However, the national seasonally adjusted unemployment rate has only risen above 10 percent one time in the past 10 years; in October 2009 it was 10.1 percent (Bureau of Labor Statistics 2011). **Figure 3-8** shows monthly unemployment rates for the region and state from 2001 through 2011.



Source: Bureau of Labor Statistics 2011

**Figure 3-8. Unemployment Percentages, 2001 to 2011**

**Housing Characteristics.** **Table 3-8** depicts the housing characteristics of the spatial levels. The housing occupancy rate in the ROI is relatively low and the owner occupancy rate is considerably low. Similarly, the City of Marietta also has a relatively low owner occupancy percentage and the second lowest occupancy percentage. The other spatial levels have occupancy percentages similar to the national average. It is worth noting that the Atlanta-Sandy Springs-Marietta MSA contains 53 percent of the housing units in Georgia (U.S. Census Bureau 2010b).

**Environmental Justice.** Minority population levels within the ROI are considerably higher than minority levels in all other spatial levels. The ROI's population reporting to be a race other than white was 58.9 percent, which is greater than the City of Marietta (47.3 percent), Cobb County (37.8 percent), the Atlanta-Sandy Springs-Marietta MSA (44.6 percent), Georgia (40.3 percent), and the United States (27.6 percent). The Hispanic or Latino population in the ROI was also considerably higher than all other spatial levels. Minority populations in all spatial levels are higher than for the United States (U.S. Census Bureau 2010b). The poverty status for individuals in the ROI is considerably higher than that of all other spatial levels. Likewise, the per capita income and median household income for the ROI is lower than in the other spatial levels. The ROI has a greater percentage of individuals under 5 years old than all other spatial levels (U.S. Census Bureau 2010b). **Table 3-9** shows the 2010 demographic data for the spatial levels.



**Table 3-8. Housing Characteristics by Spatial Levels**

	<b>ROI</b>	<b>The City of Marietta</b>	<b>Cobb County</b>	<b>Atlanta-Sandy Springs-Marietta MSA</b>	<b>Georgia</b>	<b>USA</b>
Total Housing Units	10,894	26,918	286,490	2,165,495	4,088,801	131,704,703
Occupancy Percentage	79.3%	85.7%	90.9%	89.5%	87.7%	88.6%
Owner Occupancy Percentage	21.3%	42.3%	66.9%	66.9%	65.7%	65.1%

Source: U.S. Census Bureau 2010b

Note: Owner occupancy percentage refers the percent of occupied houses that are occupied by the owner rather than rented.

**Table 3-9. Minority, Low-Income, and Poverty Status, 2010**

<b>Demographic</b>	<b>ROI</b>	<b>The City of Marietta</b>	<b>Cobb County</b>	<b>Atlanta-Sandy Springs-Marietta MSA</b>	<b>Georgia</b>	<b>United States</b>
Total Population	22,696	56,579	688,078	5,268,860	9,687,653	308,745,538
Percent Male	53.1%	48.9%	48.6%	48.7%	48.8%	49.2%
Percent Female	46.9%	51.1%	51.4%	51.3%	51.2%	50.8%
Percent Under 5 Years	9.4%	8.2%	7.0%	7.2%	7.1%	6.5%
Percent Over 65 Years	4.8%	10.1%	8.7%	9.0%	10.7%	13.0%
Percent White	41.1%	52.7%	62.2%	55.4%	59.7%	72.4%
Percent Black or African American	37.0%	31.5%	25.0%	32.4%	30.5%	12.6%
Percent American Indian, Alaska Native	1.0%	0.5%	0.3%	0.3%	0.3%	0.9%
Percent Asian	1.6%	3.0%	4.5%	4.8%	3.2%	4.8%
Percent Native Hawaiian and Other Pacific Islander	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
Percent Some Other Race	15.5%	9.1%	5.3%	4.5%	4.0%	6.2%
Percent Reporting 2 or more races	3.7%	3.3%	2.7%	2.4%	2.1%	2.9%
Percent Hispanic or Latino	34.3%	20.6%	12.3%	10.4%	8.8%	16.3%
Percent of Individuals Below Poverty	26.0%	18.5%	10.6%	12.6%	15.7%	13.8%
Per Capita Income	\$18,696	\$26,710	\$33,110	\$28,853	\$25,134	\$27,334
Median Household Income	\$34,063	\$45,233	\$65,522	\$57,550	\$49,347	\$51,914

Source: U.S. Census Bureau 2010b

## 4. Environmental Consequences

This section addresses the potential environmental consequences associated with the Proposed Action and No Action Alternative. The following discussion elaborates how environmental and socioeconomic resources impacts are categorized and described for the resource areas analyzed.

**Short-term or long-term.** These characteristics are determined on a case-by-case basis and do not refer to any rigid time period. In general, short-term effects are those that would occur only with respect to a particular activity or for a finite period, such as during the time required for construction or installation activities. Short-term effects are more likely to be acute, whereas long-term effects are more likely to be persistent and chronic.

**Direct or indirect.** A direct effect is caused by and occurs contemporaneously at or near the location of the action. An indirect effect is caused by a proposed action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action. For example, a direct effect of erosion on a stream might include sediment-laden waters in the vicinity of the action, whereas an indirect impact of the same erosion might lead to lack of spawning and result in lowered reproduction rates of indigenous fish downstream.

**Negligible, minor, moderate, or major.** These relative terms are used to characterize the magnitude or intensity of an impact. Negligible effects are generally those that might be perceptible but are at the lower level of detection. A minor effect is slight, but easily detectable. A moderate effect is readily apparent. A major effect is one that is severely adverse or exceptionally beneficial.

**Adverse or beneficial.** An adverse effect is one having adverse, unfavorable, or undesirable outcomes on the man-made or natural environment. A beneficial effect is one having positive outcomes on the man-made or natural environment. A single act might result in adverse effects on one environmental resource and beneficial effects on another resource.

**Significance.** Significant effects are those that, in their context and due to their intensity (severity), meet the thresholds for significance set forth in CEQ regulations (40 CFR 1508.27).

**Context.** The context of an effect can be localized or more widespread (e.g., regional).

**Intensity.** The intensity of an effect is determined through consideration of several factors, including whether an alternative might have an adverse impact on the unique characteristics of an area (e.g., historical resources, ecologically critical areas), public health or safety, or endangered or threatened species or designated critical habitat. Effects are also considered in terms of their potential for violation of Federal, state, or local environmental law; their controversial nature; the degree of uncertainty or unknown effects, or unique or unknown risks; if there are precedent-setting effects; and their cumulative effects (see **Section 5**).

### 4.1 Air Quality

#### 4.1.1 Evaluation Criteria

The significance criteria are dependent on whether the Proposed Action is located in an attainment, nonattainment, or maintenance area for criteria pollutants. Other significance criteria include whether New Source Review (NSR) air quality construction permitting is triggered or Title V operating permitting is triggered. Major NSR air quality construction permitting is divided into Nonattainment Major NSR

(NANSR) for nonattainment pollutants and PSD permitting for attainment pollutants. All of these significance criteria are discussed in the following paragraphs.

**Attainment Area Pollutants.** The attainment area pollutants for the location of this Proposed Action are CO, NO<sub>2</sub>, SO<sub>2</sub>, Pb, and PM<sub>10</sub>. The impact in NAAQS “attainment” areas would be considered significant if the net increases in these pollutant emissions from the Federal action would result in any one of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Expose sensitive receptors to substantially increased pollutant concentrations
- Exceed any Evaluation Criteria established by a SIP.

Impacts on ambient air quality were generally assessed by comparing the increase in emissions under the Proposed Action to the county or AQCR emissions inventory.

**Nonattainment or Maintenance Area Pollutants.** The nonattainment area pollutants for the location of this Proposed Action are PM<sub>2.5</sub> and O<sub>3</sub> (measured as NO<sub>x</sub> and VOC). Effects on air quality in NAAQS “nonattainment” areas are considered significant if the net changes in these project-related pollutant emissions result in any of the following scenarios:

- Cause or contribute to a violation of any national or state ambient air quality standard
- Increase the frequency or severity of a violation of any ambient air quality standard
- Delay the attainment of any standard or other milestone contained in the SIP.

With respect to the General Conformity Rule, effects on air quality would be considered significant if the proposed Federal action emissions exceed *de minimis* threshold levels established in 40 CFR 93.153(b) for individual nonattainment pollutants or for pollutants for which the area has been redesignated as a maintenance area. In addition, if a facility has a specific general conformity budget listed in the SIP, a proposed action that results in an exceedance of that budget would be considered a significant effect on air quality. Dobbins ARB is not specifically listed in the Georgia SIP as having a specific General Conformity budget.

**Table 4-1** presents the General Conformity *de minimis* thresholds, by regulated pollutant. As shown in this table, *de minimis* thresholds vary depending on the severity of the nonattainment area classification.

Note that emissions sources subject to NANSR, PSD, or even Minor NSR air permitting are not required to be counted towards the General Conformity *de minimis* thresholds. The reasoning for this is they would already be required to go through an approval process with the appropriate Federal, state, or local air quality regulatory authority.

**Nonattainment Major NSR Permits.** The following factors were considered in determining the significance of air quality impacts with respect to NANSR permitting requirements:

- If the net increase in stationary source emissions qualify as a NANSR major source. This major source threshold varies from 10 tpy to 100 tpy for nonattainment pollutants depending on the severity of the nonattainment classification and the pollutant (40 CFR 51.165).

**PSD and Title V Permits.** The following factors were considered in determining the significance of air quality impacts with respect to PSD permitting requirements prior to construction:

**Table 4-1. Conformity *de minimis* Emissions Thresholds**

<b>Pollutant</b>	<b>Status</b>	<b>Classification</b>	<b><i>de minimis</i> Limit (tpy)</b>
Ozone (measured as NO <sub>x</sub> or VOCs)	Nonattainment	Extreme Severe Serious Moderate/marginal (inside ozone transport region) All others	10 25 50 50 (VOCs)/100 (NO <sub>x</sub> ) 100
	Maintenance	Inside ozone transport region Outside ozone transport region	50 (VOCs)/100 (NO <sub>x</sub> ) 100
Carbon Monoxide	Nonattainment/ maintenance	All	100
PM <sub>10</sub>	Nonattainment	Serious Moderate No Special Classification	70 100 100
	Maintenance	All	100
PM <sub>2.5</sub> (measured directly, or as SO <sub>2</sub> , or NO <sub>x</sub> , or VOC as significant precursors)	Nonattainment/ maintenance	All	100
SO <sub>2</sub>	Nonattainment/ maintenance	All	100
NO <sub>x</sub>	Nonattainment/ maintenance	All	100
VOC	Nonattainment/ maintenance	All	100
Lead	Nonattainment/ maintenance	All	25

Source: 40 CFR 93.153, as of January 9, 2012

- If the net increase in stationary source emissions qualify as a PSD major source. This includes 250 tpy emissions per attainment pollutant (40 CFR 52.21(b)(1) and 40 CFR 52.21(a)(2), or 75,000 tpy emissions of GHGs.
- If the Proposed Action occurs within 10 kilometers of a Class I area and if it would cause an increase in the 24-hour average concentration of any regulated pollutant in the Class I area of 1 µg/m<sup>3</sup> or more (40 CFR 52.21[b][23][iii] and 40 CFR 52.21[a][2]).

The following factor was considered in determining the significance of air quality impacts with respect to Title V operating permit requirements (40 CFR 71.2 and 40 CFR 71.3):

- If the increase in stationary source emissions under the Proposed Action qualify as a Title V major source. This includes the potential to emit 100 tpy for criteria pollutants, or 10 tpy of any individual HAP, or 25 tpy of all HAPs combined, or 100,000 tpy of GHGs.

Only operational emissions increases were evaluated for PSD and Title V permitting impacts as construction activity emissions are typically not subject to the above significance criteria for these permit programs.

#### 4.1.2 Proposed Action

The four site alternatives would generate essentially the same air quality impacts. Therefore, their air quality impacts discussion is consolidated into this one section for the Proposed Action. However, anomalies for certain alternatives that would cause some minor differences in air emissions are included in the detailed emissions calculations within **Appendix B** and in the tables below.

**Construction Emissions Estimates.** Short-term, adverse effects on air quality would be expected from the construction of the commissary; however, the effects would not be significant. The construction activities associated with the new facility would generate air pollutant emissions from site-disturbing activities such as grading, filling, compacting, trenching, and operation of construction equipment. Construction activities would also generate particulate emissions as fugitive dust from ground-disturbing activities and from the combustion of fuels in construction equipment and hauling of materials to the site. Fugitive dust emissions would be greatest during the initial site preparation activities and would vary from day to day depending on the work phase, level of activity, and prevailing weather conditions. The quantity of uncontrolled fugitive dust emissions from a construction site is proportional to the area of land being worked and the level of activity. Construction activities would incorporate best management practices (BMPs) and control measures (e.g., frequent use of water to suppress dust from dust-generating activities) to minimize fugitive particulate matter emissions. Additionally, the work vehicles are assumed to be well-maintained and could use diesel particle filters to reduce emissions. Construction workers commuting daily to and from the job site in their personal vehicles would also result in criteria pollutant air emissions. Based on the size of the new facility and the duration of the construction activities, it is not expected that emissions from construction activities would contribute to or affect local or regional attainment status with the NAAQS.

Emissions from construction activities would be produced only for the duration of work activities, which, for the purposes of this air quality analysis, is conservatively assumed to be 240 workdays (i.e., 5 days per week, 4 weeks per month, and 12 calendar months). Air emissions from construction activities are summarized in **Tables 4-2** through **4-5** for each of the four Site Alternatives. **Appendix B** contains detailed calculations and the assumptions used to estimate the air emissions. Note that all construction emissions are not stationary sources but are classified as mobile source emissions.

**Operational Emissions Estimates.** Long-term, adverse effects on air quality would be expected from the operations at the commissary; however, the effects would not be significant. The proposed facility would produce air emissions from the operation of the building's heating systems. Long-term emissions would be produced yearly, beginning with the year following the construction of the commissary. Further information on the sources of long-term air emissions are summarized in the following paragraphs.

It was assumed the proposed commissary would use a natural gas heating system. Although the design capacity of the heating system was not available, it was assumed the total heating capacity requirement would be approximately 6 million British Thermal Units per hour (BTU/hr) based on typical heating designs for military base buildings of similar size. Emissions from the building's heating systems were estimated using USEPA's emissions factor reference document, AP-42 (USEPA 2011e). Air emissions estimates from these operations are summarized in **Table 4-6**. **Appendix B** contains detailed calculations and the assumptions used to estimate the air emissions.

**Table 4-2. Estimated Annual Air Emissions  
Resulting from Construction of the Proposed Action at Site Alternative 1**

Activity	NO <sub>x</sub> tpy	VOC tpy	CO tpy	SO <sub>2</sub> tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	CO <sub>2</sub> tpy
<b>Site 1 Alternative</b>							
Combustion Emissions	6.090	0.673	2.641	0.403	0.424	0.411	703.199
Fugitive Dust Emissions	-	-	-	-	19.380	1.938	-
Haul Truck On-Road Emissions	0.570	0.412	1.674	0.045	0.677	0.176	144.189
Construction Commuter Emissions	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>Total Construction Emissions from Proposed Action – Site 1 Alternative</b>	<b>6.836</b>	<b>1.261</b>	<b>5.901</b>	<b>0.450</b>	<b>20.498</b>	<b>2.536</b>	<b>1,057.759</b>
<b>Percent of Cobb County Inventory</b>	<b>0.03%</b>	<b>0.01%</b>	<b>0.005%</b>	<b>0.002%</b>	<b>0.1%</b>	<b>0.04%</b>	<b>See value and note below</b>
<b>Percent of Metropolitan Atlanta AQCR Inventory</b>	<b>0.004%</b>	<b>0.001%</b>	<b>0.001%</b>	<b>0.0003%</b>	<b>0.01%</b>	<b>0.01%</b>	<b>0.0005%*</b>
<b>General Conformity Applicability Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>

Notes: \* Percent of Georgia's 2009 CO<sub>2</sub> emissions (DOE/EIA 2011). NA = Not Applicable

**Table 4-3. Estimated Annual Air Emissions  
Resulting from Construction of the Proposed Action at Site Alternative 2**

Activity	NO <sub>x</sub> tpy	VOC tpy	CO tpy	SO <sub>2</sub> tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	CO <sub>2</sub> tpy
<b>Site 2 Alternative</b>							
Combustion Emissions	5.391	0.633	2.356	0.389	0.381	0.370	616.710
Fugitive Dust Emissions	-	-	-	-	11.055	1.105	-
Haul Truck On-Road Emissions	0.425	0.307	1.249	0.033	0.506	0.131	107.638
Construction Commuter Emissions	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>Total Construction Emissions from Proposed Action – Site 2 Alternative</b>	<b>5.992</b>	<b>1.116</b>	<b>5.192</b>	<b>0.425</b>	<b>11.958</b>	<b>1.617</b>	<b>934.719</b>
<b>Percent of Cobb County Inventory</b>	<b>0.03%</b>	<b>0.005%</b>	<b>0.004%</b>	<b>0.002%</b>	<b>0.1%</b>	<b>0.04%</b>	<b>See value and note below</b>
<b>Percent of Metropolitan Atlanta AQCR Inventory</b>	<b>0.004%</b>	<b>0.001%</b>	<b>0.001%</b>	<b>0.0002%</b>	<b>0.01%</b>	<b>0.005%</b>	<b>0.0005%*</b>
<b>General Conformity Applicability Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>

Notes: \* Percent of Georgia's 2009 CO<sub>2</sub> emissions (DOE/EIA 2011). NA = Not Applicable



**Table 4-4. Estimated Annual Air Emissions  
Resulting from Construction of the Proposed Action at Site Alternative 3**

Activity	NO <sub>x</sub> tpy	VOC tpy	CO tpy	SO <sub>2</sub> tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	CO <sub>2</sub> tpy
<b>Site 3 Alternative</b>							
Combustion Emissions	5.682	0.650	2.474	0.395	0.399	0.387	652.583
Fugitive Dust Emissions	-	-	-	-	13.178	1.318	-
Haul Truck On-Road Emissions	0.482	0.349	1.417	0.038	0.573	0.149	122.074
Construction Commuter Emissions	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>Total Construction Emissions from Proposed Action – Site 3 Alternative</b>	<b>6.341</b>	<b>1.174</b>	<b>5.477</b>	<b>0.435</b>	<b>14.167</b>	<b>1.864</b>	<b>985.028</b>
<b>Percent of Cobb County Inventory</b>	<b>0.03%</b>	<b>0.01%</b>	<b>0.004%</b>	<b>0.002%</b>	<b>0.1%</b>	<b>0.05%</b>	<b>See value and note below</b>
<b>Percent of Metropolitan Atlanta AQCR Inventory</b>	<b>0.004%</b>	<b>0.001%</b>	<b>0.001%</b>	<b>0.0002%</b>	<b>0.01%</b>	<b>0.01%</b>	<b>0.0005%*</b>
<b>General Conformity Applicability Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>

Notes: \* Percent of Georgia's 2009 CO<sub>2</sub> emissions (DOE/EIA 2011). NA = Not Applicable

**Table 4-5. Estimated Annual Air Emissions  
Resulting from Construction of the Proposed Action at Site Alternative 4**

Activity	NO <sub>x</sub> tpy	VOC tpy	CO tpy	SO <sub>2</sub> tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	CO <sub>2</sub> tpy
<b>Site 4 Alternative</b>							
Combustion Emissions	6.090	0.673	2.641	0.403	0.424	0.411	703.199
Fugitive Dust Emissions	-	-	-	-	19.446	1.945	-
Haul Truck On-Road Emissions	0.576	0.417	1.693	0.045	0.685	0.178	145.874
Construction Commuter Emissions	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>Total Construction Emissions from Proposed Action – Site 4 Alternative</b>	<b>6.843</b>	<b>1.265</b>	<b>5.921</b>	<b>0.450</b>	<b>20.572</b>	<b>2.544</b>	<b>1,059.444</b>
<b>Percent of Cobb County Inventory</b>	<b>0.03%</b>	<b>0.01%</b>	<b>0.005%</b>	<b>0.002%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>See value and note below</b>
<b>Percent of Metropolitan Atlanta AQCR Inventory</b>	<b>0.004%</b>	<b>0.001%</b>	<b>0.001%</b>	<b>0.0003%</b>	<b>0.01%</b>	<b>0.01%</b>	<b>0.0006%*</b>
<b>General Conformity Applicability Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>

Notes: \* Percent of Georgia's 2009 CO<sub>2</sub> emissions (DOE/EIA 2011). NA = Not Applicable

**Table 4-6. Estimated Annual Air Emissions Resulting from Operation of the Proposed Action**

Activity	NO <sub>x</sub> tpy	VOC tpy	CO tpy	SO <sub>2</sub> tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	CO <sub>2</sub> tpy
Building Heating Systems Emissions	1.288	0.142	2.164	0.015	0.196	0.196	3,091.765
Worker and Patron Commuting Emissions	5.288	5.265	47.593	0.062	0.501	0.316	6,311.130
<b>Total Operational Emissions from Proposed Action</b>	<b>6.576</b>	<b>5.407</b>	<b>49.757</b>	<b>0.077</b>	<b>0.697</b>	<b>0.512</b>	<b>9,402.895</b>
<b>Percent of Cobb County Inventory</b>	<b>0.01%</b>	<b>0.008%</b>	<b>0.01%</b>	<b>0.0001%</b>	<b>0.002%</b>	<b>0.008%</b>	<b>See value and note below</b>
<b>Percent of Metropolitan Atlanta AQCR Inventory</b>	<b>0.002%</b>	<b>0.001%</b>	<b>0.002%</b>	<b>0.00002%</b>	<b>0.0002%</b>	<b>0.0009%</b>	<b>0.003%<sup>b</sup></b>
<b>PSD Permitting Thresholds</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>75,000<sup>c</sup></b>
<b>NANSR Permitting Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>
<b>Title V Permitting Thresholds</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100,000<sup>c</sup></b>
<b>General Conformity Applicability Thresholds</b>	<b>100</b>	<b>100</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>100</b>	<b>NA</b>

Notes:

- There will be some emissions of NO<sub>x</sub> from the process operations but they have not been fully quantified; however, the limited design information indicates the emissions will be negligible.
- Percent of Georgia's 2009 CO<sub>2</sub> emissions (DOE/EIA 2011).
- These thresholds include aggregating emissions of all GHGs; however, the overwhelming majority of GHGs emitted from the operational sources is CO<sub>2</sub>.

NA = Not Applicable

Long-term air emissions would also be produced from the new workers commuting to the installation along with new patrons visiting the commissary. It is conservatively estimated that a total of 1,200 patrons and employees would commute to the installation daily based on estimated peak levels (DeCA 2012). It was assumed that the 1,200 vehicles would travel from outside the AQCR. Air emissions estimates from these personnel are summarized in **Table 4-6**. **Appendix B** contains detailed calculations and the assumptions used to estimate the air emissions. Note that the operational emissions are the same for each of the four site alternatives.

Based on the emissions calculations, operational emissions and construction emissions from the Proposed Action are not expected to (1) cause or contribute to a violation of any national or state ambient air quality standard, (2) increase the frequency or severity of a violation of any ambient air quality standard, (3) expose sensitive receptors to substantially increased pollutant concentrations, (4) exceed any Evaluation Criteria established by a SIP, or (5) delay the attainment of any standard or other milestone contained in the SIP. In addition, the operational emissions increases are not expected to trigger PSD, NANSR, or Title V permitting. Minor NSR permitting could be necessary for new heating systems or

any other fossil-fueled combustion sources (e.g., emergency generator). The requirement for Minor NSR permitting should be determined once further design information is available.

**General Conformity.** The Proposed Action is located in a nonattainment area for PM<sub>2.5</sub> and O<sub>3</sub>. Therefore, General Conformity applicability was evaluated based on the increase in PM<sub>2.5</sub> emissions and the pollutants that generate O<sub>3</sub>, VOCs, and NO<sub>x</sub>. The thresholds are 100 tpy for each of these pollutants. As shown above in **Tables 4-2** through **4-6**, the General Conformity thresholds are not expected to be exceeded for this Proposed Action, either during the construction activities or subsequent operational activities. Therefore, a General Conformity determination is not required.

**Greenhouse Gas Emissions.** Construction and operational activities would contribute directly to emissions of GHGs from the combustion of fossil fuels. Because CO<sub>2</sub> emissions account for approximately 92 percent of all GHG emissions in the United States, they are used to simplify the analyses of GHG emissions in this assessment.

The U.S. Department of Energy, Energy Information Administration estimates that in 2009 gross CO<sub>2</sub> emissions in Georgia were 164.2 million metric tons and were 5,814.4 million metric tons in the entire United States (DOE/EIA 2011). The Proposed Action would emit an estimated maximum of 960.9 metric tons from construction activities (Site Alternative 4) and 8,528.4 metric tons annually from operational activities. Construction GHG emissions would be temporary and occur for one year. GHG emissions from operational activities would be permanent beginning in the year following the completion of construction. The total maximum estimated annual CO<sub>2</sub> emissions from the Proposed Action would be 0.005 percent of Georgia's 2009 CO<sub>2</sub> emissions and 0.00015 percent of the entire United States' 2009 CO<sub>2</sub> emissions. Therefore, the Proposed Action would represent a negligible contribution towards statewide and national GHG inventories.

### 4.1.3 No Action Alternative

Under the No Action Alternative, Dobbins ARB would not implement the Proposed Action. Existing conditions would remain the same as described in **Section 3.1.2**. No effects on regional or local air quality would be expected.

## 4.2 Noise

### 4.2.1 Evaluation Criteria

Noise impact analyses typically evaluate potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the acoustical environment can be beneficial (i.e., if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound level), negligible (i.e., if the total number of sensitive receptors to unacceptable noise levels is essentially unchanged), or adverse (i.e., if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level). Projected noise effects were evaluated qualitatively for the alternatives considered.

### 4.2.2 Proposed Action

#### 4.2.2.1 Site Alternative 1: Corps Lab Site

**Construction Noise.** The sources of noise at Site Alternative 1 that could impact populations include construction activities. These sources are addressed as follows.

The Proposed Action consists of constructing a permanent commissary for authorized patrons. Noise from construction activities varies depending on the type of equipment being used, the area that the action would occur in, and the distance from the noise source. To predict how construction activities would impact adjacent populations, noise from the probable equipment was estimated. For example, as shown in **Table 3-4**, construction usually involves several pieces of equipment (e.g., trucks and bulldozers) that can be used simultaneously. Under the Proposed Action, the cumulative noise from the construction equipment, during the busiest day, was estimated to determine the total impact of noise from construction activities at a given distance. Examples of expected cumulative construction noise during daytime hours at specified distances are shown in **Table 4-7**. These sound levels were predicted at 50, 100, 200, 400, 800, and 1,200 feet from the source of the noise.

**Table 4-7. Predicted Noise Levels from Construction Activities**

<b>Distance from Noise Source</b>	<b>Predicted Noise Level</b>
50 feet	89 dBA
100 feet	83 dBA
200 feet	77 dBA
400 feet	71 dBA
800 feet	65 dBA
1,200 feet	61 dBA

The noise from construction equipment would be localized, short-term, and intermittent during machinery operations. Heavy equipment would be used periodically during construction; therefore, noise levels from the equipment would fluctuate throughout the day.

Site Alternative 1 is within the installation boundary to the northwest; however it is bordered by off-installation land to the west and north. The closest off-installation noise-sensitive receptor (a residential area) is approximately 500 feet to the west. Persons approximately 500 feet from construction activities would like experience noise levels of approximately 68 dBA.

Construction activities under the Proposed Action would result in short-term, minor, adverse impacts on the noise environment in the vicinity of construction activities. However, noise generation would last only for the duration of construction activities and would diminish as they moved farther away from the receptor. Noise generation could be minimized by restricting construction to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.) and the use of measures such as equipment exhaust mufflers. It is not anticipated that the short-term increase in ambient noise levels from the Proposed Action at Site Alternative 1 would cause significant adverse effects on the surrounding populations.

Noise contours from aircraft operations at Dobbins ARB are directly south and west of Site Alternative 1. Since multiple single noise events create the cumulative DNL value, the actual sound levels that a person hears within the area of the DNL noise contours fluctuates throughout a 24-hour period. Consequently, populations within and adjacent to Site Alternative 1 are accustomed to fluctuations of noise levels. In addition, noise generation would last only for the duration of construction activities and would be isolated to normal working hours. Consequently, construction activities at Site Alternative 1 would not result in significant impacts on the noise environment.

**Construction Vehicular Noise.** Short-term, negligible to minor, adverse impacts on the ambient environment would be expected as a result of the increase in construction vehicular traffic under the Proposed Action. Construction traffic would use existing roadways as discussed in **Section 3.2.2** to access Site Alternative 1. The additional traffic resulting from construction vehicles would likely cause minor increases in noise levels on noise-sensitive populations adjacent to these roadways.

**Operational Noise.** Long-term, negligible to minor, adverse impacts on the ambient environment would be expected as a result of the increase in operational vehicular traffic under the Proposed Action. Persons would use Atlanta Road and a new or relocated controlled access point to access Site Alternative 1. Given that the increase in vehicles under the Proposed Action would likely be intermittent, that Atlanta Road is a primary roadway, and the gate and access road to the site improvements, long-term, minor increases in noise levels on noise-sensitive populations adjacent to these roadways would be expected. See **Section 4.8.2.1** for more information on the roadway improvements for Site Alternative 1.

No adverse impacts from operation of the proposed commissary would be expected. Operational noise would include mechanical ventilation, heat recovery systems, and air conditioning. These noise sources are standard for any shopping location, and would not be expected to be intrusive to commissary patrons. Therefore, operational noise at Site Alternative 1 would not result in significant impacts on the noise environment.

#### 4.2.2.2 Site Alternative 2: BX Site

**Construction Noise.** Construction noise at Site Alternative 2 would be expected to be similar to Site Alternative 1. The proposed construction activities would be expected to result in noise levels comparable to those indicated in **Table 4-7**. Site Alternative 2 is not on the border of the installation, consequently there are no off-installation noise-sensitive land uses adjacent to it. Construction activities at Site Alternative 2 would result in short-term, direct, minor, adverse impacts on the noise environment in the vicinity of those activities.

Noise contours from aircraft operations at Dobbins ARB are directly south of Site Alternative 2. Consequently, populations within and adjacent to Site Alternative 2 are accustomed to fluctuations of noise levels. In addition, noise generation would last only for the duration of construction activities and would be isolated to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.). Consequently, construction activities at Site Alternative 2 would not result in significant impacts on the noise environment.

**Construction Vehicular Noise.** Vehicular noise from construction vehicles would be expected to be similar to those for Site Alternative 1. Construction traffic would use existing roadways as discussed in **Section 3.2.2** to access Dobbins ARB and existing roadways within the installation to access Site Alternative 2.

**Operational Noise.** Vehicular noise from commissary patrons would be expected to be similar to those for Site Alternative 1. Persons traveling to Site Alternative 2 would use existing roadways to access Site Alternative 2. However, as discussed in **Section 4.8.2.2**, a new entrance to the BX and commissary would likely be constructed off of Atlantic Avenue. If a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested, especially since Atlanta Avenue is one of the main roads on the installation and connects to the main gate. Consequently, long-term, minor increases in noise levels on noise-sensitive populations adjacent to these roadways would be expected.

Operational noise from the proposed commissary would be the same as under Site Alternative 1. Consequently, operational noise at Site Alternative 2 would not result in significant impacts on the noise environment.

#### 4.2.2.3 Site Alternative 3: Barclay Gate Site

**Construction Noise.** Construction noise at Site Alternative 3 would be expected to be similar to Site Alternative 1. The proposed construction activities would be expected to result in noise levels comparable to those indicated in **Table 4-7**. Site Alternative 3 is not on the border of the installation, consequently there are no off-installation noise-sensitive land uses adjacent to it. Construction activities at Site Alternative 3 would result in short-term, direct, minor, adverse impacts on the noise environment in the vicinity of those activities.

Noise contours from aircraft operations at Dobbins ARB are approximately 500 feet south of Site Alternative 3. Consequently, populations within and adjacent to Site Alternative 3 are accustomed to fluctuations of noise levels. In addition, noise generation would last only for the duration of construction activities and would be isolated to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.). Consequently, construction activities at Site Alternative 3 would not result in significant impacts on the noise environment.

**Construction Vehicular Noise.** Vehicular noise from construction vehicles would be expected to be similar to those for Site Alternative 1. Construction traffic would use existing roadways as discussed in **Section 3.2.2** to access Dobbins ARB and Site Alternative 3.

**Operational Noise.** Vehicular noise from commissary patrons would be expected to be similar to those for Site Alternative 1. Persons traveling to Site Alternative 3 would use existing roadways outside and inside the installation. However, if Site 3 was chosen, an access road from Industrial Drive to the commissary would need to be constructed. Patrons and employees would arrive and depart at varying times. Similar to Site 2, if a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested. Consequently, long-term, minor increases in noise levels on noise-sensitive populations adjacent to these roadways would be expected. See **Section 4.8.2.3** for more information on the roadway improvements for Site Alternative 3.

Operational noise from the proposed commissary would be the same as under Site Alternative 1. Consequently, operational noise at Site Alternative 3 would not result in significant impacts on the noise environment.

#### 4.2.2.4 Site Alternative 4: City of Marietta Site

**Construction Noise.** Construction noise at Site Alternative 4 would be expected to be similar to Site Alternative 1. The proposed construction activities would be expected to result in noise levels comparable to those indicated in **Table 4-7**. Site Alternative 4 is outside the installation boundary to the north; therefore, the site is bordered by potentially noise-sensitive land uses outside of the installation boundary. Site Alternative 4 is surrounded by public/semi-public land use to the west, north, and east, which includes two universities, their associated facilities, and a child-care center. Persons accessing these buildings would be expected to experience construction noise levels of up to 89 dBA, depending on their proximity to construction activities. Construction activities at Site Alternative 4 would result in short-term, direct, minor, adverse impacts on the noise environment in the vicinity of those activities.

Noise contours from aircraft operations at Dobbins ARB are approximately 2,000 feet south of Site Alternative 4. Consequently, populations within and adjacent to Site Alternative 4 are accustomed to



fluctuations of noise levels. In addition, noise generation would last only for the duration of construction activities and would be isolated to normal working hours (i.e., between 7:00 a.m. and 5:00 p.m.). Consequently, construction activities at Site Alternative 4 would not result in significant impacts on the noise environment.

**Construction Vehicular Noise.** Vehicular noise from construction vehicles would be expected to be similar to those for Site Alternative 1. Construction traffic would use existing roadways as discussed in **Section 3.2.2** to access Dobbins ARB and Site Alternative 4.

**Operational Noise.** Persons traveling to Site Alternative 4 would travel on South Cobb Drive outside of the installation, enter the main gate, travel on Atlantic Avenue Southeast and take the Gym Road bridge. However, the road network in this region of the installation would require upgrading to accommodate the increases in traffic and commercial deliveries. In addition, a new road would need to be constructed to directly access the site. Similar to Sites 2 and 3, if a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested. Consequently, long-term, minor increases in noise levels on noise-sensitive populations adjacent to these roadways would be expected. See **Section 4.8.2.4** for more information on the roadway improvements for Site Alternative 4.

Operational noise from the proposed commissary would be the same as under Site Alternative 1. Consequently, operational noise at Site Alternative 4 would not result in significant impacts on the noise environment.

### 4.2.3 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented. There would not be an increase in construction activities, or vehicle operations; consequently, the ambient noise environment would not change from existing conditions as described in **Section 3.2.2**.

## 4.3 Land Use

### 4.3.1 Evaluation Criteria

An analysis of the effects of a proposed action on land use on an AFRC installation addresses the potential for impacts to occur on areas affected and the potential for buildings and other obstructions to intrude into controlled airspace. New construction should be compatible with current land use guidelines. Land use can remain compatible, become compatible, or become incompatible. Projected compatibility issues were measured both qualitatively and quantitatively. The level of potential land use effects is based on the degree of land use sensitivity in areas affected by a proposed action and compatibility of proposed actions with existing conditions. In general, a land use effect would be significant if it met any of the following criteria:

- Was inconsistent or in noncompliance with existing land use plans or policies
- Precluded the viability of existing land use
- Precluded continued use or occupation of an area
- Was incompatible with adjacent land use to the extent that public health or safety is threatened
- Conflicted with planning criteria established to ensure the safety and protection of human life and property.

## 4.3.2 Proposed Action

### 4.3.2.1 Site Alternative 1: Corps Lab Site

Long-term, minor to moderate, adverse impacts on land use would be expected at Site Alternative 1. As discussed in **Section 3.3.2**, the majority of Site Alternative 1 is part of AFP-6 and, as such, it is not addressed in the installation's 2010 General Plan. If the proposed commissary were built at this site, property owned by AFMC would be transferred to AFRC. Implementation of the Proposed Action within Site Alternative 1 would require the current land use designation to be changed from Lockheed Martin to commercial. However, Lockheed Martin is not currently using facilities on this property to produce aircraft or perform maintenance on them. There is a fitness trail that runs through the center of Site 1 that would likely have to be relocated under the Proposed Action, which would result in minor, adverse impacts. A change in the land use designation would be expected to have a less than significant impact on land use plans or policies.

The Aviation Wing of the Marietta Museum of History has sub-leased approximately 15 acres on Site Alternative 1. The museum, aircraft displays and several trailers are currently on the southern portion of this site. If the Proposed Action were constructed on Site 1, it is possible that these facilities would have to be relocated. This would result in impacts to the museum from relocation; in addition, the USAF might be required to cover the financial costs. However, since Site 1 includes 24.3 total acres, it is possible that the proposed commissary and supporting facilities could be built on the northern portion of the site with minor impacts to the property that the museum leases. Consequently, long-term, minor to moderate, adverse impacts on land use would be expected.

Implementation at Site Alternative 1 would not preclude the viability of existing land uses, or the continued use and occupation of areas surrounding it. Lockheed Martin personnel would continue to have access to the area south of the site, and the transfer of land to AFRC would not be expected to interfere with Lockheed Martin's use of the rest of the AFP-6 property. Therefore, it would result in no impacts on existing land use viability or continued land occupation.

Implementation at Site Alternative 1 would not violate local zoning ordinances and municipal zoning regulations do not apply to Federal property. Therefore, the Proposed Action would not result in any impacts on municipal land use plans or policies.

Construction at Site Alternative 1 would produce temporary, elevated noise levels that could be heard by populations in the surrounding area for the duration of those activities (see **Section 4.2.2.4**). Operation of the proposed commissary at Site Alternative 1 would not produce appreciable noise above ambient noise levels. Therefore, the proposed commissary would not result in impacts on land use compatibility from noise at Site Alternative 1.

### 4.3.2.2 Site Alternative 2: BX Site

No adverse impacts on land use would be expected at Site Alternative 2. Implementation at Site Alternative 2 would require the land use designation for most of the eastern half of the parcel to be changed from open space to commercial; however, this is consistent with the Dobbins ARB Future Land Use Plan (Dobbins ARB 2010a). Impacts on municipal land use plans and policies would be similar to those described for Site Alternative 1. The operation of the proposed commissary at Site Alternative 2 would not preclude the viability of existing land uses or the continued use and occupation of areas surrounding the proposed commissary. Therefore, the Proposed Action would result in no impacts on land use plans or policies, existing land use viability, or continued land occupation.

Construction and operational noise levels would be expected to be similar to those for Site Alternative 1. Therefore, less than significant impacts on land use compatibility would be expected from noise at Site 2.

#### **4.3.2.3 Site Alternative 3: Barclay Gate Site**

Long-term, minor, adverse impacts on land use would be expected at Site Alternative 3. As discussed in **Section 3.3.2**, Site Alternative 3 is part of AFP-6 and, as such, it is not addressed in the installation's 2010 General Plan. If the proposed commissary were built at this site, the property would be transferred to AFRC. Implementation of the Proposed Action at Site Alternative 3 would require the current land use designation to be changed from Lockheed Martin to commercial. However, the existing buildings on this site are used for storage or are vacant; no adverse impacts on Lockheed Martin operations would be expected from the transfer of this land to AFRC. Impacts on municipal land use plans and policies would be similar to those described for Site Alternative 1. Therefore, a change in the land use designation would be expected to have a less than significant impact on land use plans or policies and would not preclude the viability of existing land uses, or the continued use and occupation of areas surrounding it. Portions of this site were previously used as a landfill and would not be available for development. Consequently, an evaluation of the areas suitable for development would need to occur during the design phase of the Proposed Action.

Construction and operational noise levels would be expected to be similar to those for Site Alternative 1. Therefore, Site Alternative 3 would not result in impacts on land use compatibility from noise at Site 3.

#### **4.3.2.4 Site Alternative 4: City of Marietta Site**

Long-term, minor to moderate, adverse impacts on land use would be expected at Site Alternative 4. Site Alternative 4 is outside the installation boundary in the City of Marietta. The city has designated the existing and future use of this land as recreational. If the proposed commissary were built at this site, the property would be transferred to AFRC. Implementation of the Proposed Action at Site Alternative 4 would require the current land use designation to be changed from recreational to commercial. This would reduce the amount of recreational land within the City of Marietta by 9 percent (City of Marietta 2006a). The loss of park land would be expected to have a long-term, minor to moderate, adverse impact on park patrons. There are about 25 other parks in the City of Marietta, including the A.L. Burruss Nature Park, which is within 1 mile of the site (City of Marietta 2012). Therefore, there is ample park land available elsewhere in the City of Marietta. A change in the land use designation would be expected to have a less than significant impact on municipal land use plans or policies.

Persons would continue to be able to use Barclay Circle to access the universities and other facilities to the north and east of Site Alternative 3. Implementation of Site Alternative 3 would not preclude the continued use and occupation of areas surrounding it.

Construction and operational noise levels would be expected to be similar to those for Site Alternative 1. However, there are noise-sensitive land uses adjacent to Site Alternative 4 (see **Section 4.2.2**). Short-term, minor, adverse impacts on these noise-sensitive areas would be expected from construction noise. Operation of the proposed commissary at Site Alternative 4 would not produce appreciable noise above ambient noise levels. Therefore, Site Alternative 4 would not result in impacts on land use compatibility from noise during facility operations.

### 4.3.3 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be implemented and existing land use conditions would remain the same as under current conditions as described in **Section 3.3.2**. No impacts on land use would be expected.

## 4.4 Geological Resources

### 4.4.1 Evaluation Criteria

Protection of unique geological features, minimization of soil erosion, and the siting of facilities in relation to potential geologic hazards are considered when evaluating the potential impacts of a proposed action on geological resources. Generally adverse impacts can be avoided or minimized if proper construction techniques, erosion-control measures, and structural engineering design are incorporated into project development.

Impacts on geology and soils would be significant if they would substantially alter the geology that controls groundwater quality, distribution of aquifers and confining beds, and groundwater availability; or change the soil composition, structure, or function within the environment.

### 4.4.2 Proposed Action

#### 4.4.2.1 Site Alternative 1: Corps Lab Site

Short- and long-term, minor, adverse impacts on geology and soils would be expected at Site Alternative 1. However, no significant adverse impacts would be expected, as construction would not substantially alter the geology of the site, and the soils present on site are largely disturbed, urban soil complexes. Construction would involve grading, paving, vegetation removal, and subsequent landscaping. Construction vehicles would compress soils, decreasing permeability and rates of stormwater runoff infiltration. The primary impacts on geology and soils from the Proposed Action at this site would be soil compact and erosion. Clearing of vegetation would increase erosion and sedimentation.

Because of potential soil contamination from the prior operations of the USACE Laboratory on this site, a site-specific soil contamination investigation should be conducted prior to implementing this alternative.

Long-term, minor, adverse impacts could occur from the increase in impervious surfaces in addition to the existing impervious surfaces on site. Increased impervious surfaces from construction of the commissary and its associated parking lot and access road could result in increased soil erosion and sedimentation. However, implementation of sustainable design techniques such as bioswales, green roofs, and retention ponds would offset the increase in erosion, sedimentation, and stormwater runoff resulting from the increase in impervious surfaces. By implementing sustainable design techniques, erosion and sedimentation rates should be expected to be maintained at current (pre-construction) levels.

As a result of implementing this alternative, soils would be compacted, and soil structure would be disturbed. Loss of soil structure due to excavation or compaction from foot and vehicle traffic could result in changes in drainage patterns. However, the majority of the soils at the Corps Lab Site have been previously disturbed and modified by development. Soil erosion-control, stormwater-control, and sediment-control measures would be included in site plans to minimize these impacts.

#### 4.4.2.2 Site Alternative 2: BX Site

Impacts on geological resources would be similar to the impacts expected at Site Alternative 1. The land north of Industrial Drive within this site is largely undeveloped, with less disturbed soils of the Madison and Pacolet series. Additionally, underground water pipes and Industrial Drive would potentially be rerouted to accommodate construction of the commissary. Therefore, slightly more intensive short-term, adverse impacts on soils would be expected.

The primary impacts from the Proposed Action at this site would be soil compaction and erosion. Impacts from increases in impervious surfaces are expected to be similar to Site Alternative 1. Soil erosion-, sediment-, and stormwater-control measures would be implemented as described.

#### 4.4.2.3 Site Alternative 3: Barclay Gate Site

Impacts on geological resources would be similar to the impacts expected from Site Alternative 1. However, there are two IRP sites within the area. The contaminants have been contained at both sites, and are currently in the long-term monitoring phase. Additionally, Site 3 is large enough to accommodate the proposed commissary without encroaching on the IRP sites. Therefore, potential contamination from the IRPs would not be expected to contribute to adverse impacts.

The primary impacts from the Proposed Action at this site would be soil compaction and erosion. Impacts from increases in impervious surfaces are expected to be similar to Site Alternative 1. Soil erosion-, sediment-, and stormwater-control measures would be implemented as described above.

#### 4.4.2.4 Site Alternative 4: City of Marietta Site

Impacts on geological resources would be similar to, but more intense than, the impacts expected from Site Alternative 1. In addition to the construction activities described in Site Alternative 1, Site Alternative 4 would require upgrading to the road network, and construction of a new road to access the site directly. Fencing around the perimeter of the commissary would be required in order to secure the site, which is currently located outside installation boundaries.

The primary impacts from the Proposed Action at this site would be soil compact and erosion. Erosion potential would be greatest in the northern and eastern portions of the site, where the Madison clay loam has slopes of up to 25 percent.

Because of potential soil contamination from the groundwater plume from AFP-6, a site-specific soil contamination investigation should be conducted prior to implementation at this location.

Impacts from increases in impervious surfaces are expected to be similar to, but more intense than, Site Alternative 1. Soil erosion-, sediment-, and stormwater-control measures would be implemented as described above.

#### 4.4.3 No Action Alternative

Under the No Action Alternative, the USAF would not construct a new commissary and associated infrastructure on Dobbins ARB. Conditions would remain as described in **Section 3.4.2**, and no impacts on geological resources would be expected.

## 4.5 Water Resources

### 4.5.1 Evaluation Criteria

Evaluation criteria for effects on water resources are based on water availability, quality, and use; existence of floodplains; and associated regulations. A proposed action would have significant effects on water resources if it were to do one or more of the following:

- Substantially reduce water availability or supply to existing users
- Overdraft groundwater basins
- Exceed safe annual yield of water supply sources
- Substantially adversely affect water quality
- Endanger public health by creating or worsening health hazard conditions
- Threaten or damage unique hydrologic characteristics
- Violate established laws or regulations adopted to protect water resources.

The potential effect of flood hazards on a proposed action is important if such an action occurs in an area with a high probability of flooding.

Minimization of soil erosion is considered when evaluating potential effects of a proposed action on soil resources. Generally, adverse effects can be avoided or minimized if proper construction techniques, erosion-control measures, and structural engineering design are incorporated into project development. Effects on soils would be significant if they would alter the soil composition, structure, or function within the environment.

### 4.5.2 Proposed Action

#### 4.5.2.1 Site Alternative 1: Corps Lab Site

**Groundwater.** Long-term, negligible, indirect adverse impacts on groundwater would be expected at Site Alternative 1. Groundwater at Dobbins ARB is not currently used for either potable or industrial purposes nor would it be used for such purposes at Alternative 1. Soil compaction and disturbance from vehicle traffic during project implementation could result in localized changes in drainage patterns, as compacted soil reduces infiltration and can inhibit growth of vegetation (USEPA 1999). Negligible effects on groundwater recharge would occur from the increase in impervious surfaces and related decrease in infiltration of precipitation into soils to recharge groundwater.

It is possible that construction equipment could leak or spills could occur during demolition and construction activities. In the event of a spill or leak of fuel or other contaminants, there could be adverse effects on groundwater because contaminants could seep through soils and into the underlying groundwater. All fuels and other potentially hazardous materials would be contained and stored appropriately. In the event of a spill, procedures identified in the installation's SPCC Plan would be followed to quickly contain and clean up a spill. Please see **Section 4.9** for a discussion on hazardous materials and wastes. There remains the possibility that a spill or leak could occur, but implementation of the BMPs identified in the SPCC Plan would minimize the potential for and extent of associated contamination.

**Surface water.** Construction of the commissary would result in long-term, minor, indirect, adverse effects on surface water as stormwater runoff volume and velocity would be expected to increase due to the increase in impervious surfaces. This increased runoff could affect the surface water quality of the



receiving water bodies, such as Rottenwood Creek. Adherence to standard engineering practices, applicable codes and ordinances, and the Dobbins ARB SWPPP would typically reduce stormwater runoff-related impacts. Depending on where the commissary is constructed on Site 1, long-term, negligible or long-term, minor, adverse effects on vegetation could be expected due to permanent removal of vegetation, which could impact water quality and stormwater volume and velocity entering the drainage channel. However, by implementing sustainable design techniques, as described in **Section 3.5.1**, site hydrology would be expected to remain at current (pre-construction) levels.

As previously mentioned, it is possible that construction equipment could leak or spills could occur during demolition and construction activities as described in the groundwater section for Site 1. In the event of a spill or leak of fuel or other contaminants, there could be adverse effects on the receiving water bodies. All fuels and other potentially hazardous materials would be contained and stored appropriately. In the event of a spill, procedures identified in the installation's SPCC Plan would be followed to quickly contain and clean up a spill. There remains the possibility that a spill or leak could occur, but implementation of the BMPs identified in the SPCC Plan would minimize the potential for and extent of associated contamination.

**Wetlands/Floodplains.** Although no wetlands are on Site Alternative 1, long-term, negligible, indirect, adverse impacts on wetlands would be expected. Offsite wetlands could be impacted from stormwater runoff. The Proposed Action would increase impervious surfaces, causing a decrease in groundwater recharge and an increase in stormwater runoff. The installation and maintenance of erosion- and sediment-control barriers and the implementation of stormwater BMPs would reduce potential indirect impacts on wetlands from stormwater runoff, soil erosion, and sedimentation. No floodplains occur in the vicinity of Site 1; therefore, no impacts on floodplains would be expected.

#### 4.5.2.2 Site Alternative 2: BX Site

**Groundwater.** Although a groundwater plume containing VOCs is adjacent to Site Alternative 2, impacts on groundwater would be expected to be similar to those described at Site 1. Soil compaction and vehicular disturbance would be similar to, but slightly greater than the conditions described at Site 1 due to an increase in vehicle congestion. Groundwater is currently not used for either potable or industrial purposes at Dobbins ARB nor would it be used for such purposes at Site 2. However, project planning should include the potential need for groundwater sampling prior to commencement of construction activities. The handling, storage, transportation, and disposal of hazardous substances would be conducted in accordance with applicable Federal, state, and local regulations; USAF regulations; and Dobbins ARB management procedures. BMPs would be implemented to minimize the potential for conveyance of pollutants associated with spills or stormwater runoff into the groundwater.

**Surface water.** Impacts on surface water at Site Alternative 2 would be expected to be similar to those described at Site Alternative 1. Even though Site 2 is closer to water bodies than Site 1, the commissary design remains unchanged, vegetation removal would be approximately comparable, and impacts on surface water as a result of the Industrial Drive reroute would be similar to those described for museum relocation at Site 1.

**Wetlands/Floodplains.** Long-term, minor, indirect, adverse impacts on wetlands would be expected to occur at Site Alternative 2, as described for Site Alternative 1. Site 2 is closer to wetlands than Site 1; however, this proximity would not be expected to increase impacts on wetlands and floodplains. Impacts on adjacent wetlands and other water resources would be avoided through design, siting, and proper implementation of erosion and sediment control and stormwater management practices along with other appropriate environmental protection measures and BMPs. Proper implementation of these measures and BMPs would ensure that no effects on surrounding wetlands or other waters of the United States would

occur. Correspondence with regulatory and resource agencies prior to commencing any ground-breaking construction activities would be completed and permits would be obtained, as necessary.

No effects on floodplains or associated flood flows would be expected. Site 2 is approximately 0.4 miles from the nearest 100-year floodplain and implementation of stormwater BMPs during and following construction would ensure that runoff from the site would not impact downslope floodplains.

#### 4.5.2.3 Site Alternative 3: Barclay Gate Site

**Groundwater.** Although a groundwater plume containing VOCs is underneath Site Alternative 3, impacts on groundwater would be expected to be similar to, but less than those described at Site Alternative 2. Vehicle congestion would not likely occur, no relocation of buildings or roads would be implemented, and IRP sites would be avoided resulting in long-term, negligible, indirect impacts on groundwater. BMPs as discussed at Sites 1 and 2 would be implemented to ensure potential for impacts on groundwater would be minimized.

**Surface water.** Impacts on surface water at Site Alternative 3 would be expected to be similar to, but less than those described at Site Alternative 1. The total impervious surfaces would generally remain the same; however, no building or road relocation would occur, resulting in long-term, negligible to minor, indirect, adverse impacts on surface water. Depending on where the commissary is constructed on Site 3, long-term, negligible or long-term, minor, adverse effects on vegetation could be expected due to permanent removal of vegetation, which could impact water quality and stormwater volume and velocity entering the unnamed stream on the site.

**Wetlands/Floodplains.** Effects on wetlands and floodplains would be similar to, but less than, those described at Site Alternative 2. An increase in impervious surfaces and vegetation removal would occur. No buildings or roads would be relocated and environmental protection measures and construction BMPs would be implemented to reduce the potential for impacts on wetlands. The nearest wetlands to the site are associated with Small Lake approximately 0.1 mile to the southeast. Effects on wetlands and floodplains would be reduced based on proper implementation of environmental protection measures and construction BMPs, resulting in long-term, negligible, indirect adverse impacts on wetlands. The nearest floodplains are 0.4 miles to the southeast. BMPs would keep runoff from reaching the floodplains. Therefore, no impacts on floodplains would be expected.

#### 4.5.2.4 Site Alternative 4: City of Marietta Site

**Groundwater.** Long-term, negligible, indirect adverse impacts on groundwater would be expected at Site Alternative 4. Although a groundwater plume containing VOCs is underneath a portion of Site 4, impacts on groundwater would be expected to be similar to those described at Site 2. Road infrastructure would need to be upgraded to accommodate the increase in traffic and perimeter fencing would be installed resulting in impacts similar to, but greater than, the museum relocation described at Site 1 due to increased ground disturbance and associated potential effects on groundwater. BMPs as discussed at Sites 1 and 2 would be implemented to ensure potential for impacts on groundwater would be minimized.

**Surface water.** Impacts on surface water at Site Alternative 4 would be expected to be similar to, but greater than, those described at Site Alternative 1. An increase in vegetation removal would be expected at Site 4 resulting in long-term, minor, indirect, adverse impacts on surface water as discussed at Site 1. The increase in vegetation removal would lead to increased runoff compared to the other alternatives, resulting in a greater impact on water quality. The intermittent stream running through the site could be impacted depending on building placement. Prior to conducting any activities that could impact the intermittent stream, a current jurisdictional determination from USACE would be obtained. If the stream

is a jurisdictional water of the United States then coordination with USACE would be conducted. Any impacts on the stream would be avoided and minimized to the maximum extent practicable and any necessary permits would be obtained prior to conducting any activities that could affect the stream.

**Wetlands/Floodplains.** Impacts on wetlands and floodplains would be similar to, but less than, those described at Site Alternative 2. An increase in vegetation removal would lead to increased runoff; however, the distance to adjacent wetlands would also increase, resulting in long-term, negligible, indirect, adverse impacts on wetlands. The nearest floodplains are 0.4 miles to the southeast. BMPs would keep runoff from reaching the floodplains. Therefore, no impacts on floodplains would be expected. .

### 4.5.3 No Action Alternative

Under the No Action Alternative, the proposed commissary would not be constructed and conditions of water resources described in **Section 3.5.2** would remain unchanged. Therefore, no impacts on water resources would be expected from the No Action Alternative.

## 4.6 Biological Resources

### 4.6.1 Evaluation Criteria

The level of impact on biological resources is based on (1) the importance (e.g., legal, commercial, recreational, ecological, or scientific) of the resource, (2) the proportion of the resource that would be affected relative to its occurrence in the region, (3) the sensitivity of the resource to the proposed activities, and (4) the duration of ecological ramifications. Impacts on biological resources are considered significant if species or habitats of high concern are adversely affected over relatively large areas, or disturbances cause reductions in population size or distribution of a species of special concern. A habitat perspective is used to provide a framework for analysis of general classes of effects (i.e., removal of critical habitat, noise, human disturbance). Emphasis is placed on species with legal, commercial, recreational, ecological, or scientific importance.

### 4.6.2 Proposed Action

#### 4.6.2.1 Site Alternative 1: Corps Lab Site

**Vegetation.** Short-term, negligible, direct, adverse impacts and long-term, negligible to moderate, direct, adverse impacts on vegetation would be expected at Site Alternative 1. The majority of vegetation within Site 1 is modified, landscaped, and mowed regularly. Short-term, negligible, adverse impacts on vegetation would be expected from temporary disturbances during construction activities (e.g., trampling and removal). This vegetation would be expected to regenerate or be replanted once construction activities have ceased. Depending on where the commissary is situated on Site 1, long-term, negligible or long-term, minor to moderate, adverse effects on vegetation could be expected from construction of the proposed commissary from the permanent removal of vegetation. Existing trees would likely be left in place to the greatest extent possible. The majority of vegetation within the project area has been planted and is not within a native and naturally occurring vegetation community; therefore, impacts on native vegetation as a result of direct removal within the open space and developed portions of Site 1 are anticipated to be negligible. If the proposed construction footprint overlaps a portion of the forested area in the eastern edge of Site 1, long-term, adverse impacts on vegetation would be minor to moderate from the permanent removal of native forest vegetation.

Any disturbances to the canopy or ground surface in the forested habitat in Site 1 as a result of the Proposed Action could allow opportunities for nonnative and invasive species to establish or spread within this forest stand, resulting in long-term, minor to moderate, adverse effects on vegetation. The following BMPs should be implemented during and following construction activities to prevent the establishment or spread of nonnative species:

- Inspect and clean construction equipment to remove soil, plants, and seeds
- Stage construction equipment in areas free of nonnative plant species
- Use weed-free materials (grass seed, mulch, gravel, sand)
- Promptly revegetate disturbed sites with native plant species
- Minimize soil disturbance and implement erosion-control practices.

**Wildlife.** Short-term and intermittent, direct, minor, adverse impacts on wildlife would be expected at Site Alternative 1 due to noise disturbances as a result of construction activities and heavy equipment use. High noise events could cause wildlife to engage in escape or avoidance behaviors, resulting in short-term, minor, adverse effects. Increases in ambient noise can reduce communication, inhibit predator detection, and increase energy expenditures in wildlife species. Noise can also distort or mask bird's communication signals (e.g., songs, warning calls, fledgling begging calls) and ability to find prey or detect predators (USEPA 1980). If noise persists in a particular area, animals could leave their habitat and avoid it permanently. Avoidance behavior by animals requires the expenditures of excess energy that is needed for survival (e.g., finding new food sources, water sources, and breeding and nesting habitats) (USEPA 1980). Most wildlife species in Site 1 would be expected to quickly recover once the construction activities have ceased for the day and after the construction period is complete. Construction noises would only be expected to affect individual animals within close proximity to the noise sources. Population-level impacts would not be expected to occur.

Depending on where the commissary is situated on Site 1, long-term, negligible to minor, adverse effects on wildlife could be expected from construction of the proposed commissary due to permanent removal of habitat and permanent disturbances due to increased human activity and traffic within the vicinity. The proposed construction footprint would likely occur within the open space and developed area within Site 1. Removal of this habitat type would result in long-term, negligible, adverse effects on wildlife. Wildlife species occurring within this habitat type are anticipated to be common, generalist species such as mourning doves, common grackles, gray squirrels, eastern cottontails, and nonnative species such as European starlings and house sparrows. Because these species are habitat generalists, it is anticipated that displaced individuals would be able to find other suitable habitats in the vicinity. It is also anticipated that species occurring within the open and developed areas of Site 1 would be adapted to human disturbances and could become habituated to long-term disturbances from the operation of the commissary.

If the proposed construction footprint overlaps a portion of the forested area in the eastern edge of Site 1, long-term, adverse impacts on wildlife would be minor to moderate due to the permanent removal of native forest habitat. Several wildlife species occurring within the forested habitat in the eastern portion of Site 1 are anticipated to be more specific in their habitat requirements and less accustomed to human disturbances. Therefore, impacts on wildlife from the removal of forested habitat are anticipated to be greater than impacts from the removal of maintained or disturbed habitats within Site 1.

Long-term, minor, direct, adverse impacts on wildlife could also be expected from mortality of smaller, less mobile wildlife species (e.g., reptiles, amphibians, rodents) that cannot avoid construction equipment or from wildlife species that nest or live within trees (e.g., squirrels, opossums) that are removed during construction activities. As discussed in the following section, vegetation-removal activities should occur outside of the migratory bird nesting season in order to avoid impacts on breeding birds and nests.

**Protected and Sensitive Species.** No federally listed threatened, endangered, or candidate species or Georgia DNR special concern species have been documented within Site Alternative 1. Therefore, no impacts on federally or state-listed species would be expected from the implementation of the Proposed Action at Site Alternative 1. If the construction footprint overlaps the forested portion of Site 1, a site-specific survey for pink ladyslipper populations should be conducted prior to any vegetation-removal activities. Although very unlikely, if a population of pink ladyslippers is discovered with more than 100 plants within the forested area of Site 1, a 50-foot buffer should be created to protect from disturbances around this population per the U.S. Forest Service and Georgia DNR recommendations. Any discovered occurrences of pink ladyslippers would be avoided to the greatest extent practicable.

The Migratory Bird Treaty Act and EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, require Federal agencies to minimize or avoid impacts on migratory birds listed in 50 CFR 10.13. Construction associated with the Proposed Action would be conducted in a manner to avoid adverse impacts on migratory birds to the greatest extent practicable and it is not anticipated that the Proposed Action would have any measureable negative impacts on migratory birds (e.g., direct mortality, decrease in population size, decrease in fitness, repetitive nest failure). However, impacts on migratory birds from temporary construction disturbances and long-term habitat removal and operational disturbances would be similar to those previously discussed for wildlife. BMPs, which are discussed as follows for migratory birds, are recommended for reduction or avoidance of impacts on migratory bird species within Site 1, particularly if trees or shrubs are to be removed by the Proposed Action.

Any construction or clearing activities requiring tree or shrub removal should be performed before migratory birds return to the project area or after all young have fledged to avoid incidental take (i.e., approximately mid-March through early August).

If construction or clearing activities are scheduled to start during the period when migratory birds are present, a site-specific survey for nesting migratory birds should be performed immediately prior to the activities. If nesting birds are found during the survey, buffer areas should be established around nests. Activities should be deferred in buffer areas until birds have left the nest.

Since no bald eagles are known to nest within the vicinity of Dobbins ARB and bald eagles are only transient visitors in the area, no impacts on bald eagles would be expected from the implementation of the Proposed Action within Site 1.

#### 4.6.2.2 Site Alternative 2: BX Site

**Vegetation.** Impacts on vegetation from the implementation of the Proposed Action at Site Alternative 2 would be similar to those described for Site Alternative 1. Because the proposed commissary would be constructed adjacent to the existing BX facility, most of the vegetation that would be removed is anticipated to be regularly maintained, nonnative, lawns and landscaping. Therefore, short-term and long-term impacts on vegetation are anticipated to be negligible. If the forested area in the eastern portion of Site 2 were disturbed, impacts would be similar to those described for Site 1.

**Wildlife.** Impacts on wildlife from the implementation of the Proposed Action at Site Alternative 2 would be similar to those described under Site Alternative 1. Because the proposed commissary would be constructed adjacent to the existing BX facility, wildlife species that would be impacted from short-term disturbances and long-term habitat removal are anticipated to be habitat generalists that are adapted to frequent human disturbances. Furthermore, fewer less mobile species (e.g., reptiles, amphibians, rodents) that could be trampled by construction equipment would be expected to occur within Site 2. Therefore, short-term and long-term impacts on wildlife are anticipated to be negligible. If the forested habitat in the eastern portion of Site 2 were disturbed, impacts would be similar to those described for Site 1.

**Protected and Sensitive Species.** Impacts on protected and sensitive species from the implementation of the Proposed Action at Site Alternative 2 would be similar to those described for Site Alternative 1. No federally listed threatened, endangered, or candidate species or Georgia DNR special concern species have been documented within Site 2. Therefore, no impacts on federally or state-listed species would be expected from the implementation of the Proposed Action within Site 2. Impacts on potential migratory birds within Site 2 would be minimized from the implementation of BMPs described under Site Alternative 1. No impacts on bald eagles would be expected.

#### 4.6.2.3 Site Alternative 3: Barclay Gate Site

**Vegetation.** Impacts on vegetation from the implementation of the Proposed Action at Site Alternative 3 would be similar to those described for Site Alternative 1. The construction footprint would likely occur within previously disturbed or regularly maintained and landscaped areas within Site 3. Therefore, short-term and long-term impacts on vegetation would be negligible. If the construction footprint overlaps the forested portions of Site 3, long-term, minor to moderate, adverse effects on vegetation would be expected due to the permanent removal of native forest vegetation.

**Wildlife.** Impacts on wildlife from the implementation of the Proposed Action within Site Alternative 3 would be similar to those described under Site Alternative 1. The construction footprint would likely occur within previously disturbed or regularly maintained and landscaped areas within Site 3; and fewer less mobile species (e.g., reptiles, amphibians, rodents) that could be trampled by construction equipment would be expected to occur within Site 3. Therefore, long-term impacts on wildlife from the removal of habitat and mortality from the operation of construction equipment would be negligible. If the construction footprint overlaps the forested portions of Site 3, long-term, minor, adverse effects on wildlife would be expected from the removal of native forest habitat and from wildlife mortality caused by the operation of construction equipment.

**Protected and Sensitive Species.** Impacts on protected and sensitive species from the implementation of the Proposed Action within Site Alternative 3 would be similar to those described for Site Alternative 1. No federally listed threatened, endangered, or candidate species or Georgia DNR special concern species have been documented within Site 3. Therefore, no impacts on federally or state-listed species would be expected from the implementation of the Proposed Action within Site 3. If the construction footprint overlaps the forested portions of Site 3, a site-specific survey for pink ladyslipper populations should be conducted prior to any vegetation-removal activities. Although unlikely, if a population of pink ladyslippers is discovered with more than 100 plants within the forested area of Site 3, a 50-foot buffer should be created to protect from disturbances around this population per the U.S. Forest Service and Georgia DNR recommendations. Any discovered occurrences of pink ladyslippers would be avoided to the greatest extent practicable.

Impacts on potential migratory birds within Site 3 would be minimized from the implementation of BMPs described under the Site Alternative 1. No impacts on bald eagles would be expected.

#### 4.6.2.4 Site Alternative 4: City of Marietta Site

**Vegetation.** Short-term, minor, direct, adverse effects and long-term, moderate, direct, adverse effects on vegetation would be expected at Site Alternative 4. The majority of vegetation within Site 4 is native pine/pine hardwood forest. Short-term, minor, adverse effects on vegetation would be expected from temporary disturbances during construction activities (e.g., trampling and removal). This vegetation would be expected to regenerate or be replanted once construction activities have ceased. Long-term, moderate, adverse impacts on vegetation would be expected due to the permanent removal of native forest vegetation within Site 4. Because the forest in Site 4 adjoins stand DN-1 delineated on Dobbins ARB



(Dobbins ARB 2011a), it is assumed that it is a continuation of the same forest stand and thus would likely have excellent forest habitat quality. In addition, Site 4 is part of one of the largest contiguous forest stands in the vicinity of Dobbins ARB. Therefore, adverse impacts from the removal of this vegetation type would be greater than any of the other site alternatives for the Proposed Action.

Any disturbances to the canopy or ground surface in the forested habitat in Site 4 as a result of the Proposed Action could allow opportunities for nonnative and invasive species to establish or spread within this forest stand, resulting in long-term, minor to moderate, adverse effects on vegetation. BMPs discussed in Site Alternative 1 should be implemented to prevent the establishment or spread of nonnative plant species within Site 4.

**Wildlife.** Impacts on wildlife at Site Alternative 4 would be similar to, but greater than, those described for Site Alternative 1. Short-term and long-term, minor to moderate, adverse impacts on wildlife would be expected from the implementation of the Proposed Action in Site Alternative 4. Many wildlife species occurring within Site 4 are anticipated to be more specific in their habitat requirements and less accustomed to human disturbances. Furthermore, Site Alternative 4 contains more isolated and contiguous habitat than Site Alternatives 1 through 3. Therefore, short-term and long-term, adverse impacts from construction activities, permanent removal and fragmentation of habitat, mortality of less-mobile wildlife species from construction equipment, and commissary operational disturbances within Site 4 would be greater than any of the other site alternatives for the Proposed Action.

**Protected and Sensitive Species.** No known threatened or endangered species surveys have been conducted within Site Alternative 4. Therefore, it is not known if any federally listed threatened, endangered, or candidate species or Georgia DNR special concern species occur within Site 4. Due to the existing vegetation community type within Site 4, it is likely that pink ladyslipper colonies occur within the site. Site-specific surveys for threatened, endangered, candidate, or special concern species should be conducted prior to the selection of this site for the construction of a commissary. Any discovered protected or sensitive species would be avoided to the greatest extent practicable and any necessary correspondence/consultation with USFWS would be conducted. If a population of pink ladyslippers is discovered with more than 100 plants within Site 4, a 50-foot buffer should be created to protect from disturbances around this population per U.S. Forest Service and Georgia DNR recommendations. Any discovered occurrences of pink ladyslippers would be avoided to the greatest extent practicable. Impacts on potential migratory birds within Site 4 would be minimized from the implementation of BMPs described under Site Alternative 1. No impacts on bald eagles would be expected.

### 4.6.3 No Action Alternative

Under the No Action Alternative, the proposed commissary would not be constructed and conditions of biological resources would remain as described in **Section 3.6.2**. Therefore, no impacts on biological resources would be expected from the No Action Alternative.

## 4.7 Cultural Resources

### 4.7.1 Evaluation Criteria

Adverse impacts on cultural resources can include physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource's significance; introducing visual or audible elements that are out of character with the property or that alter its setting; general neglect of the resource to the extent that it deteriorates or is destroyed; or the sale, transfer, or lease of the property out of the agency ownership (or control) without adequate legally enforceable restrictions or conditions to ensure preservation of the property's historic significance.

## **4.7.2 Proposed Action**

Consultation with Section 106 of the NHPA will occur once a preferred site has been chosen. At this time, a preferred site has not been chosen.

### **4.7.2.1 Site Alternative 1: Corps Lab Site**

No significant impacts on cultural resources would be expected at Site Alternative 1. Site 1 is within the viewshed of the western end of the Bell Bomber Plant Historic District. The westernmost building in the historic district is Building B-1, the Main Assembly Building. Given its scale, at more than 3,000,000 ft<sup>2</sup>, and that of other adjacent non-historic buildings, the proposed commissary would have no adverse effect on the viewshed of the historic district.

The Aviation Wing of the Marietta Museum of History is located at Site 1, using a parking lot for static plane displays. It is housed in non-historic facilities outside of the boundaries of the Bell Bomber Plant Historic District within AFP-6. The museum and its displays might have to be relocated if the commissary were built on this site. Although it is a separate organization, the museum, in part, interprets the history of the Bell Bomber Plant and has a vested interest in remaining in close proximity to AFP-6.

This site is just north of the Sibley-Gardner House and its archaeological sensitivity zone. Given the level of disturbance at Site 1, there is little possibility that archaeological sites are present though additional testing might be needed depending on the proximity of the proposed commissary's site to the house. Should any discoveries be found during the process of design or construction, Section 4.2.4 of the Dobbins ARB Integrated Cultural Resources Management Plan (ICRMP) regarding Inadvertent Discoveries must be followed.

### **4.7.2.2 Site Alternative 2: BX Site**

No significant impacts on cultural resources would be expected at Site Alternative 2. The eastern corner of Site 2 is in the vicinity of the Mount Sinai Cemetery, though not immediately adjacent to it. The rerouting of Industrial Drive required by selection of this site would have to be designed to avoid either direct or indirect effects on the cemetery. The viewshed of the NRHP-eligible Big Lake Dam, to the southeast of the BX site, could be blocked by vegetation, though it is already compromised by other buildings. Constructing the commissary at this location would have no adverse effect on any historic resources.

### **4.7.2.3 Site Alternative 3: Barclay Gate Site**

No significant impacts on cultural resources would be expected at Site Alternative 3. This site is the easternmost portion of AFP-6. There are three small buildings within this site. Buildings B-90 and B-120 have previously been determined not eligible for listing in the NRHP. Building 64 of AFP-6, the Avionic Test Facility built in 1961, was last evaluated for NRHP eligibility in 1997 when it was found to not possess enough exceptional significance to meet Criteria Consideration G, for buildings less than 50 years old. It has now reached 50 years of age and should be reevaluated for NRHP eligibility if this site is chosen. Due to the size of the site and the surrounding buildings, it is likely that a proposed commissary could be located and designed in such a manner that it would have no adverse effect on Building B-64 if it is proven eligible.

Site 3 borders the eastern edge of the Bell Bomber Plant Historic District, and is adjacent to Buildings U-124 and U-145, the Water Pumping Station and Dehydrated Air Compressor Building, respectively,

both of which are considered contributing to the district. Given the industrial nature of the district and the size of neighboring buildings, the proposed commissary would have no adverse effect on the viewshed of the district or Buildings U-124 and U-125.

Immediately outside of the western corner of the Site 3 is the NRHP-listed Bankston Rock House. It is surrounded by larger structures and is in the viewshed of the massive AFP-6 manufacturing buildings. If the commissary or its related parking facilities are not constructed adjacent to the Bankston Rock House in the western corner of this site, there would be no adverse effect on the historic structure.

The southeastern edge of this site is also in the vicinity of, though not immediately adjacent to, the Mount Sinai Cemetery, but the proposed commissary would have no effect on that resource.

#### 4.7.2.4 Site Alternative 4: City of Marietta Site

No significant impacts on cultural resources would be expected at Site Alternative 4. Site 4 is located outside of current USAF property, just north of Dobbins ARB and east of AFP-6. The site is currently wooded and bordered by a highway and a contemporary apartment complex and school. There are no historic buildings adjacent to the site on USAF property. Site 4 includes two potentially historic small cemeteries and an adjacent house site, as noted **Section 3.7.2**. If this site is chosen, evaluation of the cemeteries for NRHP eligibility would be completed. As noted in the 2007 to 2011 ICRMP, any project that might affect the burials would have to follow the Georgia Annotated Code Relating to Burials and Cemeteries. The proposed commissary and associated facilities could likely be designed around the cemeteries. However, long-term, adverse impacts could occur from construction and increased visibility. The impacts from increased visibility could be lessened with proper planning.

#### 4.7.3 No Action Alternative

Under the No Action Alternative, no new commissary would be constructed and there would be no effect on any historic properties at Dobbins ARB or AFP-6.

### 4.8 Infrastructure

#### 4.8.1 Evaluation Criteria

Impacts on infrastructure are evaluated for their potential to disrupt or improve existing levels of service on the existing utilities that could occur from the increase in workforce and the changes to the Dobbins ARB as a result of the Proposed Action. An impact would be significant if implementation of the Proposed Action resulted in the following impacts on electrical power, natural gas, liquid fuels, central heating and cooling, potable water, sanitary sewer/wastewater, stormwater, communications, and solid waste systems:

- Exceed capacity of a utility
- A long-term interruption of the utility
- A violation of a permit condition
- A violation of an approved plan for that utility.

## 4.8.2 Proposed Action

### 4.8.2.1 Site Alternative 1: Corps Lab Site

**Electrical System.** No significant impacts on the existing electrical system would be expected at Site Alternative 1. Minor temporary impacts could occur on the electrical system as the aboveground and underground utilities are extended or rerouted during construction, causing temporary disruptions in service to existing buildings and facilities within the boundaries of, or adjacent to Site Alternative 1. These impacts/disruptions would be short in duration and would only occur during demolition (if needed) and construction.

Following the implementation of the Proposed Action, the overall electrical demand at Dobbins ARB would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, 38 percent of the existing electrical substation's capacity is in surplus during the peak periods over the high-demand summer months (Dobbins ARB 2010a). Therefore, the additional demand for electricity would be negligible in magnitude and would be accommodated by the existing capacity of the Dobbins ARB electrical system.

**Natural Gas System.** No significant impacts on the existing natural gas system would be expected at Site Alternative 1. Natural gas would be used to heat the proposed commissary. Natural gas infrastructure would have to be extended from the installation to this site, or obtained commercially. Gas South provides the City of Marietta with gas services. Natural gas service is available at the installation; however, according to the Natural Gas Distribution System map, the existing gas line extends only to the eastern boundary of the parcel of land that contains the Corps Laboratory Site (Dobbins ARB 2010a). Therefore, the existing natural gas line network would have to be extended to the northwestern corner of this parcel of land (approximately 3,500 to 6,000 feet) to provide service to the proposed commissary at Site Alternative 1. This is the longest gas line extension of all the proposed build alternatives if it is extended from the main gas line at Dobbins ARB. This extension of services could cause temporary disruptions in gas service to existing buildings and facilities within the boundaries of, or adjacent to, Site Alternative 1. The impacts/disruptions to service would be short in duration and would only occur during demolition (if needed) and construction. Natural gas lines to the site (via the USAF-owned lines or the city) would depend on the availability of the service, amount of work with respect to connecting the site, and the associated costs.

Following the implementation of the Proposed Action, the overall natural gas demand at Dobbins ARB would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. The Atlanta Gas Light Company can meet virtually any requirement for natural gas (Dobbins ARB 2010a). However, during periods of particularly cold weather the demand for natural gas is extremely high, which forces the Atlanta Gas Light Company to curtail supplies of natural gas to its industrial customers, including the facilities at Dobbins ARB that are provided interruptible services. At the time this EA was written, it was anticipated that the commissary would be on uninterrupted service; therefore, seasonal interruptions to this service are not anticipated. The increase in natural gas for the commissary would be negligible compared to the total natural gas demand at the installation.

**Liquid Fuel.** The Proposed Action would not alter the quantities of liquid fuels used at Dobbins ARB nor would it affect their handling or storage. There would be no impacts on liquid fuel as a result of the Proposed Action at Site Alternative 1.

**Central Heating/Cooling.** No significant impacts on central heating and cooling system would be expected. Dobbins ARB does not have a central heating/cooling plant. The majority of the facilities on Dobbins ARB are heated by natural gas and some by electricity. The proposed commissary would be

heated by the natural gas network. Air conditioning would be installed in the sales areas and computer rooms of the proposed commissary, and reclamation of cold air from commissary display cases would be used in conjunction with the air conditioning system.

**Water Supply System.** No significant impacts on the existing water supply system would be expected at Site Alternative 1. Minor, temporary impacts could occur on the water supply system as the underground water lines are extended or rerouted during construction, causing temporary disruptions in service to existing buildings and facilities within the boundaries of, or adjacent to, Site Alternative 1. These impacts or disruptions would be short in duration and would only occur during demolition (if needed) and construction.

Following the implementation of the Proposed Action, the overall water supply demand at Dobbins ARB would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, the CCMWA current water supply storage capacity is 136 MGD with an average daily demand of 70 to 80 MGD (Dobbins ARB 2010a). Peak system demand occurs during the summer months and has been as high as 120 MGD. During peak periods, 12 percent of the system's treatment capacity remains in surplus. In addition, two potable water storage supply tanks are present at AFP-6 servicing Dobbins ARB with a total combined capacity of 4.5 million gallons. The peak demand at the military complex is 1.6 million gallons per month. Based on the storage supply at AFP-6 and the CCMWA, the Proposed Action would not significantly impact the existing water supply system.

**Sanitary/Sewer Wastewater System.** No significant impacts on the existing sanitary sewer/wastewater system would be expected at Site Alternative 1. Sanitary sewer/wastewater service interruptions could occur when the proposed commissary is connected to the tertiary sewage treatment plant. These impacts or disruptions would be short in duration and would only occur during demolition (if needed) and construction.

Following the implementation of the Proposed Action, the amount of wastewater generated at Dobbins ARB would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, any increase in the sanitary wastewater system would be negligible compared to the overall volume of wastewater generated at the installation. In addition, the tertiary sewage treatment plant has a maximum treatment capacity of 7 MGD of wastewater (Dobbins ARB 2010a). Historically, average daily flow is 1.1 MGD. Based on its treatment capacity, about 65 percent of the facility's capacity is surplus. Impacts on existing Dobbins ARB sanitary sewer/wastewater system are expected to be less than significant.

**Stormwater/Sewer System.** No significant impacts on the existing stormwater sewer system would be expected at Site Alternative 1. Construction of the Proposed Action would result in ground disturbance as heavy equipment would clear, grade, and contour land surfaces. These activities would temporarily disrupt natural and man-made stormwater drainage channels and increase the potential for stormwater runoff to erode soil during construction activities. Soil erosion and sediment production would be minimized during construction periods by following an erosion-and-sediment-control plan, and by using construction BMPs that would minimize ground surface disturbance and attempt to provide adequate temporary stormwater management techniques.

Site Alternative 1 is predominantly built-up with some landscaped areas and a trail intermixed. The construction of the proposed commissary and the associated sidewalks, parking lot, paved loading docks, and access road would add new impervious surface area and, therefore, an increase of sheet flow and runoff. However, because the site is already built-up, the increase in sheet flow and runoff as a result of additional impervious surface area is expected to be minimal. The proposed commissary construction plans include the installation of curbs and gutters, storm drainage systems, and landscaping that would

help reduce potential sheet flow and runoff impacts. These new features would tie into the existing stormwater system. The existing system would continue to collect, convey, and treat runoff from the proposed site. The capabilities of the stormwater system are adequate to handle the potential increase in stormwater collection and disposal. Soil erosion and sediment control measures would be included in site plans to minimize long-term erosion and sediment runoff at the site. The site would be constructed with stormwater controls favoring methods that allow for stormwater to reenter the groundwater system rather than leaving the site as surface flow. With this method, the potential increase in runoff between pre- and post-development conditions would be managed, in accordance with EISA Section 438. Use of stormwater control measures that favor infiltration in this way would minimize the potential for erosion and sediment runoff as a result of future storm events. The Proposed Action would result in adverse impacts on stormwater systems (potential increase in stormwater); however, these impacts are expected to be less than significant.

**Communications System.** No significant impacts on the existing communications system would be expected at Site Alternative 1. Telephone and data service interruptions could occur to the communications system as the network is extended or rerouted during construction and when the Proposed Action is connected to the current communications system. This would cause temporary disruptions in service to existing buildings and facilities within the boundaries of, or adjacent to, Site Alternative 1. These impacts or disruptions would be short in duration and would only occur during construction.

Following the implementation of the Proposed Action, the overall telephone and data transmission demand at Dobbins ARB would increase due to the added infrastructure associated with the proposed commissary. The existing voice communications telephone switch has the capability of providing up to 10,000 phone lines with 4,800 presently in use (Dobbins ARB 2010a). Therefore, the current system can handle the increase of users as a result of the Proposed Action. In addition, with the implementation of the C4I system, increased data needs would also be satisfied.

**Solid Waste Management System.** No significant impacts on the existing solid waste management system at would be expected at Site Alternative 1. The proposed construction of the commissary and associated supporting areas would generate waste during construction. Receptacles would be provided for municipal solid waste generated by worker activity. Construction wastes would be separated from the solid waste stream and recycled. Nonhazardous construction waste would be transported to private transfer stations and disposed of in county landfills.

Following the implementation of the Proposed Action, the overall amount of solid waste generated at Dobbins ARB would increase due to the addition of the proposed commissary. However, any potential increase in solid waste generation would be negligible compared to the total volume of solid waste generated at Dobbins ARB and would be handled by current disposal practices. Therefore, the Proposed Action would result in an increase in solid waste generation; however, these impacts would be expected to be less than significant.

**Transportation.** Short- and long-term, minor to moderate, adverse impacts on the transportation system would be expected at Site Alternative 1. If the commissary were constructed at Site 1, patrons would access the site from Atlanta Road. The construction of a commissary would result in a slight increase in the amount of traffic at the site from equipment being delivered and contractors arriving to the work site. However, construction traffic would compose a small percentage of the total existing traffic on the existing roadways. Some of the heavy construction vehicles would be driven to the work sites and kept on-site for the duration of the activities, resulting in relatively few additional trips. The proposed construction activities would be spread over a period of several months, which would further reduce effects on traffic. Any potential increases in traffic volume associated with the proposed construction

activities would be temporary. Consequently, short-term, negligible to minor, adverse impacts would be expected from construction activities.

Site 1 does not have a controlled access point, which means nonmilitary personnel can enter the site at any time. Controlled access points are required for commissaries that sell goods to military personnel. Currently, there are two entrances from Atlanta Road; a non-controlled entrance to Lockheed Martin and a separate controlled entrance to access Dobbins ARB. If the commissary were constructed on Site 1, the controlled access point would be relocated or a new entrance would be required, and accommodation for Lockheed Martin employees would continue. In addition, the access road to the site would be reconstructed. These changes would allow commissary patrons and employees to be separated, which should help alleviate congestion in the immediate area.

Under the Proposed Action, it is assumed that vehicles traveling to the commissary would arrive at varying times and come from different locations. In addition, delivery vehicles would travel to the commissary periodically. To access Site 1, traffic would use a new access route from Atlanta Road. In 2009, the average daily traffic count on Atlanta Road SE was 16,280 vehicles per day (GDOT 2009). Peak customer counts were estimated for a commissary, similar to one proposed at Dobbins ARB, at 1,200 per day (DeCA 2012). This would be an increase of approximately 7 percent of the daily total traffic on Atlanta Road. As discussed in **Section 3.8.2**, a traffic assessment in 2005 stated that vehicle speed and freedom of movement declined slightly due to increasing volume on the portion of Atlanta Road adjacent to the Site 1 (Cobb County 2008). Consequently, congestion on Atlanta Road could increase if the proposed commissary were built at this site. Given that the increase in vehicles under the Proposed Action would likely be intermittent, that Atlanta Road is a primary roadway, and the gate and access road improvements, long-term, minor to moderate, adverse impacts on the transportation system would be expected. However, if the proposed commissary is constructed at Dobbins ARB, a traffic study might need to be completed to further evaluate the traffic impacts from the proposed commissary.

**Onsite Renewable Energy and Green Power.** Dobbins ARB would consider the feasibility of incorporating renewable energy systems for the Commissary. This would include the installation of photovoltaic systems and solar hot water heaters on rooftops or over parking structures. It could also include the application of integrated solar photovoltaics on building façades. Incorporation of renewable energy on site would not only help to offset rising energy bills, it might present opportunities to test and advance new energy technologies and eventually provide energy independence for the facility. Dobbins ARB could conduct pilot projects for photovoltaic and wind alternatives to evaluate their effectiveness. Knowledge gained through pilot projects would provide insights into how these green technologies could be incorporated more broadly across the installation and in areas that are scheduled to be demolished.

In addition to onsite renewable energy generation, Dobbins ARB would consider entering into a power purchase agreement with the Georgia Power Company to supply power from renewable or sustainable sources in accordance with EO 13514 and its Strategic Sustainability Performance Plan.

#### 4.8.2.2 Site Alternative 2: BX Site

**Electrical System.** Impacts on the electrical system and service disruptions would be similar to those described for Site Alternative 1.

**Natural Gas System.** Site Alternative 2 is closer in proximity to the existing natural gas infrastructure than Site Alternative 1. The natural gas system currently exists within the limits of Site Alternative 2. Depending on the location of the commissary within Site Alternative 2, the existing gas system would have to extend up to 1,500 feet. Impacts on the natural gas demand and disruptions would be similar to those described under Site Alternative 1.



**Liquid Fuel.** The Proposed Action would not alter the quantities of liquid fuels used at Dobbins ARB nor would it affect their handling or storage. Under Alternative 2, there would be no impacts on liquid fuel as a result of the Proposed Action.

**Central Heating/Cooling.** No significant impacts on central heating and cooling system would be expected. Dobbins ARB does not have a central heating/cooling plant. The majority of the facilities on Dobbins ARB are heated by natural gas, and some by electricity. The new commissary would be heated by the natural gas network. Air conditioning would be installed in the sales areas and computer rooms of the proposed commissary, and reclamation of cold air from commissary display cases would be used in conjunction with the air conditioning system.

**Water Supply System.** Impacts on the water supply system and service disruptions would be similar to those described for Site Alternative 1.

**Sanitary/Sewer Wastewater System.** Impacts on the sanitary sewer/wastewater system and service disruptions would be similar to those described for Site Alternative 1.

**Stormwater/Sewer System.** Site Alternative 2 is predominantly forested and undeveloped; therefore the increase in sheet flow and runoff as a result of new impervious surfaces from the implementation of the Proposed Action at this site is greater than that described in Site Alternative 1. However, the existing stormwater sewer system would be able to handle this additional flow and therefore the impacts on the stormwater sewer system would be similar to those described for Site Alternative 1. The site would be constructed with the stormwater controls that are described for Site Alternative 1.

**Communication System.** Impacts on the communications system and service disruptions would be similar to those described for Site Alternative 1.

**Solid Waste Management System.** Impacts on the solid waste management system would be similar to those described for Site Alternative 1.

**Transportation.** Short-term, negligible to minor, and long-term, minor to moderate, adverse effects on the transportation system would be expected at Site Alternative 2. The Proposed Action would result in a slight increase in the amount of traffic from equipment being delivered and contractors arriving to the work site. To access Site 2, vehicles would likely travel on South Cobb Drive outside of the installation, enter the main gate, and travel on Atlantic Avenue Southeast and Industrial Drive inside the installation. Construction vehicles would compose a small percentage of the total existing traffic on the existing roadways. However, since these vehicles would travel on secondary roads within the installation, there would be a greater potential for congestion than at Site 1. Any potential increases in traffic volume associated with the proposed construction activities would be temporary. Consequently, short-term, negligible to minor adverse impacts would be expected from construction activities.

If the existing BX and proposed commissary were collocated, there would be an increase in the amount of traffic on the adjacent roadways within the installation. The new patrons and employees (about 1,200 daily vehicles on peak days) would arrive and depart at varying times. However, the increase in vehicles, combined with the existing traffic to the BX, could cause congestion on Atlantic Avenue and into the BX access drive. This scenario is discussed in the *Dobbins Air Reserve Base General Plan* (Dobbins ARB 2010a). If Site 2 were chosen, recommendations in the General Plan state that Atlantic Avenue be realigned to the west of the traffic circle at Industrial Drive. Industrial Drive would be rerouted to the west of the existing BX. This would provide additional space for turning lanes in and out of the facilities, provide a greater distance between the existing BX and the road, and allow more space for parking. As a result, delivery trucks would be able to take the rerouted drive and access the BX and

commissary from the north side. The new entrance to the BX and commissary would be from Atlantic Avenue. These measures would reduce long-term impacts on traffic within the installation. However, if a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested, especially since Atlantic Avenue is one of the main roads on the installation and connects to the main gate. Long-term, minor to moderate, adverse effects on the Dobbins ARB transportation system would be expected.

As previously mentioned, patrons would likely travel on South Cobb Drive or Delk Road outside of the installation to access Site 2. In 2010, the average daily traffic count on South Cobb Drive, adjacent to the installation, was 27,300 vehicles per day (GDOT 2010b). Peak customer counts were estimated at 1,200 per day (DeCA 2012), which would be an increase of approximately 4 percent of the daily traffic total on South Cobb Drive. In 2010, the average daily traffic count on Delk Road between the installation and I-75 was 3,970 vehicles per day (GDOT 2010a). This would be an increase of approximately 30 percent of the daily traffic total on Delk Road. Between I-75 and the installation, different segments of Delk Road have different levels of congestion. Traffic can move freely during peak hours on South Cobb Drive and some portions of Delk Road; however, vehicle speed and freedom of movement decline slightly due to increasing volume on other segments of Delk Road (Cobb County 2008). Consequently, congestion on Delk Road could increase if the proposed commissary were built at Site 2. Long-term, minor to moderate, adverse impacts on the transportation system outside the installation would be expected. If the proposed commissary is constructed at Dobbins ARB, a traffic study might need to be completed to evaluate the traffic impacts from the proposed commissary.

**Onsite Renewable Energy and Green Power.** Considerations for renewable energy and green power would be similar to those described for Site Alternative 1.

#### 4.8.2.3 Site Alternative 3: Barclay Gate Site

**Electrical System.** Impacts on the electrical system and service disruptions would be similar to those described for Site Alternatives 1 and 2.

**Natural Gas System.** Site Alternative 3 is closer to existing natural gas infrastructure than Site Alternative 1, but is farther away from the infrastructure than Site Alternative 2. The natural gas system currently exists directly south of Site Alternative 3. Depending on the location of the commissary within Site Alternative 3, the existing piping network would have to be extended approximately 250 to 2,000 feet. Impacts on the natural gas demand and service disruptions would be similar to those described at Site Alternatives 1 and 2.

**Liquid Fuel.** The Proposed Action would not alter the quantities of liquid fuels used at Dobbins ARB nor would it affect their handling or storage. Under Site Alternative 3, existing ASTs would need be decommissioned and properly disposed of or moved to other temporary or permanent locations at the installation.

**Central Heating/Cooling.** No significant impacts on central heating and cooling system would be expected. Dobbins ARB does not have a central heating/cooling plant. The majority of the facilities on Dobbins ARB are heated by natural gas, and by some electricity. The proposed commissary would be heated by the natural gas network. Air conditioning would be installed in the sales areas and computer rooms of the proposed commissary, and reclamation of cold air from commissary display cases would be used in conjunction with the air conditioning system.

**Water Supply System.** Impacts on the water supply system and service disruptions would be similar to those described for Site Alternatives 1 and 2.

**Sanitary/Sewer Wastewater System.** Impacts on the sanitary sewer/wastewater system and service disruptions would be similar to those described for Site Alternatives 1 and 2.

**Stormwater/Sewer System.** Site Alternative 3 is similar to Site Alternative 4 in that the site is somewhat built-up; therefore, the increase in sheet flow and runoff as a result of new impervious surface area at the site is expected to be minimal. Impacts on the stormwater sewer system would be similar to those described for Site Alternatives 1 and 2. The site would be constructed with the stormwater controls that are described for Site Alternative 1.

**Communications System.** Impacts on the communications system and service disruptions would be similar to those described for Site Alternatives 1 and 2.

**Solid Waste Management System.** Impacts on the solid waste management system would be similar to those described for Site Alternatives 1 and 2.

**Transportation.** Short-term, negligible to minor, and long-term, minor to moderate, adverse effects on the transportation system would be expected at Site Alternative 3. Construction of a commissary would result in a slight increase in the amount of traffic from equipment being delivered and contractors arriving to the work site. Vehicles would likely access Site 3 using the same routes as they would to Site 2. Vehicles would travel on South Cobb Drive outside of the installation, enter the main gate, and travel on Atlantic Avenue Southeast and Industrial Drive inside the installation. Therefore, since these vehicles would travel on secondary roads within the installation, there would be a greater potential for congestion than at Site 1. Any potential increases in traffic volume associated with the proposed construction activities would be temporary. Consequently, short-term, negligible to minor, adverse impacts would be expected.

If Site 3 was chosen, an access road from Industrial Drive to the commissary would need to be constructed. Patrons and employees would arrive and depart at varying times. Similar to Site 2, if a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested. Consequently, long-term, minor to moderate, adverse effects on the Dobbins ARB transportation system would be expected.

Since Site 3 is adjacent to Site 2, vehicles would likely take the same routes to access both of these sites. Consequently, long-term, minor to moderate, adverse impacts on the transportation system outside the installation would be expected. If the proposed commissary is constructed at Dobbins ARB, a traffic study might need to be completed to evaluate the traffic impacts from the proposed commissary.

**Onsite Renewable Energy and Green Power.** Considerations for renewable energy and green power would be similar to those described for Site Alternatives 1 and 2.

#### 4.8.2.4 Site Alternative 4: City of Marietta Site

**Electrical System.** No significant impacts on the existing electrical system would be expected at Site Alternative 4. Site Alternative 4 is owned by the City of Marietta. If Dobbins ARB purchased this property, electrical infrastructure would have to be extended from the installation or obtained commercially. Because electrical infrastructure is located within the vicinity of the City of Marietta Site, power to the site (via the USAF-owned lines or the city) would depend on the amount of work regarding connecting the site and the associated costs.

Following the implementation of the Proposed Action, the overall electrical demand at either Dobbins ARB or the City of Marietta would increase due to the added infrastructure and the volume of users

anticipated visiting the commissary. However, 38 percent of the existing electrical substation's capacity is in surplus during the peak periods over the high-demand summer months (Dobbins ARB 2010a). In addition, the increase in electrical demand compared to that of the general users in the City of Marietta would be negligible. Therefore, the additional demand for electricity would be less than significant and would be accommodated by either electrical system. Disruptions in electrical services during construction would be similar to those described for Site Alternatives 1, 2, and 3.

**Natural Gas System.** No significant impacts on the existing natural gas system would be expected at Site Alternative 4. Natural gas infrastructure would have to be extended from the installation to this site, or obtained commercially. Gas South provides the City of Marietta with gas services; however, no known pipelines are present within the immediate vicinity of the site (Dobbins ARB 2011d). The existing Dobbins ARB natural gas line is present directly south of the City of Marietta Site (Dobbins ARB 2010a). Depending on the location of the commissary within the site, if the lines were extended from the USAF-owned lines, the existing system would have to be extended approximately 250 to 2,000 feet. Natural gas lines to the site (via the USAF-owned lines or the city) would depend on the availability of the service, amount of work regarding connecting the site and the associated costs.

Following the implementation of the Proposed Action, the overall natural gas demand at Dobbins ARB or Gas South would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, the increase in demand would be accommodated by either service provider and would be negligible compared to the total natural gas demand at the installation or on Gas South. Service disruptions would be similar to those described under Site Alternatives 1, 2, and 3.

**Liquid Fuel.** No significant impacts on the liquid fuel would be expected at Site Alternative 4. The Proposed Action would not alter the quantities of liquid fuels used at Dobbins ARB nor would it affect their handling or storage.

**Central Heating/Cooling.** No significant impacts on central heating and cooling system would be expected. Dobbins ARB does not have a central heating/cooling plant. The majority of the facilities on Dobbins ARB are heated by natural gas, and some by electricity. The proposed commissary would be heated by the natural gas network. Air conditioning would be installed in the sales areas and computer rooms of the proposed commissary, and reclamation of cold air from commissary display cases would be used in conjunction with the air conditioning system.

**Water Supply System.** No significant impacts on the exiting water supply system would be expected at Site Alternative 4. Water supply infrastructure would have to be extended from the installation to this site, or obtained commercially. Portions of the Dobbins ARB water system are located directly south of the City of Marietta Site, and the CCMWA provides water to the City of Marietta including populous areas surrounding Site 4. Potable water to the site (via the USAF-owned lines or the CCMWA) would depend on the amount of work regarding connecting the site and the associated costs.

Following the implementation of the Proposed Action, the overall water supply would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, based on the storage supply at Dobbins ARB and the CCMWA, the Proposed Action would not significantly impact the existing water supply system. Potable water supply service disruptions would be similar to those described for Site Alternatives 1, 2, and 3.

**Sanitary/Sewer Wastewater System.** No significant impacts on the sanitary/sewer wastewater system would be expected at Site Alternative 4. Sewer/wastewater infrastructure would have to be extended from the installation to this site, or obtained commercially. Segments of the Dobbins ARB sanitary sewer/wastewater system are located directly south of the City of Marietta Site, and the CCMWA

provides wastewater infrastructure to the City of Marietta. Sewer/wastewater services to the site (via the USAF-owned lines or the CCMWA) would depend on the amount of work regarding connecting the site and the associated costs.

Following the implementation of the Proposed Action, the amount of wastewater generated would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, any increase in the sanitary wastewater system would be negligible compared to the overall volume of wastewater generated at the installation or the City of Marietta. Therefore, impacts on existing Dobbins ARB sanitary sewer/wastewater system are expected to be less than significant. Sanitary sewer/wastewater system service disruptions would be similar to those described for Site Alternatives 1, 2, and 3.

**Stormwater/Sewer System.** No significant impacts on the stormwater/sewer system would be expected at Site Alternative 4. Site Alternative 4 is similar to Site Alternative 2 in that the area is predominantly forested; however, Site Alternative 4 is more heavily forested than Site Alternative 2. The increase in sheet flow and runoff as a result of new impervious surface areas is expected to be greater than that described in the other three site alternatives. The storm sewer system under this alternative would be constructed in such a way to handle the additional flow; therefore, the impacts on the stormwater sewer system would be similar to those described for Site Alternatives 1, 2, and 3. The site would be constructed with the stormwater controls that are described for Site Alternative 1.

The City of Marietta has a progressive stormwater management program implemented to eliminate nonpoint source pollution. Coordination with the City of Marietta upon design of the Proposed Action would be required to determine if its current systems or measures would need to be upgraded or if the current system can handle the potential increase in stormwater generated from the Proposed Action.

**Communications System.** No significant impacts on the communications system would be expected at Site Alternative 4. Following the implementation of the Proposed Action, the communications demands would increase due to the added infrastructure and the volume of users anticipated visiting the commissary. However, any increase in communication demands would be negligible compared to the overall demand generated at the installation or the City of Marietta. Therefore, impacts on existing Dobbins ARB communications network or any of the City of Marietta communications service providers would be negligible. Communications system service disruptions would be similar to those described for Site Alternatives 1, 2, and 3.

**Solid Waste Management System.** No significant impacts on the solid waste management system would be expected at Site Alternative 4. Following the implementation of the Proposed Action, the overall amount of solid waste generated would increase due to the addition of the proposed commissary. However, any potential increase in solid waste generation from the implementation of the Proposed Action would be negligible compared to the total volume of solid waste generated at Dobbins ARB or within the City of Marietta. The solid waste generated would be handled by current solid waste disposal practices. Therefore, the Proposed Action would result in an increase in solid waste generation; however, these impacts would be expected to be less than significant.

**Transportation.** Short-term, negligible to minor, and long-term, minor to moderate, adverse effects on the transportation system would be expected at Site Alternative 4. If this site were chosen, patrons would travel on South Cobb Drive outside of the installation, enter the main gate, travel on Atlantic Avenue Southeast and take Gym Road bridge, which crosses over South Cobb Drive, to Site 4. Similar to Sites 2 and 3, construction vehicles would travel on secondary roads within the installation and there would be a greater potential for congestion than at Site 1. Any potential increases in traffic volume associated with the proposed construction activities would be temporary.

By using the route through the installation and over Gym Road bridge, another controlled access point would not have to be constructed since vehicles could access the main gate. However, the road network in this region of the installation would require upgrading to accommodate the increases in traffic and commercial deliveries. In addition, a new road would need to be constructed to access the site directly. Similar to Sites 2 and 3, if a large number of vehicles traveled to or from the commissary during peak hours, the installation roads and gates could become more congested. Consequently, long-term, minor to moderate, adverse effects on the Dobbins ARB transportation system would be expected.

Vehicles would access Site 4 using the same off-installation routes as Site 2. Consequently, long-term, minor to moderate, adverse impacts on the transportation system outside the installation would be expected. If the proposed commissary is constructed at Dobbins ARB, a traffic study might need to be completed to evaluate the traffic impacts from the proposed commissary.

**Onsite Renewable Energy and Green Power.** Site Alternative 4 is owned by the City of Marietta. If Dobbins ARB purchased this property, electrical infrastructure would have to be extended from the installation or obtained commercially.

Following the implementation of the Proposed Action, the overall electrical demand at either Dobbins ARB or the City of Marietta would increase due to the added infrastructure and the volume of users anticipated to be visiting the commissary. The increase in electrical demand compared to that of the general users in the City of Marietta would be negligible. However, considerations for renewable energy and green power would be similar to those described for Site Alternatives 1, 2, and 3.

### 4.8.3 No Action Alternative

Under the No Action Alternative, the proposed commissary would not be constructed and infrastructure conditions would remain as described in **Section 3.8.2**. Therefore, no impacts on infrastructure would be expected from the No Action Alternative.

## 4.9 Hazardous Materials and Wastes

### 4.9.1 Evaluation Criteria

Impacts would be considered significant if a proposed action resulted in worker, resident, or visitor exposure to hazardous materials or wastes, or if the action generated quantities of these materials beyond the capability of current management procedures. Impacts on hazardous materials management would be considered significant if the Federal action resulted in noncompliance with applicable Federal and Georgia Environmental Protection Division regulations, or increased the amounts generated or procured beyond current Dobbins ARB waste management procedures and capacities. Impacts on the DERP would be considered significant if the Federal action disturbed (or created) contaminated sites resulting in adverse impacts on human health or the environment.

### 4.9.2 Proposed Action

The impacts discussed in this section apply to all four site alternatives. Therefore, these resources are not discussed further in **Sections 4.9.2.1** through **4.9.2.4**.

**Hazardous Materials and Petroleum Products.** No current storage or use of hazardous materials or petroleum products are identified at any of the four site alternatives. It is assumed that limited to moderate quantities of hazardous materials might have been used at Site Alternatives 1 and 3 resulting in

historic releases that continue to potentially impact these sites as hazardous waste. In addition, previous management of hazardous materials at the nearby AFP-6 facility has resulted in contaminated groundwater that has migrated beneath each of the alternative sites. Impacts to each property associated with hazardous waste issues are discussed by site in subsequent sections.

No impacts on hazardous materials management during construction would be expected. Contractors would be responsible for the management of hazardous materials and petroleum product usage, which would be handled in accordance with Federal, state, and USAF regulations. Contractors must report the use of hazardous materials to the 94 MSG/CEVC to be input into the Hazardous Materials Management System (HMMS). If a material that is less hazardous can be used, the 94 MSG/CEVC should make these recommendations. Use of the HMMS system would also ensure that ozone-depleting substances are not available for use. Use of ozone-depleting substances in such products as refrigerants, aerosols, and fire-suppression systems is not permitted by the DOD without a formal request by waiver. There would be no new chemicals or toxic substances used or stored at the installation in conjunction with the Proposed Action.

The proposed commissary is not expected to use any hazardous materials other than refrigerants associated with the refrigerators, freezers, and HVAC systems or small quantities of cleaning materials. Under Title VI of the Clean Air Act, use of non-ozone depleting refrigerants is recommended. The EPA currently maintains a list of accepted alternatives to the ozone-depleting refrigerants historically used. In addition, new refrigerators and HVAC equipment are typically manufactured to be compatible with non-ozone depleting alternatives.

Prior to purchase of any chemical that would be used on-site, including refrigerants and cleaning products, a Hazardous Material Pharmacy (HAZMART) Control Number must be obtained from the HAZMART Manager. The operation of the commissary would not result in a significant increase in the type or quantity of hazardous materials or petroleum products. Therefore, no impacts on hazardous materials or petroleum product management would be expected.

**Radon.** Radon is not expected to be present in buildings above the USEPA guidance level of 4 pCi/L in indoor air at any of the sites, resulting in a negligible impact.

**Pesticides.** Pesticide contamination has not been identified at any of the four site alternatives. It is assumed that minimal amounts of pesticides were historically or are currently used at Site Alternatives 1, 3, and 4 to control nuisance pests, and that these pesticides were properly stored and used, resulting in a negligible impact.

The proposed commissary might use minor quantities of pesticides. Prior to purchase, a HAZMART Control Number must be obtained from the HAZMART Manager. The operation of the commissary would not result in a significant increase in the type or quantity of pesticides. Therefore, no impacts on hazardous materials or petroleum product management would be expected.

#### 4.9.2.1 Site Alternative 1: Corps Lab Site

**Hazardous and Petroleum Wastes.** No significant impacts would be expected from the generation of hazardous wastes during construction activities. It is anticipated that the quantity of hazardous wastes generated from proposed construction activities would be negligible and thus less than significant impacts on the installation's hazardous waste management program would be expected. Contractors would be responsible for the temporary storage and disposal of hazardous wastes in accordance with Federal and state laws and regulations, and the *Hazardous Waste Management Plan for Dobbins ARB* (Dobbins ARB 2009c). BMPs, such as secondary containment, would be followed to ensure that contamination from a



spill would not occur. In the event of a spill, the Dobbins Fire Department HAZMAT Response Team would respond to the spill. The operation and maintenance of the proposed commissary would not result in an increase in the type or quantity of hazardous and petroleum wastes; therefore, no impacts on hazardous and petroleum waste management would be expected.

Small quantities of hazardous wastes are present at the existing, onsite buildings at Site Alternative 1. It is assumed these materials are being properly managed for offsite disposal. A material identified as a sodium salt of an organic acid is present in Room E139 of the former USACE Laboratory, and requires characterization, profiling, and offsite disposal.

A former 180-day hazardous waste storage area was historically located in the loading dock area outside the USACE laboratory. Contamination associated with this site has been remediated and the site closed. Additional information is required to determine if the site was closed to residential standards or to commercial/industrial standards. If the latter, institutional controls could be present that would impact construction activities, resulting in a minor to moderate impact depending on the type of institutional controls that is in place.

A former acid neutralization pit was present on the exterior west side of the USACE Laboratory. The pit and surrounding soils were removed in 2002, but not all contaminated media was removed or remediated. Additional residual contamination at the USACE Laboratory includes contaminated surfaces inside the building associated with the HVAC system and two sumps containing contaminated sludge. If the proposed commissary were to be constructed on the site of the USACE Laboratory, contaminant sources should be properly remediated prior to initiating construction activities to reduce potential impact on construction workers.

**Environmental Restoration Programs.** No DERP sites are located within the boundaries of Site Alternative 1. The nearest DERP sites are SWMUs 23 and 62, which are located approximately 250 to 300 feet east and southeast of Site Alternative 1, respectively. Both of these SWMUs have a No Further Action status; therefore, no impacts are expected.

**Asbestos-Containing Materials.** ACMs are either known to be present or are suspected to be present in existing buildings at Site Alternate 1. If the proposed commissary is located within the footprint of these buildings which would require demolition, it is assumed that ACMs would be properly removed, managed, and transported off site for disposal in accordance with local, state, and Federal regulations prior to initiating construction, resulting in a minor impact. ACMs would not be used in the construction of the proposed commissary.

**Lead-Based Paint.** LBP is either known to be present or suspected to be present in existing buildings at Site Alternative 1. If the proposed commissary is located within the footprint of these buildings that would require demolition, it is assumed that LBP would be properly removed, managed, and transported off site for disposal in accordance with local, state, and Federal regulations prior to initiating construction. Therefore, minor, adverse impacts could be expected if demolition was required. LBP would not be used in the construction of the proposed commissary.

**Polychlorinated Biphenyls.** There is the potential for electrical equipment pre-dating 1985 at the former USACE Laboratory to contain PCBs for Site Alternative 1. If the proposed commissary is located within the footprint of this building which would require demolition, it is assumed that PCB-contaminated or PCB-containing equipment would be properly removed, managed, and transported off site for disposal in accordance with local, state, and Federal regulations prior to initiating construction. Therefore, minor, adverse impacts could be expected if demolition was required.

#### 4.9.2.2 Site Alternative 2: BX Site

**Hazardous and Petroleum Wastes.** No hazardous wastes are currently identified at Site Alternative 2; therefore, no impacts are expected.

**Environmental Restoration Programs.** No DERP sites are located within the boundaries of Site Alternative 2. The nearest DERP site is SWMU 78, located approximately 250 feet north of Site Alternative 2 within the boundaries of AFP-6. SWMU 78 is a former sanitary sludge disposal area that is still under investigation, which suggests the boundaries of this site might not be delineated yet. If contamination associated with this SWMU extends into Site Alternative 2, minor to moderate impacts (depending on contaminant concentrations) on construction workers could be expected if the contamination is not remediated prior to initiating construction activities.

**Asbestos-Containing Materials.** No ACMs are currently identified at Site Alternative 2; therefore, no impacts are expected.

**Lead-Based Paint.** No LBP is currently identified at Site Alternative 2; therefore, no impacts are expected.

**Polychlorinated Biphenyls.** There is no known PCB contamination or PCB-containing equipment at Site Alternative 2; therefore, no impacts are expected.

#### 4.9.2.3 Site Alternative 3: Barclay Gate Site

**Hazardous and Petroleum Wastes.** No hazardous wastes are currently identified at Site Alternative 3; therefore, no impacts are expected.

**Environmental Restoration Programs.** Seven DERP sites are located within the boundaries of Site Alternative 3.

SWMU 3 (B-64 LUST Site), SWMU 5 (B-90 Septic Tank Drain Field), SWMU 32 (B-90 old LUST), and SWMU 78 (Sanitary sludge disposal area) are each currently undergoing investigation. SWMU 29 (Past Landfill at Building 90) was consolidated into SWMU 3 and SWMU 29 listed as with a status of No Further Action. Depending on where the proposed commissary is cited, one or more of these SWMUs might be within the footprint of the building. Information relating to nature and extent of the contamination at these sites was not included in the EBS reports. Based on the depth to contamination and the contaminant concentrations levels, there could be a moderate, direct impact.

SWMU 1 (B-64 LUST Site) is listed as No Further Action. Additional information relating to implemented remedy, date of closure, regulatory program the site was closed under, and whether the site was closed under residential or commercial/industrial standards, was not provided in the EBS Report. If the site was closed under commercial/industrial standards, there is the potential for institutional controls to be associated with the site closure. If the site was closed under residential standards, there would be a negligible impact. If the site was closed under commercial/industrial standards, there could be moderate, direct impacts depending on the closure conditions and institutional controls, if any.

A large plume identified as IRP site IRP-GWPLUM is present in the northern portion of the Site Alternative 3 and a portion of a smaller plume located off site to the south extends approximately 50 feet into the southern portion of Site Alternative 3. Contamination in both plumes is present in both the overburden and bedrock aquifers. Depth to groundwater is approximately 5 to 6 feet below ground surface. If the commissary is cited outside the boundaries of either plume, there would be a negligible

impact during construction activities. Since there is the potential for the plume boundaries to change with time, there is the potential for future indirect impacts associated with possible vapor intrusion to the building and contamination of drinking water. Drinking water contamination would depend on type of piping used to deliver potable water to the building. If the commissary is cited within the boundaries of either plume, major direct impacts associated with construction activities could occur. In addition, major indirect impacts associated with potential vapor intrusion to the building and potential contamination of drinking water (depending on type of piping used to deliver potable water to the building) could be expected.

**Asbestos-Containing Materials.** ACMs are either known to be present or are suspected to be present in existing buildings at Site Alternate 3. If the proposed commissary is located within the footprint of these buildings which would require demolition, it is assumed that ACMs would be properly removed, managed, and transported off site for disposal in accordance with local, state, and Federal regulations prior to initiating construction, resulting in a minor impact. ACMs would not be used in the construction of the proposed commissary.

**Lead-Based Paint.** LBP is either known to be present or suspected to be present in existing buildings at Site Alternative 3. If the proposed commissary is located within the footprint of these buildings which would require demolition, it is assumed that LBP would be properly removed, managed, and transported off site for disposal in accordance with local, state, and Federal regulations prior to initiating construction. Therefore, minor, adverse impacts could be expected if demolition was required. LBP would not be used in the construction of the proposed commissary.

**Polychlorinated Biphenyls.** There is no known PCB contamination or PCB-containing equipment at Site Alternative 3; therefore, no impacts are expected.

#### 4.9.2.4 Site Alternative 4: City of Marietta Site

**Hazardous and Petroleum Wastes.** No hazardous wastes are currently identified at Site Alternative 4; therefore, no impacts are expected.

**Environmental Restoration Programs.** No DERP sites are located within the boundaries of Site Alternative 4. The nearest DERP sites are SWMU-28 (B-58 Wingseal Facility Spill) and SWMU-14/89 B-80 Fuel Oil Storage Tank Spill Area and TCE Contamination at B-80 Fuel Spill Area, respectively), which are located approximately 260 feet west of Site Alternative 4. Both sites are still under investigation, which suggests the boundaries of this site might not be delineated yet. If contamination associated with these SWMUs extends into Site 4, minor to moderate (depending on contaminant concentrations) impacts on construction workers could be expected if the contamination is not remediated prior to initiating construction activities.

The northwestern half of Site Alternative 4 is also underlain by the IRP-GWPLUM plume that originates from AFP-6, with contamination present in both the overburden and bedrock aquifers beneath the site. If the commissary is cited outside the boundaries of the plumes, there would be negligible impacts during construction activities. There is the potential for the plume boundaries to change with time. Consequently, moderate to major impacts associated with potential vapor intrusion to the building and potential contamination of drinking water (depending on type of piping used to deliver potable water to the building) could be expected. If the commissary is cited within the boundaries of the plume, major impacts associated with construction activities, future potential vapor intrusion to the building, and potential contamination of drinking water (depending on type of piping used to deliver potable water to the building) could be expected.

**Asbestos-Containing Materials.** No ACMs are currently identified at Site Alternative 4; therefore, no impacts are expected.

**Lead-Based Paint.** No LBP is currently identified at Site Alternative 4; therefore, no impacts are expected.

**Polychlorinated Biphenyls.** There is no known PCB contamination or PCB-containing equipment at Site Alternative 4; therefore, no impacts are expected.

### 4.9.3 No Action Alternative

Under the No Action Alternative, the proposed commissary would not be constructed and hazardous materials and waste conditions would remain as described in **Section 3.9.2**. Therefore, no impacts on hazardous materials and waste would be expected from the No Action Alternative.

## 4.10 Safety

### 4.10.1 Evaluation Criteria

Impacts on safety are evaluated for their potential to increase risks associated with the safety of construction personnel, contractors, military personnel, or the local community as a result of the Proposed Action. An impact would be considered significant if any of the following occurred:

- Increases the risks associated with the safety of construction personnel, contractors, military personnel, or the local community
- Hinders the ability to respond to an emergency
- Introduces a new health or safety risk for which the installation is not prepared or does not have adequate management and response plans.

The impacts on safety are discussed in the following subsections and include contractor safety, fire hazards and public safety, explosives and munitions safety, and protection of children.

### 4.10.2 Proposed Action

#### 4.10.2.1 Site Alternative 1: Corps Lab Site

**Contractor Safety.** Short-term, minor, adverse impacts on contractor safety would be expected at Site Alternative 1. Implementation of the Proposed Action would slightly increase safety risks to contractors performing construction work at the site because of the increase in the level of construction activities. Contractors would be required to establish and maintain safety programs that their employees must follow. Implementation of proper safety plans and the use of PPE would decrease the risk to contractors. Although construction of the Proposed Action would result in increased risk to contractors, safety impacts would be less than significant due to the implementation of and adherence to effective health and safety plans.

**Fire Hazards and Public Safety.** No significant impacts regarding fire hazards or public safety would be expected at Site Alternative 1. As part of the proposed commissary, the project would include emergency building lighting and fire protection systems. These systems would aid the Dobbins Fire and Emergency Services (94 MSG/CEFO) and the 94th Security Forces (94 SFS/S3) in monitoring/patrolling the proposed commissary.

Site Alternative 1 does not have a controlled access point, which means nonmilitary personnel can enter this site at any time. Controlled access points are required for commissaries that sell goods to military personnel. Therefore, following implementation of the Proposed Action at Site Alternative 1, the controlled access point would need to be relocated or a new entrance would be required. If the new access point were constructed, additional security staffing at the gate would be needed.

**Explosives and Munitions Safety.** No explosives and munitions safety impacts would be expected at Site Alternative 1.

**Protection of Children.** Implementation of the Proposed Action would not result in increased health and safety risks to children. As previously mentioned, children do not reside on the installation. Children may be on installation as visitors, but their access to certain areas is restricted, and they must be under adult supervision. The installation takes precautions for children, including use of fencing and other limitations to prevent or restrict access to certain areas (such as construction sites).

Following implementation of the Proposed Action, there is a potential for increased visitation to the installation by children, but, as stated previously, children must be accompanied by an adult at all times while on installation. In addition, visitors to the commissary would not have access to restricted areas associated with the commissary.

#### 4.10.2.2 Site Alternative 2: BX Site

**Contractor Safety.** Impacts on contractor safety would be similar to those described for Site Alternative 1.

**Fire Hazards and Public Safety.** No significant impacts regarding fire hazards or public safety would be expected at Site Alternative 2. As part of the proposed commissary, the project would include emergency building lighting and fire protection systems, which would aid the 94 MSG/CEFO and the 94 SFS/S3 in monitoring/patrolling the commissary.

**Explosives and Munitions Safety.** No explosives and munitions safety impacts would be expected at Site Alternative 2.

**Protection of Children.** Impacts on the protection of children would be similar to those described at Site Alternative 1.

#### 4.10.2.3 Site Alternative 3: Barclay Gate Site

**Contractor Safety.** Impacts on contractor safety would be similar to those described for Site Alternatives 1 and 2.

**Fire Hazards and Public Safety.** Impacts on public safety would be similar to those described for Site Alternative 2.

**Explosives and Munitions Safety.** Although Site Alternative 3 is partially overlapped by the 200-foot clear zone for Explosive Site 01 (Above Ground Magazine), no conflicts or explosives and munitions safety concerns would occur at any of the sites (Dobbins ARB 2010d). A 200-foot clear zone would be maintained. Therefore, impacts on explosives and munitions safety would be similar to those described for Site Alternatives 1 and 2.

**Protection of Children.** Impacts on the protection of children would be similar to those described in Site Alternatives 1 and 2.

#### 4.10.2.4 Site Alternative 4: City of Marietta Site

**Contractor Safety.** Impacts on contractor safety would be similar to those described for Site Alternatives 1, 2, and 3.

**Fire Hazards and Public Safety.** Impacts on public safety would be similar to those described for Site Alternative 1, including the need to construct a controlled access point and the need for security staffing at the gate.

**Explosives and Munitions Safety.** No explosives and munitions safety impacts are anticipated with the implementation of the Proposed Action at this site.

**Protection of Children.** Children live in the vicinity of Site Alternative 4. The site is currently a city-owned public park, Wildwood Park. Walking trails, a dog park, and picnic pavilions are located within this park. Children can freely use the park in its current existence. However, if this site was selected for the Proposed Action, policies regarding children at Dobbins ARB would be enforced at this location. Greater safety measures in the form of signage would be needed to inform the children and guardians that the park is no longer available for public use, thereby reducing potential for risks to children. Impacts on the protection of children would be similar to those described in Site Alternatives 1, 2, and 3.

#### 4.10.3 No Action Alternative

Under the No Action Alternative, the proposed commissary would not be constructed and safety conditions would remain as described in **Section 3.10.2**. Therefore, no impacts on contractor safety, fire hazards, explosives and munitions safety, or protection of children would be expected from the No Action Alternative.

Long-term, minor, adverse impacts on public safety would be expected under the No Action Alternative. Under the No Action Alternative, a new facility would not be constructed resulting in the lack of a commissary in the Atlanta metropolitan area for patrons (retirees, active-duty and Reserve personnel, and their dependents). This would create adverse impacts on public safety as patrons would have to travel outside of the Atlanta metropolitan area to visit a commissary. The adverse impacts result from travel hazards from driving a distance of 2 hours to Robins AFB and Fort Benning, or 3 hours to Fort Gordon.

### 4.11 Socioeconomics and Environmental Justice

#### 4.11.1 Evaluation Criteria

**Socioeconomics.** The significance of socioeconomic impacts is assessed in terms of direct effects on the local economy and related effects on other socioeconomic resources (e.g., income, housing, and employment). The magnitude of potential impacts can vary greatly, depending on the location of a proposed action. For example, implementation of an action that creates 10 employment positions might be unnoticed in an urban area, but could have significant impacts in a rural community. If potential socioeconomic changes were to result in substantial shifts in population trends or regional spending and earning patterns, they would be considered significant.

**Environmental Justice.** Ethnicity and poverty data are examined for the ROI and compared to city, county, and state statistics to determine if a low-income or minority population could be disproportionately affected by the Proposed Action. This section also evaluates impacts from the Proposed Action on children's environmental health and safety risks.

## 4.11.2 Proposed Action

### 4.11.2.1 Site Alternative 1: Corps Lab Site

Short-term, minor, beneficial effects on the local economy from increases in employment and local business volume during construction would be expected at Site Alternative 1. As of 2010, approximately 16.5 percent of the ROI's workforce and 13 percent of the City of Marietta's workforce is employed in the construction industries. Therefore, there should be more than sufficient local workers available for the construction activities associated with Site Alternative 1. Short-term increases in local business volume within the local economy during construction would also be expected due to the provision of construction materials and supplies and other related services. Because Atlanta is a metropolitan area with access to the necessary construction materials and supplies, this benefit is likely to be felt locally. Short-term population increases during construction would not be expected to occur because construction workers are likely present in the community. No impacts on social conditions, including property values, school enrollment, county or municipal expenditures, or crime rates due to population increases would be anticipated during construction activities and because the workers would likely be existing local residents.

The ROI has a considerably higher percent of residents of a racial minority and children under the age of 5 years old than the State of Georgia (58.9 percent versus 40.3 percent and 9.4 percent versus 7.1 percent, respectively). The ROI also has a considerably higher percentage of Hispanic or Latino and low-income residents than the State of Georgia (34.3 percent versus 8.8 percent and 26 percent versus 15.7 percent, respectively). Therefore, implementation at Site Alternative 1 could have short-term, negligible, adverse effects on minority and low-income populations from construction noise and traffic.

Dobbins ARB currently does not have a commissary. Therefore, Site Alternative 1 would result in a long-term, minor to moderate, beneficial effect on the local economy due to increase of employees and patrons at the commissary and regional (i.e., nonlocal) people shopping at nearby stores and restaurants. Sales at Fort McPherson, Fort Gillem, and the Navy Supply Corps School totaled \$33.3 million in 2010. Patrons would no longer need to drive outside the Atlanta metro area to visit a commissary. Therefore, there would be an annual increase of approximately \$33 million in revenue in the Atlanta metro area under the Proposed Action. It is anticipated that 50 employees would work at the commissary daily. These jobs would likely be a combination of full-time and part-time positions. Currently, there is not a controlled access point at Site Alternative 1, which would be required. If this site is selected, a controlled access point would be constructed and additional security staffing would be necessary.

Long-term, minor, adverse effects on minority and low-income populations from increased traffic would be expected at Site Alternative 1. As previously mentioned, the ROI has a disproportionately high minority and low-income population compared to the baseline. Therefore, the increase in traffic from the additional commissary patrons and employees would disproportionately affect minority and low-income populations. However, the effects would be minor since it is estimated that approximately 1,200 vehicles would visit the commissary at various times during the day. No impacts on social conditions, including property values, school enrollment, county or municipal expenditures, or crime rates from population increases would be anticipated during operation of the proposed commissary since the employees would likely be local.

### 4.11.2.2 Site Alternative 2: BX Site

Short-term effects from implementation of the Proposed Action at Site Alternative 2 would be similar to those for Site Alternative 1. Additional short-term, beneficial effects on the local economy would result from the construction work necessary at Site 2. The road network in this region of the installation would require upgrading to accommodate increases in traffic and commercial deliveries.



Long-term effects from implementation of the Proposed Action at Site Alternative 2 would be similar to those for Site Alternative 1. As stated in **Section 2.3.2**, if the existing BX and proposed commissary were collocated, there would be an increase in the amount of traffic on the adjacent roadways. The new patrons and employees of the commissary could cause congestion in the immediate area.

#### **4.11.2.3 Site Alternative 3: Barclay Gate Site**

Short-term and long-term effects from implementation of the Proposed Action at Site Alternative 3 would be similar to those for Site Alternative 1.

#### **4.11.2.4 Site Alternative 4: City of Marietta Site**

Short-term effects from implementation of the Proposed Action at Site Alternative 4 would be similar to those for Site Alternative 1. However, short-term, beneficial effects on the local economy would result from the additional construction work necessary at Site Alternative 4. The access road would require upgrading to accommodate increases in traffic and commercial deliveries. In addition, fencing around the perimeter would need to be installed to ensure the entire site is secure. Long-term effects from implementation of the Proposed Action at Site Alternative 4 would be similar to those for Site Alternative 1.

#### **4.11.3 No Action Alternative**

Under the No Action Alternative, the Proposed Action would not occur, and the existing conditions discussed in **Section 3.11.2** would continue. No construction would occur and there would continue to be no access to a commissary for the active-duty, Reserve, and retired military personnel in the Atlanta metropolitan area. Sales at Fort McPherson, Fort Gillem, and the Navy Supply Corps School totaled \$33.3 million in 2010. Patrons would need to drive outside the Atlanta metro area to visit a commissary. Therefore, there would be an annual loss of approximately \$33 million in revenue in the Atlanta metro area under the No Action Alternative, resulting in long-term, minor adverse socioeconomics. The No Action Alternative would not result in any environmental justice impacts.

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## 5. Cumulative and Other Potential Adverse Impacts

CEQ regulations stipulate that the cumulative effects analysis in an EA should consider the potential environmental effects resulting from “the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 CFR Part 1508.7). CEQ guidance in considering cumulative effects affirms this requirement, stating that the first steps in assessing cumulative effects involve defining the scope of the other actions and their interrelationship with a proposed action. The scope must consider other projects that coincide with the location and timetable of a proposed action and other actions. Cumulative effects analyses must also evaluate the nature of interactions among these actions (CEQ 1997).

### 5.1 Projects Identified for Potential Cumulative Effects

The scope of the cumulative effects analysis involves both timeframe and geographic extent in which effects could be expected to occur, and a description of what resources could be cumulatively affected. For the purposes of this analysis, the geographic area for consideration of cumulative effects is Dobbins ARB and Cobb County, including the City of Marietta.

***Construction of Marietta Trail System Multi-Use Trail.*** The City of Marietta has proposed to construct a multi-use trail within the University segment of the Marietta Trail System. The multi-use trail would travel along South Cobb Drive southeast into Southern Polytechnic State University and connect to an existing trail just north of Wildwood Park on Life University property. This trail then connects to A.L. Burruss Park to the south (City of Marietta 2010b).

***The Operation of a Joint Forces Headquarters (JFHQ) at the General Lucius D. Clay National Guard Center, Cobb County, Georgia.*** The Georgia Air National Guard completed construction of the JFHQ in 2012. The JFHQ is an approximately 17-acre site in the northwestern portion of the General Lucius D. Clay National Guard Center in Cobb County, adjacent to the south of Dobbins ARB. The facility includes a 215,000-ft<sup>2</sup> multi-story building, onsite parking areas, sidewalks, an access road, exterior fire protection, lighting, a flagpole, and other ancillary facilities. The JFHQ accommodates the relocation of elements of the Headquarters, Headquarters Detachment of the Georgia State Area Command, the 124th Mobile Public Affairs Detachment, and the 118th Personnel Service Detachment of the Georgia Air National Guard; headquarters elements of the Georgia Air National Guard; and multiple departments of the Georgia DOD (Dobbins ARB 2009d).

***Expansion of Lockheed Martin Aeronautics Material Recycling Facility.*** Lockheed Martin has proposed to expand and use an existing recycling facility that is at the central-southern edge of Site 3. The recycling facility is not currently operating and upgrades would need to be completed prior to its use. The design of the proposed facility has not been finalized, but the existing building would be expanded, a loading dock and asphalt parking lot/yard would be constructed, and an existing gravel road to the east and south of the proposed site would be widened and paved (Dobbins ARB 2011h).

***Dobbins ARB General Plan Projects.*** The Dobbins ARB General Plan is intended to guide the installation's long-range development by providing an assessment of on-installation conditions, and recommendations for improvements and future development of the installation. The General Plan outlines future facility and infrastructure requirements that will enhance mission support capability (Dobbins ARB 2010a). These requirements are identified as a list of planned, programmed, and recommended projects in the General Plan's finding and recommendations. There are six major programmed projects identified in the General Plan. A summary of these projects is presented in **Table 5-1**.

**Table 5-1. Summary of Dobbins ARB Projects in the Area of the Proposed Action**

Project Title	Description	Status
Construction of New Fire Station/Security Forces Complex	A new fire station/security forces complex would be constructed immediately northeast of the existing Fire Station (Building 745). The proposed joint facility would combine the administration and the 24-hour operations of both services, and would provide a state-of-the-art facility for emergency response personnel. The facility would consist of a multi-story building with drive-through bays for fire engines, living quarters for firefighters, administrative offices and storage for the fire department and security forces, and a consolidated emergency dispatch center. Combination of the fire department and security forces allows Dobbins ARB to comply with AFI 10-2501, which requires integration of the emergency dispatch and Base Defense Operating Center functions. The existing Fire Station (Building 745) would be demolished immediately following completion and occupation of the new facility.	Programmed
Construction of New Fitness Center	A new fitness center would be constructed in the North Area to replace the existing outdated and undersized facility. The proposed facility would include men's and women's locker rooms with sauna, a cardiovascular and stretching area, a gymnasium with basketball/volleyball court and spectator seating area, racquetball courts, and a resistance and free weights training area. The facility would also include a lobby and administrative and support offices, a conference room, group exercise rooms, a laundry area, support storage, and equipment repair area. The existing fitness center would be demolished after construction of the new facility.	Programmed
Construction of AFRC Contingency Training Center	An AFRC Contingency Training Center would be constructed that could accommodate both Civil Engineering Expeditionary Combat Support Training – Certification Center and Force Support Combat Training, and a joint and interagency use. The AFRC Contingency Training Center would require a consolidated schoolhouse with contiguous functions and accessibility between housing, classrooms, and administration; troop billeting/student housing (open bay/hooch) and shower-and-shave facility; an open area for field training and field-training activities (field lodging; designated areas for specific field-training exercises; and pads for erecting field kitchens, tents, and billeting tents); runway minimum requirement (5,000-foot-long-by-75-foot-wide area); and Airfield Damage Repair pavement pads. The proposed site is the Army Reserve area southeast of the runway, and the alternate site is the Cobb County Legacy Golf Course adjacent to the southeast boundary of the installation.	Programmed

Project Title	Description	Status
Renovation of Wing Headquarters Building	Building 922 would be renovated to become the new Wing Headquarters. The renovation activities would include the removal of existing walls to provide an open office layout that will provide additional usable space, and other interior improvements, resurface parking lots, and relocate a fire hydrant. Wing Headquarters staff functions are currently in four geographically separated buildings, which result in reduced efficiency. Functions from Buildings 838, 727, 737, and 827 would be relocated to Building 922.	Programmed
Relocation of 700th Airlift Squadron	The 700th Airlift Squadron (700 AS) would be relocated to Bay 1 of Building 838 after Wing Headquarters functions have departed (see “Renovation of Wing Headquarters Building”). This relocation would consolidate 700 AS Operations into a single facility on the flightline and provide adequate space for operational activities associated with its new mobility mission. Some structural changes to Bay 1 might be required to accommodate this function.	Programmed
Recreation Area/Lodging Campus Projects	Several projects would be implemented on the North Area after the AFRC Contingency Training Center is relocated (see “Construction of AFRC Contingency Training Center and Alternative”). The recreational projects include relocation and expansion of the Family Campgrounds, construction of a frisbee golf course, relocation of the Rental Center, and construction of the new Fitness Center (see “Construction of New Fitness Center”). In addition to the recreation projects, a Lodging and Conference Facility would be constructed along Gym Road. The lodging facility would include space for 95 visitor rooms (each with a private bath), 5 distinguished visitor suites, lobby, vending, public restrooms, a front desk area, office/break area, storage areas, and a laundry room.	Programmed

Source: Dobbins ARB 2010a

## 5.2 Resource-Specific Cumulative Effects

### 5.2.1 Site Alternative 1: Corps Lab Site

**Noise.** All projects identified in **Section 5.1** would result in short-term, adverse impacts on the ambient noise environment in the northwestern corner of Dobbins ARB and nearby off-installation receptors, including residences, due to construction activities. Long-term, adverse impacts are likely to result from the combined vehicle traffic from these projects, except the Marietta multi-use trail. In addition, operation of the Lockheed Martin recycling facility and the AFRC Contingency Training Center would likely also result in long-term, adverse impacts on the noise environment due to activities that would occur at each site; however, the significance of these impacts is not known.

Implementation at Site Alternative 1 would result in short-term and long-term, negligible to minor, adverse impacts on the ambient noise environment from construction activities and vehicle traffic, and from operational vehicle traffic.

The projects identified in **Section 5.1** are more than 1.25 miles from Site 1, and it is unlikely that noise generated from the construction and operation of the Proposed Action would be heard at the other project sites. Therefore, when the noise impacts from Site Alternative 1 are combined with the noise impacts of projects identified in **Section 5.1**, no cumulative impacts would be expected.

**Land Use.** Most projects identified in **Section 5.1** would likely not result in land use impacts as the projects would be constructed on property with similar or compatible land uses. Projects sited on DOD property near an installation boundary (JFHQ, AFRC Contingency Training Center) or outside of DOD property (Marietta multi-use trail) could result in short-term, negligible impacts from generation of construction noise that could affect noise-sensitive land uses in the vicinity. Construction and operation of the AFRC Contingency Training Center has several constraints that would likely result in long-term, moderate, adverse impacts on land use. These constraints include overlap with an existing transitional surface, apron setbacks, an IRP site (LF-01), the explosive clear arc from Building 1043, and Explosive Safety-Quantity Distance arcs. An alternative to the proposed AFRC Contingency Training Center site is the Legacy Golf Course, which is directly adjacent to the south of the Dobbins ARB and is operated by Cobb County. If this alternative is implemented, there could be long-term, moderate, adverse impacts on land use due to the need to transfer land from Cobb County to AFRC, change land use categories, and upgrade security measures. Additionally, there would be a decrease in recreational land (i.e., golf course) in Cobb County.

Implementation of the Proposed Action at Site 1 would result in long-term, minor, adverse impacts on land use plans or policies because the proposed commissary would be constructed on property primarily outside of the Dobbins ARB boundary. The property at the proposed site that is owned by AFMC would need to be transferred to AFRC, and the land use designation would need to be changed from Lockheed Martin to commercial. Lockheed Martin is not currently using this property to produce aircraft or perform maintenance on them; therefore, land use impacts would be less than significant.

Implementation of the Proposed Action at Site 1 and the other projects identified in **Section 5.1** could result in short-term, minor, adverse cumulative impacts on noise-sensitive land uses, and long-term, minor to moderate, adverse cumulative impacts on land use plans and policies.

**Air Quality.** Past and current development and stationary and mobile sources at Dobbins ARB and in Cobb County have impacted regional and local air quality and future activities in these areas would continue to impact local and regional air quality. It is likely that the projects identified in **Section 5.1** would result in short-term, adverse impacts on air quality due to generation of particulate emissions as fugitive dust from ground-disturbing activities during construction, and generation of criteria pollutant air emissions from vehicular traffic of construction equipment and commuting construction workers. Emissions from construction activities would be produced only for the duration of work activities, and would likely not be significant. While the designs of these projects are not known, it is likely that operation of all projects except for the Marietta multi-use trail would result in long-term, adverse impacts on air quality due to emissions from operation of the building's heating systems or other operational equipment (e.g., specialized recycling equipment). Long-term impacts could also result from the vehicles of workers commuting to these proposed facilities.

As shown in **Tables 4-2** and **4-6**, construction and operation of the Proposed Action at Site Alternative 1 would contribute a minor amount of emissions to the local and regional air quality.

Implementation of the Proposed Action combined with other projects at Dobbins ARB and Cobb County that involve construction, stationary, and mobile source emissions would result in continuous long-term, minor, adverse cumulative impacts on air quality in the region.

**Geological Resources.** Past development activities at Dobbins ARB and the surrounding Cobb County have extensively modified geological resources, particularly soils, and current development activities continue to alter the soils. While several projects identified in **Section 5.1** would occur on fully or partially developed land or previously disturbed land, continued development on Dobbins ARB and within the City of Marietta would impact soils and topography locally. This could occur through ground-disturbing activities such as grading, excavation, and recontouring of the soils, which could result in increased soil compaction and erosion.

The Proposed Action would impact soils through site-disturbing construction activities and increases to impervious surfaces resulting in short-term and long-term, minor, adverse impacts resulting in compacted soils, increased erosion and sedimentation, and possible changes in drainage patterns. However, the majority of the soils at Site Alternative 1 have been previously disturbed and modified by development, and thus impacts from the Proposed Action would not be significant. In addition, soil erosion, stormwater, and sediment-control measures would be included in the site plan to minimize these impacts.

When combined with impacts from other projects, permanent but localized effects of the components of the Proposed Action would result in long-term, negligible, adverse, cumulative impacts on geological resources.

**Water Resources.** While several projects identified in **Section 5.1** would occur on fully or partially developed land, their implementation would further increase impervious surface area and, thereby, would have the potential to increase stormwater runoff and erosion and sedimentation into surface waters. Potential increases in sedimentation and other water resource degradation from development projects would be alleviated through the use of BMPs, and would likely be minimized through the use of design criteria and stormwater management controls designed to comply with NPDES permit requirements.

Implementation of the Proposed Action at Site Alternative 1 would result in long-term, negligible to minor, adverse impacts on water resources including groundwater, surface water, and wetlands. The Proposed Action would increase impervious surfaces and compact soil that could result in localized changes in drainage and infiltration patterns that could affect groundwater quality and recharge. The quality of surrounding surface water and wetlands could be affected by increased stormwater runoff and possible spills or leaks.

The Proposed Action would combine with other past and future development to produce long-term, minor, adverse, cumulative impacts on water resources.

**Biological Resources.** Existing development and operations on Dobbins ARB and in Cobb County currently impact vegetation and wildlife. Since several projects identified in **Section 5.1** would occur on fully or partially developed land or previously disturbed land. Development would eliminate some areas that are currently vegetated, while revegetation of disturbed areas with native species would replace some areas of nonnative vegetation schemes and weedy areas. Conversion of existing open space to facilities would reduce wildlife habitat; however, that habitat is of low quality on Dobbins ARB due to former use.

Implementation of the Proposed Action at Site Alternative 1 would result in short-term and long-term, negligible, adverse impacts on vegetation and wildlife due to removal of vegetation and wildlife habitat, and permanent disturbances due to increased human activity. If the proposed commissary is constructed in the forested portion of Site 1, the long-term impacts on vegetation and wildlife habitat could be minor to moderate due to permanent removal of native forest vegetation. In addition, construction activities could result in an adverse impact due to mortality of smaller, less mobile wildlife species. If the construction footprint overlaps the forested portion of Site 1, a site-specific survey for pink ladyslipper populations should be conducted prior to any vegetation-removal activities.



Past development at Dobbins ARB, in conjunction with the urban expansion and development in Cobb County, has degraded historic habitat of both sensitive and common species. The Proposed Action, in conjunction with past and future development both on and off the installation, would result in an overall long-term, minor, adverse, cumulative impact on biological resources. Cumulative actions are causing reduction in habitat and permanent loss of vegetation.

**Cultural Resources.** The potential impacts of the projects identified in **Section 5.1** on cultural resources are not known. Impacts on cultural resources resulting from projects at Dobbins ARB are likely to be minimal, if at all, due to the previously disturbed nature of the installation. Impacts could occur if new construction uncovered previously undetected prehistoric sites.

Implementation of the Proposed Action would have no adverse effect on viewshed of the NRHP-eligible Bell Bomber Plant Historic District and the Sibley-Gardner House. There is demonstrated concern that there might be archaeological resources related to the Sibley-Gardner house; however, given the level of disturbance at Site 1 there is little possibility that archaeological sites are present. Additional testing might be needed based on the proximity of the proposed commissary to the Sibley-Gardner House. In addition, the Aviation Wing of the Marietta Museum of History would need to be relocated.

Because the Proposed Action would have no adverse effects on any archaeological site or culturally significant buildings or structures, there would be no cumulative impacts on cultural resources.

**Safety.** Construction of the projects identified in **Section 5.1** could increase safety risk to contractors performing construction work; however, most of these projects would be required to develop and adhere to health and safety plans. Following implementation of the Proposed Action at Site Alternative 1, the controlled access point would need to be relocated or a new entrance would be required. Construction of the Fire Station/Security Forces Complex at Dobbins ARB would likely result in beneficial impacts on safety and emergency response capabilities.

Short-term, minor impacts on contractor safety would be expected under the Proposed Action. Contractors would use PPE and would be required to establish and maintain safety programs that their employees must follow, which would minimize their risk.

The Proposed Action would have a negligible, adverse cumulative effect on safety.

**Socioeconomics and Environmental Justice.** Construction of the projects in **Section 5.1** would result in short-term, negligible to minor, beneficial impacts on the local economy due to increases in employment and local business volume during construction activities. The ROI has higher percentages of minority, low-income, and Hispanic or Latino populations than the State of Georgia; therefore, the cumulative projects could result in impacts on these populations due to increased traffic. However, these impacts are not likely to be significant.

The Proposed Action would result in both short-term and long-term, beneficial effects on the local economy, but these impacts would not be significant. The Proposed Action would generate increased traffic that could negatively impact surrounding minority, low-income, and Hispanic or Latino populations; however, this impact would not be significant.

When combined with the impacts of other projects, the Proposed Action would result in beneficial cumulative impacts on the local economy, and possible cumulative adverse impacts on the local minority, low-income, and Hispanic or Latino populations. However, these impacts would not be significant.

**Infrastructure.** Impacts on infrastructure and utility systems due to implementation of projects identified in **Section 5.1** would include possible short-term interruptions of service and long-term increased demand

of utility system services. It is likely that these impacts would not be significant as service interruptions would be short in duration and only occur during demolition and construction, and increased demand could be accommodated by the existing utility system capacity. Construction activities would likely result in short-term, adverse impacts on transportation systems in the vicinity of each project due to increased traffic from construction vehicles. This increased traffic would be intermittent and temporary; therefore, these impacts would be less than significant. It is unlikely that these projects would create significant long-term effects on transportation systems.

The Proposed Action would not significantly impact infrastructure or utilities. Short-term, minor, adverse impacts from temporary disruptions to the electrical system, natural gas system, water supply, sanitary sewer/wastewater system, stormwater drainage system, and the communications system at Dobbins ARB could result due to rerouting and connecting of utilities during construction. Additional solid waste would be generated during construction and demolition activities and adequate receptacles would be provided for waste disposal. During operation of the proposed commissary, long-term impacts on the electrical system, natural gas system, water supply, sanitary sewer/wastewater system, communications system, and solid waste management system at Dobbins ARB would result due to increased demand from additional infrastructure and the increased volume of users. There would be no impacts on liquid fuels and central heating and cooling systems. Short-term, negligible to minor and long-term, minor impacts would result from construction and operational traffic from implementation of the Proposed Action at Site 1.

Short-term, negligible to minor, cumulative impacts on infrastructure and utilities could result during construction and demolition activities from possible interruptions in service. Long-term, cumulative impacts on the electrical system, natural gas system, water supply, sanitary sewer/wastewater system, communications system, and solid waste management system at Dobbins ARB and regional providers would result from increased demand on these services. The other Dobbins ARB projects are on the eastern half of the installation, and, therefore, would likely use the main gate to access the project sites. The Marietta multi-use trail is also located east of Dobbins ARB and, thus, would primarily use South Cobb Drive to access the work site. Because the projects identified in **Section 5.1** are more than 1.25 miles from Site 1, it is unlikely that there would be any cumulative impacts on transportation systems.

**Hazardous Materials and Hazardous Waste.** Impacts from the use of hazardous materials for construction of the projects identified in **Section 5.1** would depend on the quantity and nature of the materials used, both of which are unknown. However, the use of BMPs and adherence to all applicable Federal, state, and local regulations would reduce the adverse effects from their use. Hazardous waste would likely be generated during operation of some of these projects, but these impacts would be minimized by properly disposing of all hazardous wastes. There is an environmental restoration program site within the proposed site of the AFRC Contingency Training Center, which is a constraint to development. The presence of ACMs, LBP, PCBs, radon, and pesticides at these sites is not known, although it is likely that some of these materials are present at the sites of these projects.

The Proposed Action would use hazardous materials during construction and operation, although no impacts are anticipated to occur due to implementation of proper storage and management regulations. A hazardous waste storage facility and acid neutralization pit associated with a former USACE laboratory facility are at Site 1. These areas should be tested prior to their demolition and removal, and, if necessary, the sites remediated prior to construction. Based on test results, impacts from hazardous wastes could be minor to major.

Construction activities at Site 1 could result in negligible impacts from historical pesticide use at the site, and minor impacts from historical use of ACMs, LBP, and PCBs at the site. ACMs and LBP would not

be used to construct the proposed commissary. Radon is not expected to be present in buildings above the USEPA guidance level; therefore, negligible impacts would be expected.

The cumulative use of hazardous materials in projects on Dobbins ARB and surrounding areas would increase; the type and quantity is unknown. The proper use and disposal of these materials would reduce or eliminate any adverse effects from them. As stated previously, the USAF adheres to sustainable building practices. These practices generally use materials that are the least hazardous. For future construction projects, Dobbins ARB would implement fewer hazardous materials as replacement materials become available. Therefore, no cumulative impacts on hazardous materials would be expected.

Cumulative impacts from the generation of hazardous wastes account for wastes from on-installation activities in combination with off-installation activities. The amount of hazardous waste would be higher at times of construction. The potential exposure to hazardous wastes during construction of the Proposed Action could combine with similar exposures experienced during construction of other projects at Dobbins ARB and surrounding areas to result in cumulative minor to major impacts, although the type and quantity of wastes is unknown. Although no particular removal actions for the existing USACE laboratory facility are known, it is likely that hazardous wastes would be generated from any necessary remediation activities. Effects from remediation activities would be reduced through proper disposal and implementation of BMPs.

Based on the presence of ACMs, LBP, PCBs, and radon at the sites of other projects, there could be negligible to minor, cumulative impacts from exposure to these materials during construction.

## 5.2.2 Site Alternative 2: BX Site

**Noise.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1; however, the Proposed Action would not occur near the installation boundary. Consequently, there are no off-installation, noise-sensitive land uses adjacent to Site Alternative 2. Noise impacts from the Proposed Action could combine with those of other cumulative projects to result in short-term and long-term, minor, adverse impacts.

**Land Use.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. No adverse impacts on land use would be expected from implementation of the Proposed Action at Site 2. Therefore, no cumulative impacts on land use would result from Site Alternative 2.

**Air Quality.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1. Emissions from construction and operation are shown in **Tables 4-3** and **4-6**. The cumulative impacts on air quality would be similar to those described under Site Alternative 1.

**Geological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1; however, underground water lines and Industrial Drive would potentially be rerouted to accommodate the proposed commissary. Therefore, slightly more intensive short-term, adverse impacts on soils would be expected. The cumulative impacts on geological resources would be similar to those described under Site Alternative 1.

**Water Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described

under Site Alternative 1; however, soil compaction and, thus, associated potential effects on groundwater would be slightly greater under this alternative. The cumulative impacts on water resources would be similar to those described under Site Alternative 1.

**Biological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1; however, fewer less mobile species that could be trampled by construction equipment would be expected to occur within Site 2. Therefore, short-term and long-term impacts on wildlife are anticipated to be negligible. Similar to Site Alternative 1, if the construction footprint overlaps the forested portions of Site 3, a site-specific survey for pink ladyslipper populations should be conducted prior to any vegetation-removal activities. The cumulative impacts on biological resources would be similar to those described under Site Alternative 1.

**Cultural Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 has some potential to impact the Mount Sinai Cemetery due to the realignment of Industrial Drive; therefore, it should be designed to avoid direct and indirect effects on the cemetery. Use of Site 2 would result in no adverse effect on historic resources. The cumulative impacts on cultural resources would be similar to those described under Site Alternative 1.

**Safety.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1, although Site 2 would not require modification of the controlled access point as it is already within a secured area. The cumulative impacts on safety would be similar to those described under Site Alternative 1.

**Socioeconomics and Environmental Justice.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 2 would result in impacts similar to those described under Site Alternative 1. The cumulative impacts on socioeconomics and minority, Hispanic or Latino, and low-income populations would be similar to those described under Site Alternative 1.

**Infrastructure.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Site 2 is predominantly undeveloped forest land; therefore, implementation of the Proposed Action at this site would create new impervious surfaces resulting in increased sheet flow and runoff as compared to Site Alternative 1. However, the existing stormwater sewer system would be able to handle the additional flow. Implementation of Site Alternative 2 would result in short-term, negligible to minor impacts on the Dobbins ARB transportation system because construction vehicles would travel on secondary roads within the installation resulting in a greater potential for congestion than at Site 1. Long-term minor impacts on Dobbins ARB and off-installation transportation systems would result from increases in operational traffic. Traffic on Dobbins ARB would be further congested due to the collocation of the proposed commissary with the BX. Atlantic Avenue and Industrial Drive would be rerouted under Site Alternative 2, which would reduce some of the long-term impacts on installation traffic. The cumulative impacts on infrastructure and utility systems would be similar to those described under Site Alternative 1. The cumulative impacts on transportation systems would likely include short-term, minor impacts and long-term, minor to moderate impacts because many of the other Dobbins ARB projects are also on the eastern half of the installation and would be using the same off-installation and installation roads as the Proposed Action.

**Hazardous Materials and Hazardous Waste.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. There is no known historical use of hazardous materials, or presence of

hazardous wastes, ACMs, LBP, PCBs, radon, and pesticides at Site 2; therefore, negligible impacts would be anticipated from construction of the Proposed Action. The main environmental concern at Site 2 is the presence of a former sanitary sludge disposal area 250 feet north of the Site 2 boundary. This area is still under investigation; therefore, the boundaries of contamination associated with this area have not been defined. Based on the siting of the proposed commissary facility and the extent of the contamination, there could be minor to moderate impacts from construction activities. It is recommended that appropriate site investigations be performed prior to construction to determine the necessary actions to protect human health and the environment from the plume. However, it is anticipated that proper removal and disposal of hazardous wastes and materials at the site would be performed. Therefore, cumulative hazardous materials and hazardous waste impacts would be similar to those described under Site Alternative 1; however, the cumulative impacts from exposure to IRP sites during construction could be greater.

### 5.2.3 Site Alternative 3: Barclay Gate Site

**Noise.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1; however, there are no off-installation, noise-sensitive land uses adjacent to Site Alternative 3. Noise impacts from the Proposed Action could combine with those of other cumulative projects to result in short-term and long-term, minor, adverse impacts.

**Land Use.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1; however, the entire proposed site is within AFP-6. Therefore, all property at the proposed site would need to be transferred from AFMC to AFRC, and the land use designation would need to be changed from Lockheed Martin to commercial. The existing buildings on Site 3 are used for storage or are vacant. Implementation of the Proposed Action at Site 3 and the other projects identified in **Section 5.1** could result in short-term, minor, adverse impacts on noise-sensitive land uses, and long-term, minor, adverse impacts on land use plans and policies.

**Air Quality.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1. Emissions from construction and operation are shown in **Tables 4-4** and **4-6**. The cumulative impacts on air quality would be similar to those described under Site Alternative 1.

**Geological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1. Two IRP sites are within Site 3; however, the contaminants at both IRP sites have been contained, and both sites are in the long-term monitoring phase. Additionally, Site 3 is large enough to accommodate the proposed commissary without encroaching on the IRP sites. The cumulative impacts on geological resources would be similar to those described under Site Alternative 1.

**Water Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1; however, impacts on groundwater and surface would be expected to be slightly less under this alternative. The cumulative impacts on water resources would be similar to those described under Site Alternative 1.

**Biological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would result in impacts similar to those described under Site Alternative 1; however, fewer less mobile species that could be trampled by construction

equipment would be expected to occur within Site 3. Therefore, short-term and long-term impacts on wildlife are anticipated to be negligible. Similar to Site Alternative 1, if the construction footprint overlaps the forested portions of Site 3, a site-specific survey for pink ladyslipper populations should be conducted prior to any vegetation-removal activities. The cumulative impacts on biological resources would be similar to those described under Site Alternative 1.

**Cultural Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 3 would have no adverse effect on the viewshed of the NRHP-eligible Bell Bomber Plant Historic District or Buildings U-124 and U-125, and could be designed to have no adverse effect on Building B-64 if it is proven eligible. If the proposed commissary is not constructed adjacent to the Bankston Rock House, there would be no adverse effect on the historic structure. The cumulative impacts on cultural resources would be similar to those described under Site Alternative 1.

**Safety.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1; however, Site 3 is partially within the 200-foot clear zone for Explosive Site 01, an Above Ground Magazine. No conflicts or explosives and munitions safety concerns would occur if the Proposed Action is implemented at Site 3. A 200-foot clear zone would be maintained. In addition, Site 3 would not require modification of the controlled access point as it is already within a secured area. The cumulative impacts on safety would be similar to those described under Site Alternative 1.

**Socioeconomics and Environmental Justice.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1. The cumulative impacts on socioeconomics and minority, Hispanic or Latino, and low-income populations would be similar to those described under Site Alternative 1.

**Infrastructure.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1. Existing ASTs at Site 3 would need to be decommissioned and properly disposed of or moved to other locations on the Lockheed Martin plant. Implementation of Site Alternative 3 would result in short-term, negligible to minor impacts on the Dobbins ARB transportation system because construction vehicles would travel on secondary roads within the installation resulting in a greater potential for congestion than at Site 1. Long-term, minor to moderate impacts on Dobbins ARB transportation systems would result from the need to construct an access road from Industrial Drive to the commissary and from increases in operational traffic. Long-term, minor, adverse impacts on the transportation system outside the installation would be expected. The cumulative impacts on infrastructure and utility systems would be similar to those described under Site Alternative 1. The cumulative impacts on transportation systems would likely include short-term, minor impacts and long-term, minor to moderate impacts because many of the other Dobbins ARB projects are also on the eastern half of the installation and would be using the same off-installation and installation roads as the Proposed Action. Long-term, cumulative impacts on the Dobbins ARB transportation system would also be expected due to combination of traffic from the proposed commissary and the Lockheed Martin recycling facility that is also on Site 3.

**Hazardous Materials and Hazardous Waste.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1, except there could be moderate to major impacts from exposure to onsite IRP sites during construction. There are several IRP and SWMU sites within Site 3; however, Site 3 is large enough to accommodate the proposed commissary without encroaching upon these sites.

In addition, there is no known PCB contamination or hazardous wastes at Site 3; therefore, impacts from potential presence of these materials are negligible. Therefore, cumulative hazardous materials and hazardous waste impacts would be similar to those described under Site Alternative 1, except there could also be minor to moderate, cumulative impacts from presence of IRP sites or similarly contaminated sites.

#### 5.2.4 Site Alternative 4: City of Marietta Site

**Noise.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1; however, the Proposed Action would occur at an off-installation site that is bordered by potentially noise-sensitive land uses, including a university and a childcare center. Persons accessing these buildings would be expected to experience construction noise levels of up to 89 dBA, depending on their proximity to construction activities. Noise impacts from the Proposed Action could combine with those of other cumulative projects, particularly the construction of the Marietta multi-use trail that is in the same area as Site 4, to result in short-term and long-term, minor, adverse impacts.

**Land Use.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in short-term, minor, adverse and long-term, minor to moderate, adverse impacts on land use. Short-term impacts on noise-sensitive areas surrounding the proposed site would be expected from construction noise. The proposed site is outside of Dobbins ARB on City of Marietta-owned land whose existing and future use has been designated as recreational. The property at Site 4 would need to be transferred to AFRC, and the land use designation would need to be changed from recreational to commercial. This would reduce the amount of recreational land within the City of Marietta resulting in a long-term, adverse impact on park patrons. However, there is ample park land available elsewhere in the City of Marietta; therefore, this impact would be less than significant. Therefore, implementation of the Proposed Action at Site 4 and the other projects identified in **Section 5.1** could result in short-term, minor, adverse impacts on noise-sensitive land uses, and long-term, minor to moderate, adverse impacts on land use plans and policies, including the cumulative removal of recreational opportunities for Cobb County residents.

**Air Quality.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1. Emissions from construction and operation are shown in **Tables 4-5** and **4-6**. The cumulative impacts on air quality would be similar to those described under Site Alternative 1.

**Geological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1; however, more ground would be disturbed due to the need to upgrade the existing road network and construction of a new access road. In addition, due to potential soil contamination from the onsite TCE groundwater plume, a site-specific soil contamination investigation should be conducted prior to implementing this alternative. The cumulative impacts on geological resources would be similar to those described under Site Alternative 1.

**Water Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1; however, there would be greater impacts on groundwater and surface water due to increased ground-disturbing activities and vegetation removal leading to increased runoff, sedimentation, and erosion. In addition, the intermittent stream running through the site could be impacted depending on building placement. Prior to conducting any activities that could impact the intermittent stream, a current jurisdictional determination from USACE would be obtained. The cumulative impacts on water resources would be similar to those described under Site Alternative 1.



**Biological Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1; however, implementation of the Proposed Action at Site 4 would result in long-term, moderate, adverse impacts on vegetation and wildlife. Adverse impacts on vegetation would be expected due to the permanent removal of native forest vegetation that makes up a majority of Site 4. This forest stand in Site 4 is one of the largest contiguous forest stands in the vicinity of Dobbins ARB, and likely has excellent forest habitat quality. Due to the existing vegetation community type within Site 4, it is likely that pink ladyslipper colonies occur within the site. Site-specific surveys for threatened, endangered, candidate, or special concern species should be conducted prior to the selection of this site for the construction of a commissary. BMPs discussed in Site Alternative 1 should be implemented to prevent the establishment or spread of nonnative plant species within Site 4. Wildlife occurring within Site 4 are anticipated to be more specific in their habitat requirements and less accustomed to human disturbances; therefore, adverse impacts from construction activities, permanent removal and fragmentation of habitat, mortality of less mobile wildlife species, and operational disturbances within Site 4 would be greater than at any of the other site alternatives. The cumulative impacts on biological resources would be short-term and long-term, moderate, and adverse.

**Cultural Resources.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 could have an adverse impact on the two cemeteries and other settlements on Site 4. While the proposed commissary could likely be designed around the cemeteries, there could be long-term, adverse impacts on them due to construction and increased visibility, or they could need more protection than is currently provided. If the Proposed Action is implemented at Site 4, additional extensive archaeological investigations, and careful site design and management planning would be required to control long-term impacts. Implementation of Site Alternative 4 could result in long-term, adverse cumulative impacts on cultural resources.

**Safety.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1, although Site 4 would require expansion of the boundary fence protecting the North Area to include all newly acquired Air Force property. The cumulative impacts on safety would be similar to those described under Site Alternative 1.

**Socioeconomics and Environmental Justice.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action would result in impacts similar to those described under Site Alternative 1; however, additional short-term, beneficial effects on the local economy would result from the additional construction work necessary to upgrade the road network in the vicinity of Site 4. The cumulative impacts on socioeconomics and minority, Hispanic or Latino, and low-income populations would be similar to those described under Site Alternative 1.

**Infrastructure.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. Implementation of the Proposed Action at Site 4 would result in impacts similar to those described under Site Alternative 1. Because Site 4 is off-installation on City of Marietta-owned property, most utilities would need to be extended from Dobbins ARB or obtained commercially. The utility provider would be based on the amount of work required to connect the site and the associated costs. Site 4 is predominantly forested and would create more new impervious surfaces than Site Alternatives 1, 2, and 3. Therefore, implementation of the Proposed Action at this site would result in greater sheet flow and runoff as compared to the other alternatives. The existing stormwater system at Dobbins ARB would be able to handle this additional flow. Implementation of Site Alternative 4 would result in short-term, negligible to minor impacts on the Dobbins ARB transportation system because construction vehicles would travel on secondary roads within the installation resulting in a greater potential for congestion than at Site 1. Long-term, minor to moderate impacts on Dobbins ARB transportation systems would result from the

need to construct an access road to the commissary, they need to upgrade the installation road network in the vicinity of Site 4, and increases in operational traffic. Long-term, minor, adverse impacts on the transportation system outside the installation would be expected. The short-term and long-term, cumulative impacts on infrastructure would be similar to those described under Site Alternative 1. The cumulative impacts on transportation systems would likely include short-term, minor impacts and long-term, minor to moderate impacts because many of the other Dobbins ARB projects are also on the eastern half of the installation and would be using the same off-installation and installation roads as the Proposed Action.

**Hazardous Materials and Hazardous Waste.** Impacts from other cumulative projects would be the same as described in **Section 5.2.1**. There is no known historical use of hazardous materials, or presence of hazardous wastes, ACMs, LBP, PCBs, radon, and pesticides at Site 4; therefore, negligible impacts would be anticipated from construction of the Proposed Action. The main environmental concerns at Site 4 are the presence of a Wingseal Facility spill, and a fuel oil spill and associated TCE-contaminated groundwater plume 260 feet west of the Site 4 boundary. These areas are still under investigation; therefore, the boundaries of contamination associated with these areas have not been defined. Based on the siting of the proposed commissary facility and the extent of the contamination, there could be minor to moderate impacts from construction activities. It is recommended that appropriate site investigations be performed prior to construction to determine the necessary actions to protect human health and the environment from the plume. However, it is anticipated that proper removal and disposal of hazardous wastes and materials at the site would be performed. Therefore, cumulative hazardous materials and hazardous waste impacts would be similar to those described under Site Alternative 1; however, the cumulative impacts from exposure to IRP sites during construction could be greater.

### 5.2.5 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur, and the existing conditions discussed in **Section 3** would continue. There would be no commissary in the Atlanta metropolitan area and commissary patrons would need to drive outside the metropolitan area to visit a commissary. The No Action Alternative would not result in any cumulative impacts.

## 5.3 Unavoidable Adverse Effects

Unavoidable adverse impacts would result from implementation of the Proposed Action. None of these impacts would be significant.

**Air Quality.** Implementation of the Proposed Action would result in temporary particulate emissions due to construction and possibly demolition activities. The operation of the proposed commissary would also result in long-term, adverse impacts on air quality due to emissions from the building's heating systems and from vehicular traffic of commuting workers. Although unavoidable, the results of the impact analysis indicate impacts would not be significant.

**Geological Resources.** Under the Proposed Action, construction activities, such as grading and excavating of the ground, would result in some minor soil disturbance. Implementation of BMPs during construction would limit environmental consequences resulting from construction and demolition activities. Standard erosion-control measures would also reduce potential environmental impacts related to these characteristics. Although unavoidable, impacts on soils would not be considered significant.

**Infrastructure.** Solid waste would be generated as a result of construction and demolition activities. This is an unavoidable, but minor, adverse impact that can be mitigated to a certain extent by possible recycling opportunities.

Minor, adverse traffic impacts would be expected as a result of the Proposed Action. These impacts would be the unavoidable consequences of implementing the Proposed Action, but are not considered significant.

**Hazardous Materials and Wastes.** The use of hazardous materials and the generation of hazardous wastes would be unavoidable conditions associated with the Proposed Action. Products containing hazardous materials would be procured and used during the proposed commissary construction project. It is anticipated that the quantity of products containing hazardous materials used during the construction activities would be minimal and their use would be of short duration. Contractors would be responsible for the management of hazardous materials, which would be handled in accordance with Federal and state regulations. Contractors must report use of hazardous materials. It is anticipated that the quantity of hazardous wastes generated from proposed construction activities would be negligible. Contractors would be responsible for the disposal of hazardous wastes in accordance with Federal and state laws and regulations, and the Dobbins ARB Hazardous Waste Management Plan. The potential for accidents or spills due to improper fuel handling during construction or demolition activities is an unavoidable risk associated with the Proposed Action.

**Energy Resources.** Energy supplies would be committed to the Proposed Action. The use of nonrenewable resources is an unavoidable occurrence, although not considered significant. The construction and demolition activities associated with the Proposed Action would require the use of fossil fuels, a nonrenewable natural resource. Relatively small amounts of energy resources would be committed to the Proposed Action and are not considered significant.

#### 5.4 Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls

The proposed construction activities would not result in any significant or incompatible land use changes on or off the installation. Implementation of the Proposed Action would require the change of land use categories under Site Alternatives 1, 3, and 4. After completion of these changes, construction activities would not be in conflict with installation or City of Marietta land use policies or objectives. The Proposed Action would not directly conflict with any applicable off-installation land use ordinances or designated clear zones.

#### 5.5 Relationship between the Short-term Use of the Environment and Long-term Productivity

Short-term uses of the biophysical components of the human environment include direct, construction-related disturbances and direct impacts associated with an increase in population and activity that occurs over a period of less than 5 years. Long-term uses of the human environment include those effects occurring over a period of more than 5 years, including permanent resource loss.

This EA identifies potential short-term, adverse effects on the natural environment as a result of construction activities. These potential adverse effects include noise emissions, air emissions, soil erosion, stormwater runoff into surface water, and increased traffic. Proposed construction activities would be expected to increase the long-term productivity of Dobbins ARB by providing the only commissary in the Atlanta metropolitan area.

The Proposed Action would not result in significant intensifications of land use at Dobbins ARB or the surrounding areas.

## 5.6 Irreversible and Irretrievable Commitments of Resources

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that use of these resources would have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource that cannot be replaced within a reasonable timeframe (e.g., energy and minerals). The irreversible and irretrievable commitments of resources that would result from implementation of the Proposed Action involve the loss of biological habitat and consumption of material resources used for construction, energy resources, land, landfill space, and human labor resources. The use of these resources is considered to be permanent.

**Material Resources.** Material resources irretrievably used for the Proposed Action include steel, concrete, and other building materials. Such materials are not in short supply and would not be expected to limit other unrelated construction activities. The irretrievable use of material resources would not be considered significant.

**Energy Resources.** Energy resources used for the Proposed Action would be irretrievably lost. These include petroleum-based products (e.g., gasoline and diesel), natural gas, and electricity. During construction, gasoline and diesel fuel would be used for the operation of construction vehicles. Natural gas and electricity would be used by operational activities. Consumption of these energy resources would not place a significant demand on their availability in the region. Therefore, no significant impacts would be expected.

**Landfill Space.** The generation of construction and possibly demolition debris and subsequent disposal of that debris in a landfill would be an irretrievable adverse impact.

**Biological Habitat.** The Proposed Action would result in minimal, irreversible loss of vegetation and wildlife habitat. The loss would be minimal and not considered significant on a regional basis.

**Human Resources.** The use of human resources for construction and operation is considered an irretrievable loss, only in that it would preclude such personnel from engaging in other work activities. However, the use of human resources for the Proposed Action represents employment opportunities and is considered beneficial.

## 6. List of Preparer's

This EA has been prepared by HDR and Stell Environmental Enterprises under the direction of AFRC and the 94th Airlift Wing at Dobbins ARB. The individuals who contributed to the preparation of this document are listed below.

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## **APPENDIX A**

**INTERAGENCY AND INTERGOVERNMENTAL COORDINATION  
FOR ENVIRONMENTAL PLANNING AND PUBLIC INVOLVEMENT CORRESPONDENCE**







DEPARTMENT OF THE AIR FORCE  
AIR FORCE RESERVE

13 December 2011

MEMORANDUM FOR DISTRIBUTION

FROM: 94 MSG/CE  
884 Industrial Drive  
Dobbins ARB, Georgia 30069

SUBJECT: Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) for an Environmental Assessment Addressing a Proposed Commissary at Dobbins Air Reserve Base, Georgia.

1. The Air Force Reserve Command (AFRC) is proposing to construct a new commissary at Dobbins Air Reserve Base (ARB). Dobbins ARB is in Cobb County in northwestern Georgia, about 16 miles northwest of the City of Atlanta. At this time, the installation does not have a commissary. A commissary would be built to provide service to patrons in the Atlanta area and would consist of a facility that would be approximately 70,972 square feet in size. The commissary would include general sales, a Grab N Go area, electronic checkout registers, receiving area, loading dock, meat and produce preparation areas, cold and freezer storage, and other supporting facilities. A parking lot consisting of approximately 350 patron parking spaces, 50 employee spaces, and shopping cart corrals would be constructed. To accommodate deliveries, a paved parking area and loading docks would be built in the rear of the commissary. In addition, an access road that could accommodate the delivery trucks traveling to the back of the commissary would be constructed.

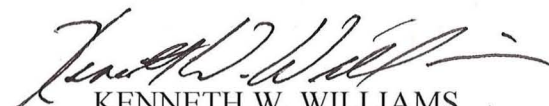
2. The purpose of the Proposed Action is to construct a permanent commissary for authorized patrons. The need for the Proposed Action is to provide a commissary in the Atlanta metropolitan area, which is necessitated by the closing of other commissaries in the area due to Department of Defense Base Realignment and Closure (BRAC) actions. Four alternative site locations will be evaluated in the Environmental Assessment (EA), as shown in **Figure 1**. Site Alternative 1, Corps Lab Site, is in the northwestern corner of the installation near a former U.S. Army Corps of Engineers Laboratory. This site consists of 24.3 acres and includes property owned by the Georgia Department of Defense, Air Force Materiel Command, and Air Force Reserve Command. Site Alternative 2 is the Base Exchange (BX) Site in the central portion of the installation, where the proposed commissary would be built adjacent to the existing BX. This property is near the intersection of Industrial Drive and Atlantic Avenue and includes 9.0 acres on Air Force Reserve Command property. Site Alternative 3 is the Barclay Gate Site. This site is owned by Air Force Materiel Command, includes 45.7 acres north of Alternative Site 2, and is southwest of South Cobb Drive. Site Alternative 4, the City of Marietta Site, is the location of Wildwood Park, which is east of South Cobb Drive and northeast of Alternative Site 3. This property is owned by the City of Marietta and consists of 23.2 acres.

3. Under the No Action Alternative, Dobbins ARB would not construct the proposed commissary. As a result, there would not be a commissary in the Atlanta metropolitan area for patrons, which include retirees, active-duty and Reserve personnel, and their dependents.

4. The EA will be prepared to evaluate the Proposed Action at four alternative site locations and the No Action Alternative. Resources that will be considered in the impacts analysis are noise, land use, air quality, geological resources, water resources, biological resources, cultural resources, socioeconomic resources and environmental justice, infrastructure, hazardous materials and waste management, and safety.

5. The environmental impact analysis process for the Proposed Action and appropriate alternatives is being conducted by Headquarters Air Force Reserve Command in accordance with the Council on Environmental Quality's guidelines pursuant to the requirements of the National Environmental Policy Act (NEPA). The U.S. Air Force's implementing regulation for NEPA is its *Environmental Impact Analysis Process* that is detailed in 32 Code of Federal Regulations Part 989, as amended.

6. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation by reviewing this letter and solicit your comments concerning the proposal and any potential environmental issues of concern to you. We request that you send comments or information you would like considered during preparation of the Draft EA directly to the undersigned at 901 Industrial Drive, Dobbins ARB, Georgia, 30069 within 30 days from the date of this letter. In addition, please indicate if you are interested in receiving a copy of the Draft EA, once it is available, or if someone else within your organization other than you should receive the Draft EA. Attachment 2 of this letter provides a list of other contacted stakeholders. Your prompt attention to this request would be greatly appreciated. If members of your staff have any questions, please contact my POC, Mr. Mark Floyd at (678) 655-3549.

  
KENNETH W. WILLIAMS  
Base Civil Engineer

Attachments:

1. Alternative Site Location Map
2. Distribution List



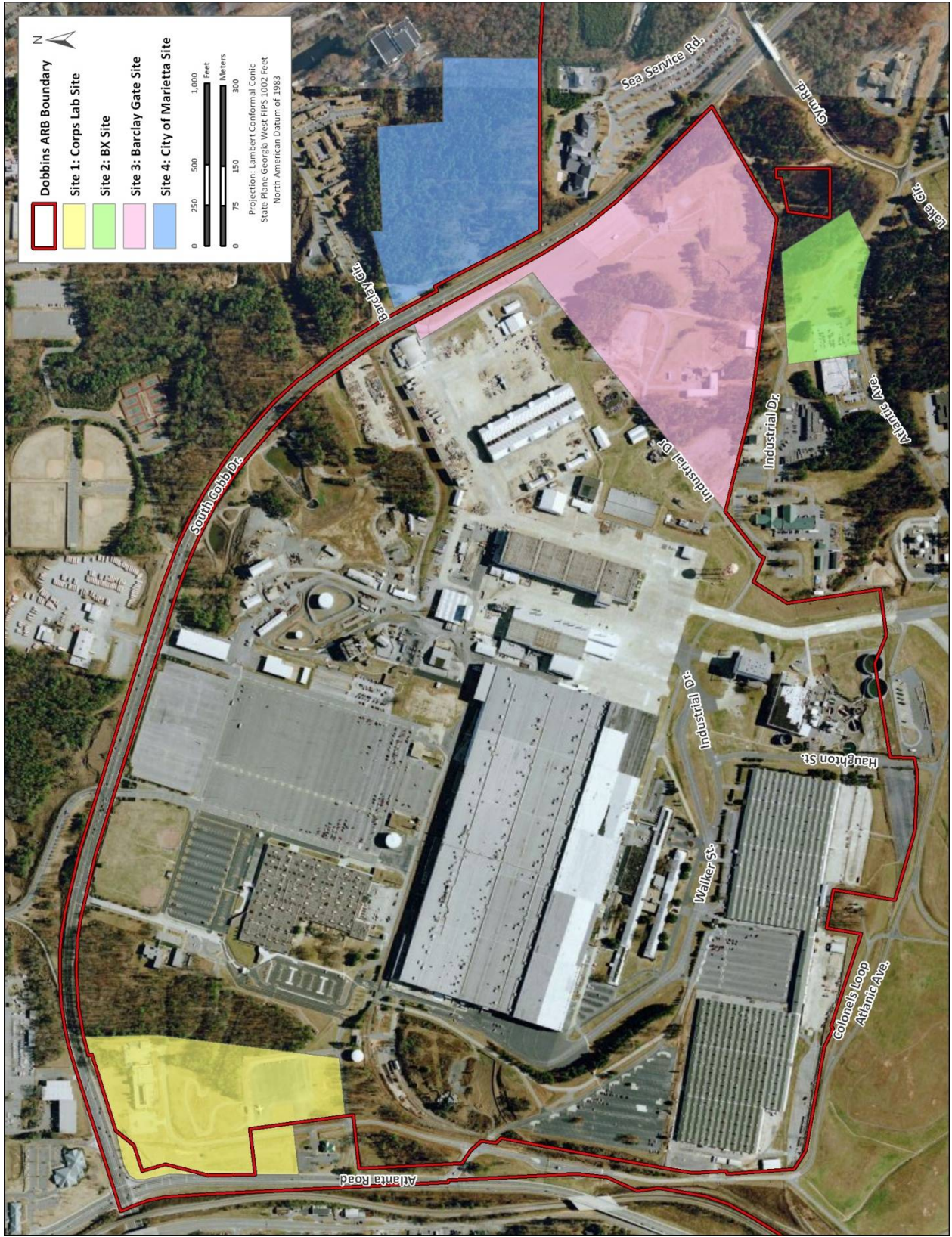


Figure 1. Alternative Site Location Map

## Attachment 2

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### IICEP Distribution List:

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U.S. Environmental Protection Agency,  
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Cobb County Community Development  
Department  
100 Cherokee Street, Suite 556  
Marietta, GA 30090-9674

Cobb Chamber of Commerce  
P. O. Box 671868  
Marietta, GA 30006-0032

Cobb County Soil and Water Conservation  
District  
678 South Cobb Drive, Suite 150  
Marietta, GA 30060

Cobb County Board of Commissioners  
100 Cherokee Street  
Marietta, GA 30090

Cobb County Department of Transportation  
1890 County Services Pkwy  
Marietta, GA 30008

Mr. Rusty Roth  
City of Marietta Department of Planning and  
Zoning  
205 Lawrence Street  
Marietta, GA 30060

Mr. William Bruton, Jr.  
Marietta City Manager  
205 Lawrence Street  
Marietta, GA 30060

Mr. Rich Buss  
Marietta City Hall, Parks and Recreation  
P.O. Box 609  
Marietta, GA 30061-0609

City of Smyrna  
P.O. Box 1226  
Smyrna, Georgia 30081

Atlanta Regional Commission  
40 Courtland Street, NE  
Atlanta, GA 30303-2538

---

## Attachment 2

---

Alabama-Quassarte Tribal Town  
117 North Main  
Wetumka, OK 74883

Catawba Indian Nation  
611 East Main Street  
Rock Hill, SC 29730

Cherokee Nation  
PO Box 948  
Tahlequah, OK 74465

Eastern Band of Cherokee Indians  
PO Box 455  
Cherokee, NC 28719

Poarch Band of Creek Indians  
5811 Jack Springs Road  
Atmore, AL 36502

---





PARKS, RECREATION AND FACILITIES  
RECREATION DIVISION

205 Lawrence Street  
P.O. Box 609  
Marietta, GA 30061-0609  
(770) 794-5601  
Fax (770) 794-5635

Kenneth W. Williams  
Base Civil Engineer  
901 Industrial Drive  
Dobbins ARB, GA 30069

January 10, 2012

RE: Proposed Commissary Site at Wildwood Park

Dear Mr. Williams:

This letter is a response to your request for comments regarding the proposal and any environmental issues of concern related to the potential location of a commissary in Wildwood Park.

There are three areas of note regarding the property that I shall share: 1) Regulations on transfer of the property, 2) Ground Water Monitoring Wells on the property, and 3) the existence of know gravesites. I am unaware of any other issues or environmental conditions.

Wildwood Park was acquired in the Federal Land to Parks initiative. The development of the park was done in part with Land and Water Conservation Fund (LWCF) monies appropriated by the Department of Interior through the National Park Service. Use of the property for anything other than outdoor recreation requires a "conversion" of the property according to LWCF guidelines. Chapter 675.9 of the LWCF Grants Manual details the requirements. I can supply a copy if you find it necessary. In summary, the property would have to be replaced.

There are two ground water monitoring wells on the property testing runoff from the Lockheed Martin facility.

Two separate locations have identified gravesites. The interred are unknown. We have conducted an archaeological study and believe these to be the only sites. There was a graduate paper done by a Georgia State University student done hypothesizing that a much larger graveyard is present. Our study did not corroborate with that document.

A complete package with all of the available documents for each of these items was submitted to Stell Environmental, and from what I understand they were forwarded to Mark Floyd over the holidays.

Let me know if you need any additional information.

Sincerely:

A handwritten signature in blue ink that reads "Rich".

Rich



HISTORIC PRESERVATION DIVISION

MARK WILLIAMS  
COMMISSIONER

DR. DAVID CRASS  
DIVISION DIRECTOR

January 12, 2012

Kenneth Williams  
Base Civil Engineer  
Department of the Air Force  
Air Force Reserve Command  
94 MSG/CE  
884 Industrial Drive  
Dobbins ARB, Georgia 30069  
Attn: Mark Floyd, [mark.floyd@dobbins.af.mil](mailto:mark.floyd@dobbins.af.mil)

**RE: Dobbins ARB: Construct 70, 972 Square Foot Commissary Building  
Cobb County, Georgia  
HP-111215-002**

Dear Mr. Williams:

The Historic Preservation Division (HPD) has received initial information as part of the Interagency and Intergovernmental Coordination for Environmental Planning for an Environmental Assessment addressing the above referenced project. Our comments are offered to assist federal agencies and their applicants in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Thank you for contacting HPD concerning this potential undertaking. We look forward to receiving Section 106 compliance documentation from you when it becomes available. Please note that if the federal agency involved intends to use National Environmental Policy Act (NEPA) documentation and procedures to comply with Section 106 of the NHPA in lieu of the procedures set forth in 36 CFR Part 800.3 through 800.6, the federal agency must notify HPD and the Advisory Council on Historic Preservation (ACHP) in advance, pursuant to 36 CFR Part 800.8(c).

For information pertaining to historic properties in the subject area of potential effect (APE) for the completion of NEPA documentation or for environmental planning purposes, please see our website under "Historic Resources" for information concerning the multiple file sources available for research in our office. Unfortunately, we cannot provide this service for you. If we may be of further assistance, please do not hesitate to contact me at (404) 463-6687, or Erin Parr, Environmental Review Specialist, at (404) 651-6546.

Sincerely,

A handwritten signature in cursive script that reads "Elizabeth Shirk".

Elizabeth Shirk  
Environmental Review Coordinator



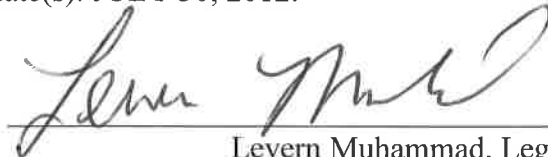
# The Atlanta Journal- Constitution

## PUBLISHER'S AFFIDAVIT

ACCOUNT NAME HDR ENVIRONMENTAL

ACCOUNT NO. 069133514

**LEVERN MUHAMMAD** personally appeared before me, the undersigned Notary Public, who states that she is an ACCOUNT EXECUTIVE for **THE ATLANTA JOURNAL AND CONSTITUTION** newspaper, a newspaper of general circulation published in the City of Atlanta, Georgia, and who further states under oath that the advertisement attached hereto and made part of this affidavit appeared in The Atlanta Journal-Constitution on the following date(s): JULY 30, 2012.



Levern Muhammad, Legal Clerk

SWORN TO AND SUBSCRIBED BEFORE ME,

THIS 1 DAY OF AUGUST, 2012



(NOTARY SIGNATURE)



# PolitiFact

from BI

even in cases of incest.

aim is almost to one made Obama ad that ran last week of July. Colleagues at Politifact.org said that Romney's campaign backed by pointing to a date when Romney would sign a bill that banned all abortion there was no bill and no specific date.

Obama campaign did a new ad, but it was posted on YouTube. I did it on a Washington site that tracks ads using data from Star Media. The ad says the claim to Romney support is "rather than a

time, the Obama campaign referred us to other material. In 2008, the Republican platform said the "human life amendment," which is not legal personhood, is not consistent with that all constitutionally. In 2007, I said on ABC's Morning America, "I do support that Republican platform and I'm pro-

the Obama campaign as a problem in relating Romney's position from that time to support for the amendment does not necessarily equate to opposition when pregnancies due to rape or in-

national Commission for a Human Life Amendment, a Washington-based advocacy group has compiled the legislative bills in favor of an amendment dating back to 1973. Some of the bills have no exceptions for rape and incest.

Facebook and search for Politifact Georgia. Once our page appears, hit the "Like" button. And let the commenting commence.

However, the most recent versions do.

In 2003, Rep. Jo Ann Emerson, R-Mo., introduced H.J. Res 9, which held that "no unborn person shall be deprived of life." However, the bill adds "nothing in this article shall prohibit a law permitting only those medical procedures required to prevent the death of the mother of an unborn person: Provided further, that nothing in this article shall limit the liberty of a mother with respect to the unborn offspring of the mother conceived as a result of rape or incest."

We asked Michael Taylor, executive director of the National Committee for a Human Life Amendment, what that bill means.

"I'm not a lawyer," Taylor said, "but the way I read it, there's an exception for the life of the mother and for cases of rape and incest."

Taylor's site lists another occasion in 1989 when the Senate Judiciary Committee's subcommittee on the Constitution approved amendment language proposed by Sen. Mitch McConnell, R-Ky., that also included exceptions for rape and incest.

These versions predate the Republican Party platforms of 2004 and 2008 that endorse the "human life amendment." Emerson introduced the same amendment with the exception for rape and incest in 2005, so the main versions when Romney made his 2007 remark included the exception.

More recently, Romney has made clear that he supports the exception for rape and incest. In 2011, Romney explained his position on abortion in an op-ed in the National Review. It begins with "I am pro-life and believe

campaign said Romney "backed a bill that outlaws all abortions, even in cases of rape and incest."

The Obama campaign provides virtually nothing to back that up, however. It has no evidence that Romney explicitly opposed the exception for rape and incest. While he supported the "human

It supports those exceptions. In its effort to appeal to women, the Obama campaign has twisted Romney's position to a ridiculous degree. We rate the claim Pants on Fire.

For a list of sources for this article, go to [www.politifact.com](http://www.politifact.com).

# Legal Notices

**INVITATION FOR BIDS**  
METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY (MARTA) will accept Bids as follows:  
CP 826516 Procurement of Door Interlock Kits for Rail Vehicles. Bid Opening August 8, 2012 at 2:00 p.m. For more information call Elvis Gibbs at 404-848-3235.

CP 821350 Hamilton Bus Facility Expansion. Bid Opening August 15, 2012 at 2:00 p.m. For more information call DeValery Donahue at 404-848-4159.  
RFP P24674 Solicitation of Proposals for Automated Teller Machines in MARTA Rail Stations and Facilities. Proposal Deadline August 15, 2012 at 2:00 p.m. For more information call Diane Graham at 404-848-4123.  
CP 826769 AC Traction Overhaul and Repair Services. Bid Opening August 15, 2012 at 2:00 p.m. For more information call DeValery Donahue at 404-848-4159.

RFP P26495 MARTA Concessions Program Enhancements through Partnerships. Proposal Information Deadline August 20, 2012 at 2:00 p.m. For more information call Darlene West at 404-848-5194.

To obtain a Bid document or CD, contact MARTA's Contract Control Branch at 404-848-5580. You may also use a major credit card to purchase Bid documents or CDs. Bids should be received at 2424 Piedmont Road, N.E., Lobby Floor, Atlanta, GA 30324 by the aforementioned date and local time. Envelopes containing bids MUST BE marked with Bid Number and returned to the Contract Control Branch. Contracts are subject to Federal Grant Regulations and to MARTA's Resolution on Equal Opportunity prohibiting discrimination based on race, color, sex, religion or national origin.

View MARTA's Home Page About MARTA <http://www.itsmarta.com>

**NOTICE OF INTENT TO AWARD**  
Notice is hereby given that not sooner than five (5) days after the publication hereof, the Metropolitan Atlanta Rapid Transit Authority (MARTA) intends to award the following contract:  
RFP P22221 Design Build Brady Mobility Facility. Archer Western Contractors, Ltd. - \$38,206,066.00. Federal Funds.  
CP 822614 Chassis Dynamometer Upgrades. M.C. Headley Properties, LLC - \$293,942.00. Federal/Local Capital Funds.  
A summary of the terms of the contract is available at the Office of Contracts & Procurement and Material, MARTA, 2424 Piedmont Road, N.E., Atlanta, GA 30324.  
Beverly A. Scott, Ph.D.  
General Manager/CEO  
View MARTA'S VENDOR OPPORTUNITIES <http://www.itsmarta.com>

## PUBLIC NOTICE

The City of Atlanta License Review Board's (LRB) meeting of Tuesday, July 24, 2012, was not held as scheduled. Accordingly, that meeting has been rescheduled, and it will be held at 5:00 p.m. on Tuesday, July 31, 2012. The meeting location will be in the City of Atlanta Council Chamber on the 2nd Floor, 55 Trinity Avenue, Atlanta, Georgia 30303.

GIVEN UNDER MY HAND AND SEAL OF THIS OFFICE ON THIS 26th day of July, 2012

Rhonda Dauphin Johnson  
Municipal Clerk, CMC

For more information on Legal Guidelines, Contact your County Newspaper.

## PUBLIC NOTICE Air Force Reserve Command

### Notice of Availability Draft Environmental Assessment Addressing a Proposed Commissary at Dobbins Air Reserve Base, Georgia

The Air Force Reserve Command (AFRC), in conjunction with Dobbins Air Reserve Base (ARB), has completed a Draft Environmental Assessment (EA) that evaluates the potential effects of a proposed commissary at Dobbins ARB, Georgia.

The analysis considered in detail the potential environmental effects of the Proposed Action and the No Action Alternative. Four alternative site locations were evaluated. The commissary would be approximately 70,972 sq ft in size and include general sales, a parking lot, and an access road. The results, as found in the EA, show that the Proposed Action would not have a significant impact on the environment, indicating that a Finding of No Significant Impact (FONSI) would be appropriate. An Environmental Impact Statement is not considered necessary to implement the Proposed Action. Copies of the Draft EA presenting the analysis are available for review at the following libraries:

Cobb County Central Library  
266 Roswell Street  
Marietta, GA 30060

Smyrna Public Library  
100 Village Green Circle  
Smyrna, Georgia 30080-3478

The document is also available at:

<http://www.dobbins.afrc.af.mil/shared/media/document/AFD-120615-055.pdf>

Written comments on the Draft EA are invited and will be accepted for 30 days from the publication of this notice. Comments for consideration by the AFRC on this document should be provided in writing to:

94th Airlift Wing Public Affairs Office  
1430 First Street  
94AWPA  
Dobbins ARB, GA 30069  
Phone: 678-655-5055  
Email: [94AWPA@us.af.mil](mailto:94AWPA@us.af.mil)

Website: <http://www.dobbins.afrc.af.mil/94awpa/index.asp>

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**Wade Stephens**

Vice President of Sales & Marketing  
wstephens@mdjonline.com

**Main Office**

580 Fairground Street  
Post Office Box 449  
Marietta, Georgia 30061  
Phone: 770.428.9411  
Fax: 770.428.5375

**Cobb County**

Marietta Daily Journal  
Cobb Life Magazine  
East Cobb Neighbor  
North Cobb Neighbor  
South Cobb Neighbor  
Smyrna Neighbor  
Vinings Neighbor

**Cherokee County**

Cherokee Tribune  
Cherokee Life Magazine  
Cherokee Tribune Plus

**Bartow County**

Bartow Neighbor

**Douglas County**

Douglas Neighbor

**Paulding County**

Paulding Neighbor

**Fulton County**

Northside Neighbor  
Sandy Springs Neighbor  
Sandy Springs Life Magazine  
Roswell Neighbor  
Johns Creek Neighbor  
Milton Neighbor  
Alpharetta Neighbor  
South Fulton Neighbor

**Fayette County**

Fayette Neighbor

**Henry County**

Henry Neighbor

**Clayton County**

Clayton Neighbor

**DeKalb County**

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Mid DeKalb Neighbor

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# AFFIDAVIT OF PUBLICATION

I, Wade Stephens do solemnly swear that I am  
Vice President of the Marietta Daily Journal,  
Cherokee Tribune, and Neighbor Newspapers, printed  
and published at Marietta in the State of Georgia and that  
from my own personal knowledge and reference to the files  
Of said publication, the advertisements for:

**Public Notice –**  
**Air Force Reserve Command Notice of Availability for:**  
**“Draft Environmental Assessment Addressing a Proposed**  
**Commissary at Dobbins Air Force Base, Georgia”,**

Was published in the: MARIETTA DAILY JOURNAL,

On: Monday, July 30, 2012, page 5B;



Subscribed and sworn to before 6th day of August, 2012.

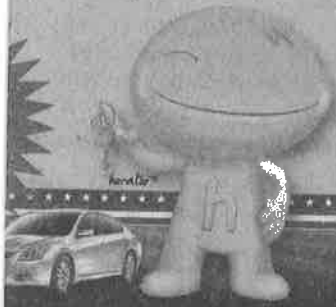
  
Notary Public

Aug 11, 2015  
Expiration Date



Investigators, in a police report, listed a knife or some other sharp object as the weapon used to kill the couple. Davis said detectives hadn't determined a motive for the slayings.

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nd Shrimp **\$9.99**

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#### PUBLIC NOTICE

Air Force Reserve Command  
Notice of Availability

#### Draft Environmental Assessment

Addressing a Proposed Commissary at  
Dobbins Air Reserve Base, Georgia

The Air Force Reserve Command (AFRC), in conjunction with Dobbins Air Reserve Base (ARB), has completed a Draft Environmental Assessment (EA) that evaluates the potential effects of a proposed commissary at Dobbins ARB, Georgia.

The analysis considered in detail the potential environmental effects of the Proposed Action and the No Action Alternative. Four alternative site locations were evaluated. The commissary would be approximately 70,972 ft<sup>2</sup> in size and include general sales, a parking lot, and an access road. The results, as found in the EA, show that the Proposed Action would not have a significant impact on the environment, indicating that a Finding of No Significant Impact (FONSI) would be appropriate. An Environmental Impact Statement is not considered necessary to implement the Proposed Action. Copies of the Draft EA presenting the analysis are available for review at the following libraries:

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Marietta, GA 30060	Smyrna, Georgia 30080-3478

The document is also available at:

<http://www.dobbins.afrc.af.mil/shared/media/document/AFD-120615-055.pdf>

Written comments on the Draft EA are invited and will be accepted for 30 days from the publication of this notice. Comments for consideration by the AFRC on this document should be provided in writing to:

94th Airlift Wing Public Affairs Office

1430 First Street  
94AW/PA

Dobbins ARB, GA 30069

Phone: 678-655-5055

Email: [94AW.PA@us.af.mil](mailto:94AW.PA@us.af.mil)

Website: <http://www.dobbins.afrc.af.mil/units/pa/index.asp>



## **APPENDIX B**

### **AIR QUALITY CALCULATIONS**





**Site Alternative 1**

<b>Summary</b>	Summarizes total emissions by calendar year for the Proposed Action
<b>Combustion</b>	Estimates emissions from non-road equipment exhaust.
<b>Fugitive</b>	Estimates particulate emissions from construction and demolition activities including earthmoving, vehicle traffic, and windblown dust.
<b>Grading</b>	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
<b>Haul Truck On-Road</b>	Estimates emissions from haul trucks hauling fill and construction materials to the job site.
<b>Construction Commuter</b>	Estimates emissions for construction workers commuting to the site.
<b>AQCR Tier Report</b>	Summarizes total emissions for the Metropolitan Atlanta Intrastate Air Quality Control Region Tier report for 2008, to be used to compare the Proposed Action to regional emissions.

**Air Quality Emissions from the Proposed Action**

<b>Construction Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Combustion	6.090	0.673	2.641	0.403	0.424	0.411	703.199
Fugitive Dust	-	-	-	-	19.380	1.938	-
Haul Truck On-Road	0.570	0.412	1.674	0.045	0.677	0.176	144.189
Commuter	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>TOTAL Construction Activities</b>	<b>6.836</b>	<b>1.261</b>	<b>5.901</b>	<b>0.450</b>	<b>20.498</b>	<b>2.536</b>	<b>1,057.759</b>

<b>Operational Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Building Heating Systems	1.288	0.142	2.164	0.015	0.196	0.196	3,091.765
Worker Commuting and Commissary Patron Trips	5.288	5.265	47.593	0.062	0.501	0.316	6,311.130
<b>TOTAL Operational Activities</b>	<b>6.576</b>	<b>5.407</b>	<b>49.757</b>	<b>0.077</b>	<b>0.697</b>	<b>0.512</b>	<b>9,402.895</b>

Note: Total PM<sub>10/2.5</sub> fugitive dust emissions are assuming USEPA 50% control efficiencies.

	<b>Construction Activities</b>	<b>Operational Activities</b>
CO <sub>2</sub> emissions converted to metric tons =	<b>959.39</b>	<b>8528.43</b>
State of Georgia CO <sub>2</sub> emissions (metric tons) =	<b>164,200,000</b>	
Percent of Georgia CO <sub>2</sub> emissions =	<b>0.0006%</b>	<b>0.005%</b>
United States' CO <sub>2</sub> emissions (metric tons) =	<b>5,814,400,000</b>	
Percent of USA's CO <sub>2</sub> emissions =	<b>0.00002%</b>	<b>0.00015%</b>

Source: U.S. Department of Energy, Energy Information Administration (U.S. DOE/EIA). 2011. *State CO<sub>2</sub> Emissions by Year 1980-2009 (Million Metric Tons of Carbon Dioxide)*. Available online <[http://www.eia.gov/environment/emissions/state/state\\_emissions.cfm](http://www.eia.gov/environment/emissions/state/state_emissions.cfm)>. Data released October 2011. Data accessed 09 January 2012. Since future year budgets were not readily available, actual 2008 air emissions inventories for the counties were used as an approximation of the regional inventory. Because the Proposed Action is several orders of magnitude below significance, the conclusion would be the same, regardless of whether future year budget data set were used.

**Metropolitan Atlanta Air Quality Control Region and Cobb County**

Year	All Sources					
	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Metro Atlanta AQCR 2008	161,849	150,101	890,752	178,961	165,459	34,875
Cobb County 2008	20,872	22,492	129,676	25,972	17,573	3,892

Source: USEPA - AirData National Emissions Inventory Data by State and County; Site Accessed on January 4, 2012.

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=15&inventoryYear=2008>

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=51&inventoryYear=2008>

**Air Emissions from the Construction and Operation of the Dobbins ARB Commissary**

	<b>(tpy)</b>	<b>(tpy)</b>	<b>(tpy)</b>	<b>(tpy)</b>	<b>(tpy)</b>	<b>(tpy)</b>
Proposed Construction Emissions	6.836	1.261	5.901	0.450	20.498	2.536
Proposed Operational Emissions	6.576	5.407	49.757	0.077	0.697	0.512
% of Regional Emissions (Construction only)	<b>0.004%</b>	<b>0.001%</b>	<b>0.001%</b>	<b>0.0003%</b>	<b>0.01%</b>	<b>0.01%</b>
% of Regional Emissions (Operational only)	<b>0.004%</b>	<b>0.004%</b>	<b>0.006%</b>	<b>0.00004%</b>	<b>0.0004%</b>	<b>0.0015%</b>
% of Cobb County Emissions (Construction only)	<b>0.03%</b>	<b>0.01%</b>	<b>0.005%</b>	<b>0.002%</b>	<b>0.1%</b>	<b>0.1%</b>
% of Cobb County Emissions (Operational only)	<b>0.03%</b>	<b>0.024%</b>	<b>0.04%</b>	<b>0.0003%</b>	<b>0.004%</b>	<b>0.013%</b>

**Site Alternative 2**

<b>Summary</b>	Summarizes total emissions by calendar year for the Proposed Action
<b>Combustion</b>	Estimates emissions from non-road equipment exhaust.
<b>Fugitive</b>	Estimates particulate emissions from construction and demolition activities including earthmoving, vehicle traffic, and windblown dust.
<b>Grading</b>	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
<b>Haul Truck On-Road</b>	Estimates emissions from haul trucks hauling fill and construction materials to the job site.
<b>Construction Commuter</b>	Estimates emissions for construction workers commuting to the site.
<b>AQCR Tier Report</b>	Summarizes total emissions for the Metropolitan Atlanta Intrastate Air Quality Control Region Tier report for 2008, to be used to compare the Proposed Action to regional emissions.

**Air Quality Emissions from the Proposed Action**

<b>Construction Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Combustion	5.391	0.633	2.356	0.389	0.381	0.370	616.710
Fugitive Dust	-	-	-	-	11.055	1.105	-
Haul Truck On-Road	0.425	0.307	1.249	0.033	0.506	0.131	107.638
Commuter	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>TOTAL Construction Activities</b>	<b>5.992</b>	<b>1.116</b>	<b>5.192</b>	<b>0.425</b>	<b>11.958</b>	<b>1.617</b>	<b>934.719</b>

<b>Operational Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Building Heating Systems	1.288	0.142	2.164	0.015	0.196	0.196	3,091.765
Worker Commuting and Commissary Patron Trips	5.288	5.265	47.593	0.062	0.501	0.316	6,311.130
<b>TOTAL Operational Activities</b>	<b>6.576</b>	<b>5.407</b>	<b>49.757</b>	<b>0.077</b>	<b>0.697</b>	<b>0.512</b>	<b>9,402.895</b>

Note: Total PM<sub>10/2.5</sub> fugitive dust emissions are assuming USEPA 50% control efficiencies.

CO <sub>2</sub> emissions converted to metric tons =	<b>847.79</b>	<b>8528.43</b>
State of Georgia CO <sub>2</sub> emissions (metric tons) =	<b>164,200,000</b>	
Percent of Georgia CO <sub>2</sub> emissions =	<b>0.0005%</b>	<b>0.005%</b>
United States' CO <sub>2</sub> emissions (metric tons) =	<b>5,814,400,000</b>	
Percent of USA's CO <sub>2</sub> emissions =	<b>0.000015%</b>	<b>0.00015%</b>

Source: U.S. Department of Energy, Energy Information Administration (U.S. DOE/EIA). 2011. *State CO<sub>2</sub> Emissions by Year 1980-2009 (Million Metric Tons of Carbon Dioxide)*. Available online <[http://www.eia.gov/environment/emissions/state/state\\_emissions.cfm](http://www.eia.gov/environment/emissions/state/state_emissions.cfm)>. Data released October 2011. Data accessed 09 January 2012. Since future year budgets were not readily available, actual 2008 air emissions inventories for the counties were used as an approximation of the regional inventory. Because the Proposed Action is several orders of magnitude below significance, the conclusion would be the same, regardless of whether future year budget data set were used.

**Metropolitan Atlanta Air Quality Control Region and Cobb County**

Year	All Sources					
	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Metro Atlanta AQCR 2008	161,849	150,101	890,752	178,961	165,459	34,875
Cobb County 2008	20,872	22,492	129,676	25,972	17,573	3,892

Source: USEPA - AirData National Emissions Inventory Data by State and County; Site Accessed on January 4, 2012.

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=15&inventoryYear=2008>

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=51&inventoryYear=2008>

**Air Emissions from the Construction and Operation of the Dobbins ARB Commissary**

	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Proposed Construction Emissions	5.992	1.116	5.192	0.425	11.958	1.617
Proposed Operational Emissions	6.576	5.407	49.757	0.077	0.697	0.512
% of Regional Emissions (Construction only)	0.004%	0.001%	0.001%	0.0002%	0.01%	0.005%
% of Regional Emissions (Operational only)	0.004%	0.004%	0.006%	0.00004%	0.0004%	0.0015%
% of Cobb County Emissions (Construction only)	0.03%	0.005%	0.004%	0.002%	0.1%	0.04%
% of Cobb County Emissions (Operational only)	0.03%	0.024%	0.04%	0.0003%	0.004%	0.013%

**Site Alternative 3**

<b>Summary</b>	Summarizes total emissions by calendar year for the Proposed Action
<b>Combustion</b>	Estimates emissions from non-road equipment exhaust.
<b>Fugitive</b>	Estimates particulate emissions from construction and demolition activities including earthmoving, vehicle traffic, and windblown dust.
<b>Grading</b>	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
<b>Haul Truck On-Road</b>	Estimates emissions from haul trucks hauling fill and construction materials to the job site.
<b>Construction Commuter</b>	Estimates emissions for construction workers commuting to the site.
<b>AQCR Tier Report</b>	Summarizes total emissions for the Metropolitan Atlanta Intrastate Air Quality Control Region Tier report for 2008, to be used to compare the Proposed Action to regional emissions.

**Air Quality Emissions from the Proposed Action**

<b>Construction Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Combustion	5.682	0.650	2.474	0.395	0.399	0.387	652.583
Fugitive Dust	-	-	-	-	13.178	1.318	-
Haul Truck On-Road	0.482	0.349	1.417	0.038	0.573	0.149	122.074
Commuter	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>TOTAL Construction Activities</b>	<b>6.341</b>	<b>1.174</b>	<b>5.477</b>	<b>0.435</b>	<b>14.167</b>	<b>1.864</b>	<b>985.028</b>

<b>Operational Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Building Heating Systems	1.288	0.142	2.164	0.015	0.196	0.196	3,091.765
Worker Commuting and Commissary Patron Trips	5.288	5.265	47.593	0.062	0.501	0.316	6,311.130
<b>TOTAL Operational Activities</b>	<b>6.576</b>	<b>5.407</b>	<b>49.757</b>	<b>0.077</b>	<b>0.697</b>	<b>0.512</b>	<b>9,402.895</b>

Note: Total PM<sub>10/2.5</sub> fugitive dust emissions are assuming USEPA 50% control efficiencies.

CO <sub>2</sub> emissions converted to metric tons =	<b>893.42</b>	<b>8528.43</b>
State of Georgia CO <sub>2</sub> emissions (metric tons) =	<b>164,200,000</b>	
Percent of Georgia CO <sub>2</sub> emissions =	<b>0.0005%</b>	<b>0.005%</b>
United States' CO <sub>2</sub> emissions (metric tons) =	<b>5,814,400,000</b>	
Percent of USA's CO <sub>2</sub> emissions =	<b>0.000015%</b>	<b>0.00015%</b>

Source: U.S. Department of Energy, Energy Information Administration (U.S. DOE/EIA). 2011. *State CO<sub>2</sub> Emissions by Year 1980-2009 (Million Metric Tons of Carbon Dioxide)*. Available online <[http://www.eia.gov/environment/emissions/state/state\\_emissions.cfm](http://www.eia.gov/environment/emissions/state/state_emissions.cfm)>. Data released October 2011. Data accessed 09 January 2012. Since future year budgets were not readily available, actual 2008 air emissions inventories for the counties were used as an approximation of the regional inventory. Because the Proposed Action is several orders of magnitude below significance, the conclusion would be the same, regardless of whether future year budget data set were used.

**Metropolitan Atlanta Air Quality Control Region and Cobb County**

Year	All Sources					
	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Metro Atlanta AQCR 2008	161,849	150,101	890,752	178,961	165,459	34,875
Cobb County 2008	20,872	22,492	129,676	25,972	17,573	3,892

Source: USEPA - AirData National Emissions Inventory Data by State and County; Site Accessed on January 4, 2012.

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=15&inventoryYear=2008>

<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=51&inventoryYear=2008>

**Air Emissions from the Construction and Operation of the Dobbins ARB Commissary**

	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Proposed Construction Emissions	6.341	1.174	5.477	0.435	14.167	1.864
Proposed Operational Emissions	6.576	5.407	49.757	0.077	0.697	0.512
% of Regional Emissions (Construction only)	0.004%	0.001%	0.001%	0.0002%	0.01%	0.01%
% of Regional Emissions (Operational only)	0.004%	0.004%	0.006%	0.00004%	0.0004%	0.0015%
% of Cobb County Emissions (Construction only)	0.03%	0.01%	0.004%	0.002%	0.1%	0.05%
% of Cobb County Emissions (Operational only)	0.03%	0.024%	0.04%	0.0003%	0.004%	0.013%

**Site Alternative 4**

<b>Summary</b>	Summarizes total emissions by calendar year for the Proposed Action
<b>Combustion</b>	Estimates emissions from non-road equipment exhaust.
<b>Fugitive</b>	Estimates particulate emissions from construction and demolition activities including earthmoving, vehicle traffic, and windblown dust.
<b>Grading</b>	Estimates the number of days of site preparation, to be used for estimating heavy equipment exhaust and earthmoving dust emissions.
<b>Haul Truck On-Road</b>	Estimates emissions from haul trucks hauling fill and construction materials to the job site.
<b>Construction Commuter</b>	Estimates emissions for construction workers commuting to the site.
<b>AQCR Tier Report</b>	Summarizes total emissions for the Metropolitan Atlanta Intrastate Air Quality Control Region Tier report for 2008, to be used to compare the Proposed Action to regional emissions.



**Air Quality Emissions from the Proposed Action**

<b>Construction Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Combustion	6.090	0.673	2.641	0.403	0.424	0.411	703.199
Fugitive Dust	-	-	-	-	19.446	1.945	-
Haul Truck On-Road	0.576	0.417	1.693	0.045	0.685	0.178	145.874
Commuter	0.176	0.175	1.586	0.002	0.017	0.011	210.371
<b>TOTAL Construction Activities</b>	<b>6.843</b>	<b>1.265</b>	<b>5.921</b>	<b>0.450</b>	<b>20.572</b>	<b>2.544</b>	<b>1,059.444</b>

<b>Operational Activities</b>	<b>NO<sub>x</sub> (ton)</b>	<b>VOC (ton)</b>	<b>CO (ton)</b>	<b>SO<sub>2</sub> (ton)</b>	<b>PM<sub>10</sub> (ton)</b>	<b>PM<sub>2.5</sub> (ton)</b>	<b>CO<sub>2</sub> (ton)</b>
Building Heating Systems	1.288	0.142	2.164	0.015	0.196	0.196	3,091.765
Worker Commuting and Commissary Patron Trips	5.288	5.265	47.593	0.062	0.501	0.316	6,311.130
<b>TOTAL Operational Activities</b>	<b>6.576</b>	<b>5.407</b>	<b>49.757</b>	<b>0.077</b>	<b>0.697</b>	<b>0.512</b>	<b>9,402.895</b>

Note: Total PM<sub>10/2.5</sub> fugitive dust emissions are assuming USEPA 50% control efficiencies.

	<b>Construction Activities</b>	<b>Operational Activities</b>
CO <sub>2</sub> emissions converted to metric tons =	<b>960.92</b>	<b>8528.43</b>
State of Georgia CO <sub>2</sub> emissions (metric tons) =	<b>164,200,000</b>	
Percent of Georgia CO <sub>2</sub> emissions =	<b>0.0006%</b>	<b>0.005%</b>
United States' CO <sub>2</sub> emissions (metric tons) =	<b>5,814,400,000</b>	
Percent of USA's CO <sub>2</sub> emissions =	<b>0.000017%</b>	<b>0.00015%</b>

Source: U.S. Department of Energy, Energy Information Administration (U.S. DOE/EIA). 2011. *State CO<sub>2</sub> Emissions by Year 1980-2009 (Million Metric Tons of Carbon Dioxide)*. Available online <[http://www.eia.gov/environment/emissions/state/state\\_emissions.cfm](http://www.eia.gov/environment/emissions/state/state_emissions.cfm)>. Data released October 2011. Data accessed 09 January 2012. Since future year budgets were not readily available, actual 2008 air emissions inventories for the counties were used as an approximation of the regional inventory. Because the Proposed Action is several orders of magnitude below significance, the conclusion would be the same, regardless of whether future year budget data set were used.

**Metropolitan Atlanta Air Quality Control Region and Cobb County**

Year	All Sources					
	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)
Metro Atlanta AQCR 2008	161,849	150,101	890,752	178,961	165,459	34,875
Cobb County 2008	20,872	22,492	129,676	25,972	17,573	3,892

Source: USEPA - AirData National Emissions Inventory Data by State and County; Site Accessed on January 4, 2012.

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<http://neibrowser.epa.gov/eis-public-web/geo/county-emissions.html?stateJurisdictionId=51&inventoryYear=2008>

**Air Emissions from the Construction and Operation of the Dobbins ARB Commissary**

	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Proposed Construction Emissions	6.843	1.265	5.921	0.450	20.572	2.544
Proposed Operational Emissions	6.576	5.407	49.757	0.077	0.697	0.512
% of Regional Emissions (Construction only)	0.004%	0.001%	0.001%	0.0003%	0.01%	0.01%
% of Regional Emissions (Operational only)	0.004%	0.004%	0.006%	0.00004%	0.0004%	0.0015%
% of Cobb County Emissions (Construction only)	0.03%	0.01%	0.005%	0.002%	0.1%	0.1%
% of Cobb County Emissions (Operational only)	0.03%	0.024%	0.04%	0.0003%	0.004%	0.013%