

9-B-50

18 Apr 05  
R

Please file

# ENVIRONMENTAL ASSESSMENT OF ESTABLISHMENT OF COMMUNICATIONS SUPPORT FACILITIES

ANDREWS AFB, MARYLAND



DECEMBER 2004

# Report Documentation Page

Form Approved  
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>06 FEB 2005</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2005 to 00-00-2005</b>	
4. TITLE AND SUBTITLE <b>Environmental Assessment of Communications Support Facilities Andrews Air Force Base, Maryland</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>e2M Inc,4215 Walney Road, Suite 4,Chantilly,VA,20151</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## *ABBREVIATIONS AND ACRONYMS*

°F	degrees Fahrenheit	NAAQS	National Ambient Air Quality Standards
89 AW	89th Airlift Wing	NEPA	National Environmental Policy Act
ACM	asbestos-containing material	NO <sub>2</sub>	nitrogen dioxide
AFB	Air Force Base	NO <sub>x</sub>	nitrogen oxide(s)
AFI	Air Force Instruction	NPDES	National Pollution Discharge Elimination System
AFPD	Air Force Policy Directive	NSR	New Source Review
AMC	Air Mobility Command	O <sub>3</sub>	ozone
AOC	area of concern	Pb	lead
AQCR	Air Quality Control Region	PEPCO	Potomac Electric Power Company
C&D	construction and demolition	PM <sub>2.5,10</sub>	particulate matter ≤ 2.5, 10 microns in diameter
CAA	Clean Air Act	POL	petroleum, oil, and lubricants
CE	Civil Engineering	PSD	Prevention of Significant Deterioration
CEQ	Council on Environmental Quality	RCRA	Resource Conservation and Recovery Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	SARA	Superfund Amendment and Reauthorization Act
CFR	Code of Federal Regulations	SCIF	Sensitive Compartmentalized Information Facility
CO	carbon monoxide	SIP	State Implementation Plan
COMAR	Code of Maryland Regulations	SO <sub>2</sub>	sulfur dioxide
DOD	U.S. Department of Defense	SO <sub>x</sub>	sulfur oxide(s)
EA	Environmental Assessment	SR	State Route
EIAP	Environmental Impact Analysis Process	tpy	tons per year
EIS	Environmental Impact Statement	USAF	United States Air Force
EO	Executive Order	USEPA	U.S. Environmental Protection Agency
ERP	Environmental Restoration Program	UST	Underground Storage Tank
FONSI	Finding of No Significant Impact	VOC	volatile organic compound
FY	fiscal year	WHCA	White House Communications Agency
HAP	hazardous air pollutant	WWSC	Washington Suburban Sanitary Commission
HVAC	heating, ventilation, air conditioning		
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning		
LBP	lead-based paint		
MDE	Maryland Department of the Environment		
MSW	municipal solid waste		

# FINDING OF NO SIGNIFICANT IMPACT

## ESTABLISHMENT OF COMMUNICATIONS SUPPORT FACILITIES AT ANDREWS AIR FORCE BASE, MARYLAND

---

### INTRODUCTION

The White House Communications Agency (WHCA), under the White House Military Office, has identified the need to establish Communications Support Facilities at Andrews Air Force Base (AFB). The WHCA provides premier communication systems that enable the President and the Presidential staff to lead the Nation efficiently. Andrews AFB is a United States Air Force (USAF) base under the Air Mobility Command (AMC) and is headquarters to the 89th Airlift Wing (89 AW). The 89 AW provides logistical support for the President, Vice President, cabinet members, and high-ranking U.S. and foreign government officials.

Three projects would be necessary components of the WHCA Communications Support Facilities:

- Construct a new Civil Engineering (CE) warehouse
- Renovate Building 3296
- Renovate Building 3415

The Proposed Action and the No Action Alternative were assessed in the attached Environmental Assessment (EA), which is incorporated by reference. This EA was prepared in accordance with the National Environmental Policy Act (NEPA).

### PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The purpose of the Proposed Action is to provide WHCA with facilities to support its headquarters operations and the operation of a PCC from Andrews AFB. The renovation of two existing buildings is needed to support secure operations and communications for 80 personnel. In addition, construction of a warehouse space is needed to house the functions that would be displaced by the Communications Support Facilities.

### DESCRIPTION OF THE PROPOSED ACTION

**Construct Civil Engineering Warehouse.** A new CE warehouse is needed for the operations currently in Building 3296. The CE warehouse would be approximately 10,000 square feet. Proposed location for the CE warehouse is on the western side of Andrews AFB, approximately 500 feet west of Buildings 5014 and 5026 and 500 feet north of the running track. The site for the proposed construction is partially grassy and wooded. There are no buildings or structures that would require removal.

**Renovate Building 3296.** Current operations in Building 3296 would be transferred to the proposed CE warehouse upon its construction. Interior renovations would be made to the warehouse to include office space, bathroom facilities, maintenance functions, and electronic equipment storage. Specifically, 250 square feet is needed for operations, 225 square feet is needed for expendable supplies, and 350 square feet is needed for computer equipment storage. No ground-breaking is anticipated as part of the renovations to Building 3296.

**Renovate Building 3415.** Building 3415 would be renovated to provide secure operations and communications support for 80 personnel. Interior renovations would be made to Building 3415 to include bathroom facilities, commercial power system, Sensitive Compartmentalized Information Facility rooms, and administrative workspace. No ground-breaking is anticipated as part of the renovations to Building 3415.



As part of the proposed renovations to Buildings 3296 and 3415, additional parking would be provided to support 50 vehicles. The proposed parking would be between the buildings.

#### **NO ACTION ALTERNATIVE**

Under the No Action Alternative, Andrews AFB would continue to use Buildings 3296 and 3415 in their current configurations, which would not meet the needs of the WHCA. The CE warehouse would not be constructed. Future WHCA operations would continue without secure Communications Support Facilities.

#### **ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION**

As part of the NEPA process, reasonable alternatives to the Proposed Action must be considered.

*Construct CE Warehouse.* The only alternative considered that would meet the purpose and need was another location for the CE warehouse. Available land in appropriate land uses is limited at Andrews AFB. The site selected as the preferred site for the Proposed Action is the only site that was identified by 89 AW as meeting the screening criteria.

*Renovate Building 3296.* An alternative to renovating Building 3296 is constructing a new facility. However, construction costs and the lack of available land at Andrews AFB eliminated new construction as a viable alternative.

*Renovate Building 3415.* An alternative to renovating Building 3415 is constructing a new facility. However, construction costs and the lack of available land at Andrews AFB eliminated new construction as a viable alternative.

Therefore, other alternatives were initially considered, but eliminated from further consideration because they were not found to be viable alternatives.


#### **ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION**

Analysis performed in the EA addressed potential effects on air quality, geological resources, water resources, hazardous materials and wastes, infrastructure, and safety. The analysis indicates that implementing the Proposed Action would have no significant direct, indirect, or cumulative effects on the quality of the natural or human environment.

#### **FINDING OF NO SIGNIFICANT IMPACT**

After review of the EA prepared in accordance with the requirements of NEPA, the Council on Environmental Quality regulations, and Environmental Impact Analysis Process, 32 Code of Federal Regulations Part 989, as amended, I have determined that the Proposed Action would not have a significant impact on the quality of the human or natural environment and, therefore, an Environmental Impact Statement is not required. This decision has been made after taking into account all submitted information, and considering a full range of practical alternatives that would meet project requirements and are within the legal authority of the USAF.

  
\_\_\_\_\_  
DAVID S. GRAY, Brigadier, USAF  
Commander

  
\_\_\_\_\_  
Date

**ENVIRONMENTAL ASSESSMENT OF  
ESTABLISHMENT OF  
COMMUNICATIONS SUPPORT FACILITIES**

**ANDREWS AIR FORCE BASE, MARYLAND**

---

**AIR MOBILITY COMMAND  
Environmental Planning Branch  
507 Symington Drive  
Scott Air Force Base, IL 62225-5022**

**DECEMBER 2004**



**ENVIRONMENTAL ASSESSMENT OF  
ESTABLISHMENT OF COMMUNICATIONS SUPPORT FACILITIES**

**CONTENTS**

<b>1. PURPOSE OF AND NEED FOR THE PROPOSED ACTION .....</b>	<b>1-1</b>
1.1 Background.....	1-1
1.2 Purpose of and Need for the Proposed Action.....	1-2
1.3 Location .....	1-2
1.4 Summary of Key Environmental Compliance Requirements.....	1-2
1.4.1 National Environmental Policy Act.....	1-2
1.4.2 Integration of Other Environmental Statutes and Regulations .....	1-4
1.4.3 Interagency and Intergovernmental Coordination for Environmental Planning and Public Involvement.....	1-5
<b>2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES .....</b>	<b>2-1</b>
2.1 Introduction.....	2-1
2.2 Proposed Action.....	2-1
2.3 Alternatives Considered but Eliminated from Further Consideration .....	2-5
2.4 No Action Alternative.....	2-6
<b>3. AFFECTED ENVIRONMENT.....</b>	<b>3-1</b>
3.1 Air Quality .....	3-2
3.1.1 Definition of the Resource .....	3-2
3.1.2 Existing Condition .....	3-5
3.2 Geological Resources .....	3-6
3.2.1 Definition of the Resource .....	3-6
3.2.2 Existing Condition .....	3-7
3.3 Water Resources .....	3-8
3.3.1 Definition of the Resource .....	3-8
3.3.2 Existing Condition .....	3-9
3.4 Hazardous Materials and Wastes .....	3-10
3.4.1 Definition of the Resource .....	3-10
3.4.2 Existing Condition .....	3-11
3.5 Infrastructure.....	3-15
3.5.1 Definition of the Resource .....	3-15
3.5.2 Existing Condition .....	3-15
3.6 Safety .....	3-18
3.6.1 Definition of the Resource .....	3-18
3.6.2 Existing Condition .....	3-19
<b>4. ENVIRONMENTAL CONSEQUENCES.....</b>	<b>4-1</b>
4.1 Air Quality .....	4-1
4.1.1 Evaluation Criteria.....	4-1
4.1.2 Environmental Consequences.....	4-3
4.2 Geological Resources .....	4-3
4.2.1 Evaluation Criteria.....	4-3
4.2.2 Environmental Consequences.....	4-4
4.3 Water Resources .....	4-5
4.3.1 Evaluation Criteria.....	4-5

4.3.2	Environmental Consequences.....	4-5
4.4	Hazardous Materials and Wastes.....	4-6
4.4.1	Evaluation Criteria.....	4-6
4.4.2	Environmental Consequences.....	4-6
4.5	Infrastructure.....	4-8
4.5.1	Evaluation Criteria.....	4-8
4.5.2	Environmental Consequences.....	4-8
4.6	Safety.....	4-9
4.6.1	Evaluation Criteria.....	4-9
4.6.2	Environmental Consequences.....	4-9
4.7	No Action Alternative.....	4-10
<b>5.</b>	<b>CUMULATIVE AND ADVERSE IMPACTS.....</b>	<b>5-1</b>
5.1	Unavoidable Adverse Impacts.....	5-1
5.2	Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Polices, and Controls.....	5-2
5.3	Relationship Between Short-term Use and Long-term Productivity.....	5-2
5.4	Irreversible and Irretrievable Commitments of Resources.....	5-3
<b>6.</b>	<b>LIST OF PREPARERS.....</b>	<b>6-1</b>
<b>7.</b>	<b>REFERENCES.....</b>	<b>7-1</b>

**APPENDIX A – APPLICABLE LAWS, REGULATIONS, POLICIES, AND PLANNING CRITERIA**

**APPENDIX B – INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING CORRESPONDENCE AND PUBLIC INVOLVEMENT**

**LIST OF FIGURES**

1-1.	Andrews AFB and Surrounding Area.....	1-3
2-1.	Locations of Proposed Construction at Andrews AFB.....	2-2
2-2.	Location of Proposed CE Warehouse.....	2-3
2-3.	Locations of Proposed Modifications to Buildings 3296 and 3415.....	2-4

**LIST OF TABLES**

2-1.	Proposed Construction Projects.....	2-1
3-1.	National Ambient Air Quality Standards.....	3-3
4-1.	General Conformity Rule <i>de minimis</i> Emission Thresholds.....	4-2

# **1. Purpose of and Need for the Proposed Action**

## **1.1 Background**

Andrews Air Force Base (AFB) is a United States Air Force (USAF) base under the Air Mobility Command (AMC). The 89th Airlift Wing (89 AW) is the host unit at Andrews AFB and reports to AMC headquarters located at Scott AFB, Illinois. The mission of the 89 AW is to provide logistical support for the President, Vice President, cabinet members, and high-ranking U.S. and foreign government officials. The 89 AW also provides airlift, airdrop, and air refueling support, including the movement of troops, passengers, military equipment, cargo, and mail. Other responsibilities include operation, administration, and maintenance of Andrews AFB facilities.

The White House Communications Agency (WHCA) provides premier communication systems that enable the President and the Presidential staff to lead the Nation efficiently. The Agency provides worldwide audiovisual, voice, and data communications support for the President, Vice President, Presidential Emissaries, White House staff, the United States Secret Service, and others as directed by the White House Military Office. WHCA supports the President at the White House and in the Washington metropolitan area. In addition, they deploy teams worldwide to support Presidential travel missions.

WHCA sets up and records radio broadcasts for the President from any location around the world. WHCA videotapes Presidential movements, processes film from official White House photographers, and makes video recordings for the White House and staff.

This Environmental Assessment (EA) analyzes the WHCA's Proposed Action and includes the No Action Alternative. Additional alternatives were evaluated; however, the Proposed Action was preferred and other alternatives were eliminated from further analysis. As such, only the Proposed Action and No Action Alternative will be carried forward for further analysis. If the analyses presented in the EA indicate that implementation of the Proposed Action would not result in significant environmental impacts, a Finding of No Significant Impact (FONSI) would be prepared. A FONSI briefly presents why a Proposed Action would not have a significant effect on the human environment and why an Environmental Impact Statement (EIS) is unnecessary. If significant environmental issues result that cannot be mitigated to insignificance, an EIS will be required, or the Proposed Action would be abandoned and no action would be taken.

Based on the analysis in the EA, the USAF, as the decisionmaker, will decide whether there are significant adverse environmental impacts associated with the proposed modifications and demolition activities. Based on the review of the analysis, the USAF will either prepare a FONSI or recommend the analysis proceed to an EIS.

## **1.2 Purpose of and Need for the Proposed Action**

The purpose of the Proposed Action is to provide WHCA with facilities to support its headquarters operations and the operation of a Communications Support Facilities from Andrews AFB. The renovation of two existing buildings is needed to support secure operations and communications for 80 personnel. In addition, construction of a warehouse space is needed to house the functions that would be displaced by the Communications Support Facilities.

## **1.3 Location**

Andrews AFB encompasses 6,853 acres and is located in Prince George's County, Maryland, five miles southeast of Washington, D.C. (see Figure 1-1). The communities of Camp Springs and Morningside surround the base. Interstate 495 (the Capital Beltway) is immediately northwest of the base. Flight operations at Andrews AFB use two parallel Class B runways (01L/19R, West Runway and 01R/19L, East Runway), both oriented in the north-south direction. Other tenants at Andrews AFB include Air Force Reserve Command (459th Airlift Wing), Air National Guard Readiness Center, D.C. Air National Guard (113th Wing), U.S. Army Priority Air Transport, Civil Air Patrol, Maryland State Police, and Naval Air Facility Washington.

## **1.4 Summary of Key Environmental Compliance Requirements**

### **1.4.1 National Environmental Policy Act**

The National Environmental Policy Act, commonly known as NEPA, is a Federal statute requiring the identification and analysis of potential environmental impacts of proposed Federal actions before those actions are taken. NEPA established the Council on Environmental Quality (CEQ) that is charged with the development of implementing regulations and ensuring agency compliance with NEPA. CEQ regulations mandate that all Federal agencies use a systematic interdisciplinary approach to environmental planning and the evaluation of actions that may affect the environment. This process evaluates potential environmental consequences associated with a proposed action and considers alternative courses of action. The intent of NEPA is to protect, restore, or enhance the environment through well-informed Federal decisions.

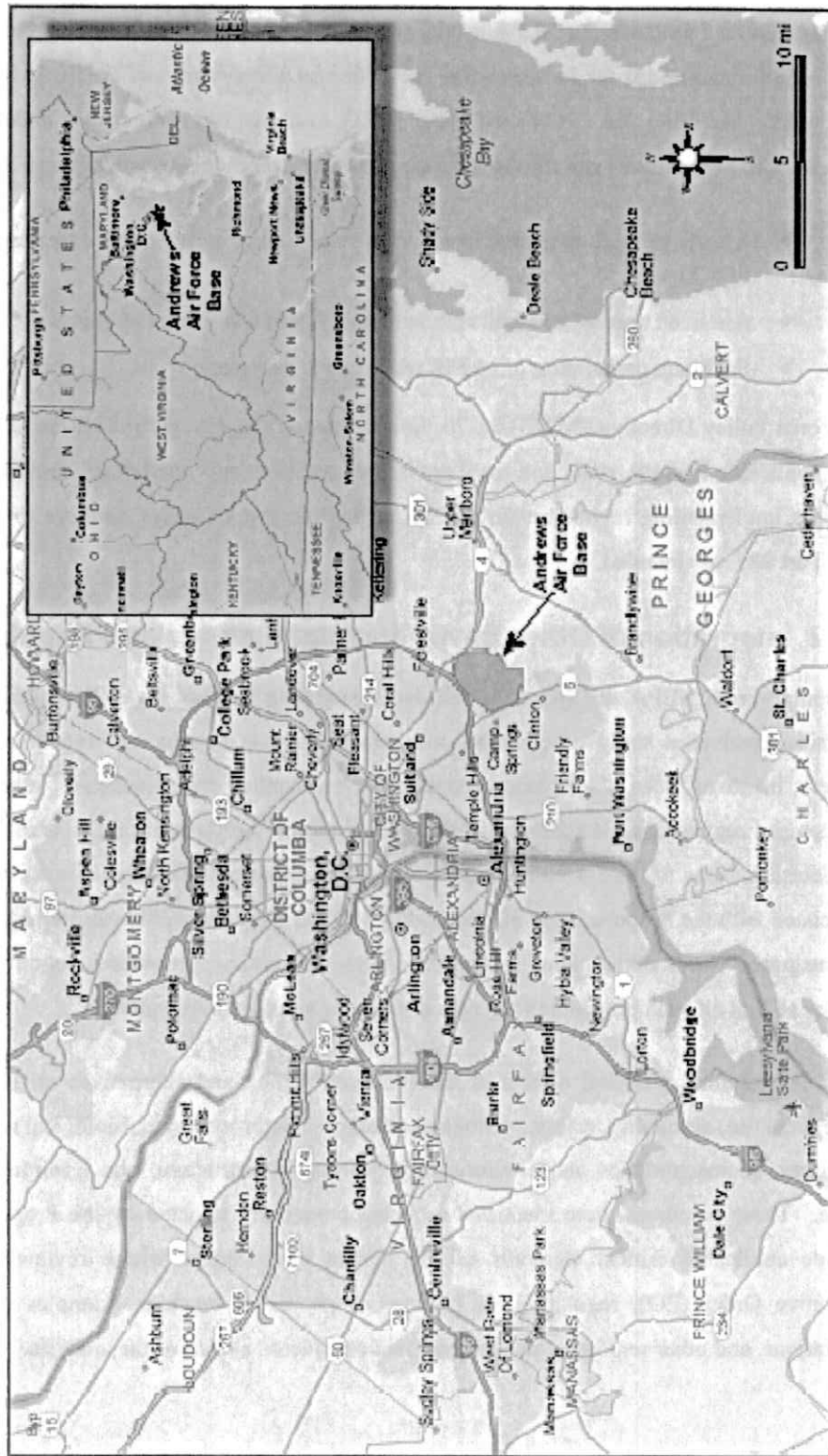


Figure 1-1. Andrews AFB and Surrounding Area



The process for implementing NEPA is codified in Title 40 Code of Federal Regulations (CFR) Parts 1500–1508, *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. The CEQ was established under NEPA to implement and oversee Federal policy in this process. CEQ regulations specify the following must be accomplished when preparing an EA:

- Briefly provide evidence and analysis for determining whether to prepare an EIS or a FONSI
- Aid in an agency’s compliance with NEPA when an EIS is unnecessary
- Facilitate preparation of an EIS when one is necessary

Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, states that the USAF will comply with applicable Federal, state, and local environmental laws and regulations, including NEPA. The USAF’s implementing regulation for NEPA is *Environmental Impact Analysis Process (EIAP)*, 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.”

This EA examines potential effects of the Proposed Action and alternatives on 11 resource areas, noise, land use, air quality, safety, geological resources, water resources, biological resources, cultural resources, socioeconomics and environmental justice, infrastructure, and hazardous materials and waste. These resources were identified as being potentially affected by the Proposed Action, and include applicable critical elements of the human environment whose review is mandated by Executive Order (EO), regulation, or policy. Appendix A contains examples of relevant laws, regulations, and other requirements that are often considered as part of the analysis.

### **1.4.3 Interagency and Intergovernmental Coordination for Environmental Planning and Public Involvement**

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 requires the USAF to implement a process known as Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), which is used for the purpose of agency coordination and implements scoping requirements.

Through the IICEP process, the 89 AW notified relevant Federal, state, and local agencies of the action proposed and provided them time to make known their environmental concerns specific to the action. The IICEP process provided the 89 AW the opportunity to cooperate with and consider state and local views in implementing the Federal proposal. Agency responses were incorporated into the analysis of potential environmental impacts. Appendix B includes a copy of the IICEP letter mailed to the agencies for this action, the IICEP distribution list, and agency responses.

A Notice of Availability for the Final EA and Draft FONSI was published in *The Capital Flyer* on November 12, 2004. The Final EA and Draft FONSI were available upon request to members of the public. No public comments were received.

***THIS PAGE INTENTIONALLY LEFT BLANK***

## 2. Description of Proposed Action and Alternatives

### 2.1 Introduction

This section describes the Proposed Action, Alternatives to the Proposed Action, and the No Action Alternative.

### 2.2 Proposed Action

The existing infrastructure at Andrews AFB is inadequate to support the proposed WHCA Communications Support Facilities. The Proposed Action includes three construction and renovation projects. These projects are summarized in Table 2-1 and discussed below. Figure 2-1 shows a map of Andrews AFB and Figures 2-2 and 2-3 show the locations of the proposed construction and renovation projects.

**Table 2-1. Proposed Construction Projects**

Project No.	Project Title	Fiscal Year
1	Construct CE Warehouse	04
2	Renovate Building 3296	05
3	Renovate Building 3415	05

**Construct Civil Engineering Warehouse.** A new Civil Engineering (CE) warehouse is needed for the operations currently in Building 3296. The CE warehouse would be approximately 10,000 square feet. The proposed location for the CE warehouse is on the western side of Andrews AFB, approximately 500 feet west of Buildings 5014 and 5026 and 500 feet north of the running track (see Figure 2-2). The site for the proposed construction is partially grassy and wooded. There are no buildings or structures that would require removal.

**Renovate Building 3296.** Current operations in Building 3296 would be transferred to the proposed CE warehouse upon its construction. Interior renovations would be made to the 3296 warehouse to include office space, bathroom facilities, maintenance functions, and electronic equipment storage. Specifically, 250 square feet is needed for operations, 225 square feet is needed for expendable supplies, and 350 square feet is needed for computer equipment storage. Necessary modifications to supporting infrastructure would be made to accommodate the new operations in Building 3296. New

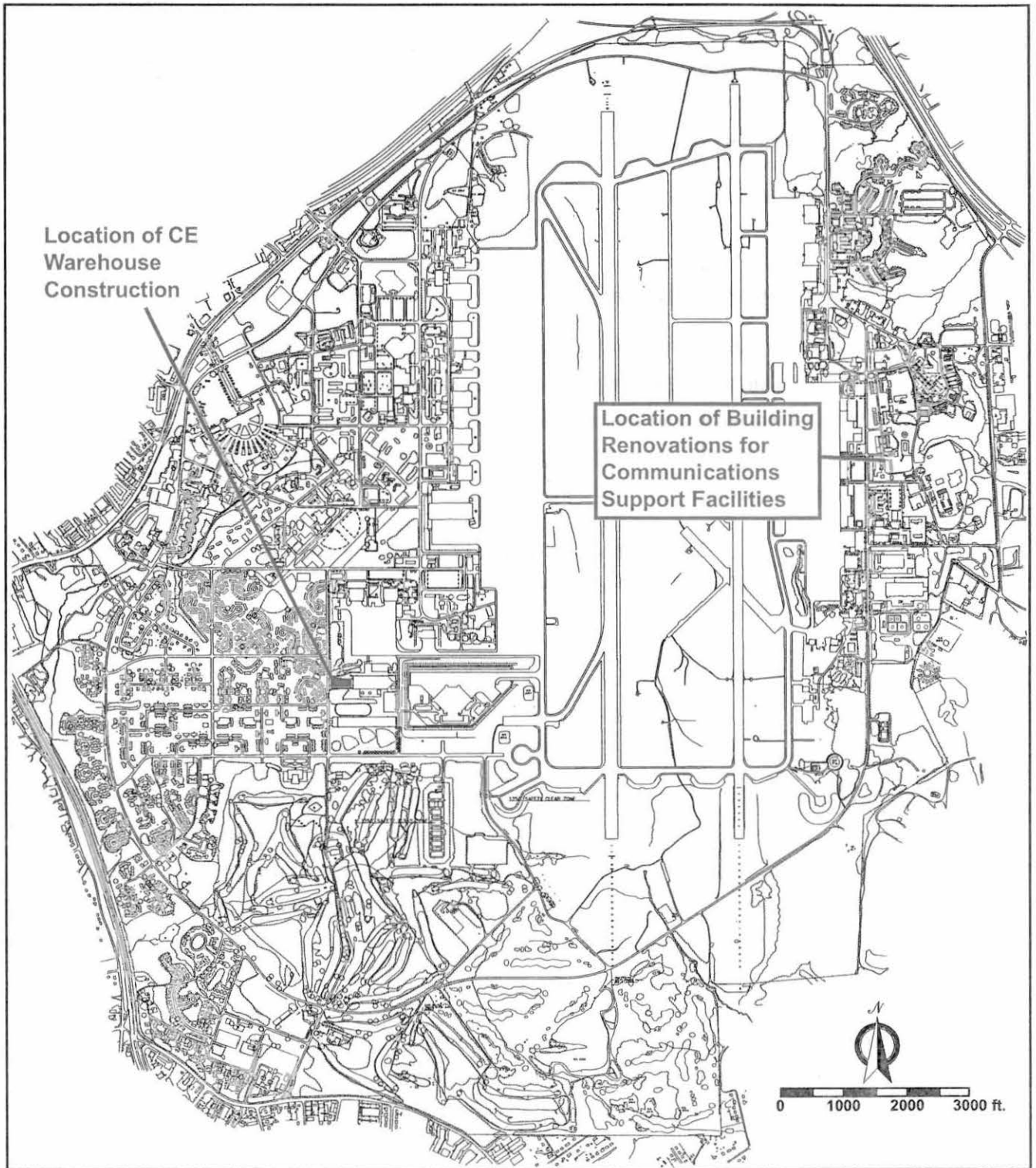


Figure 2-1. Location of Proposed Construction at Andrews AFB

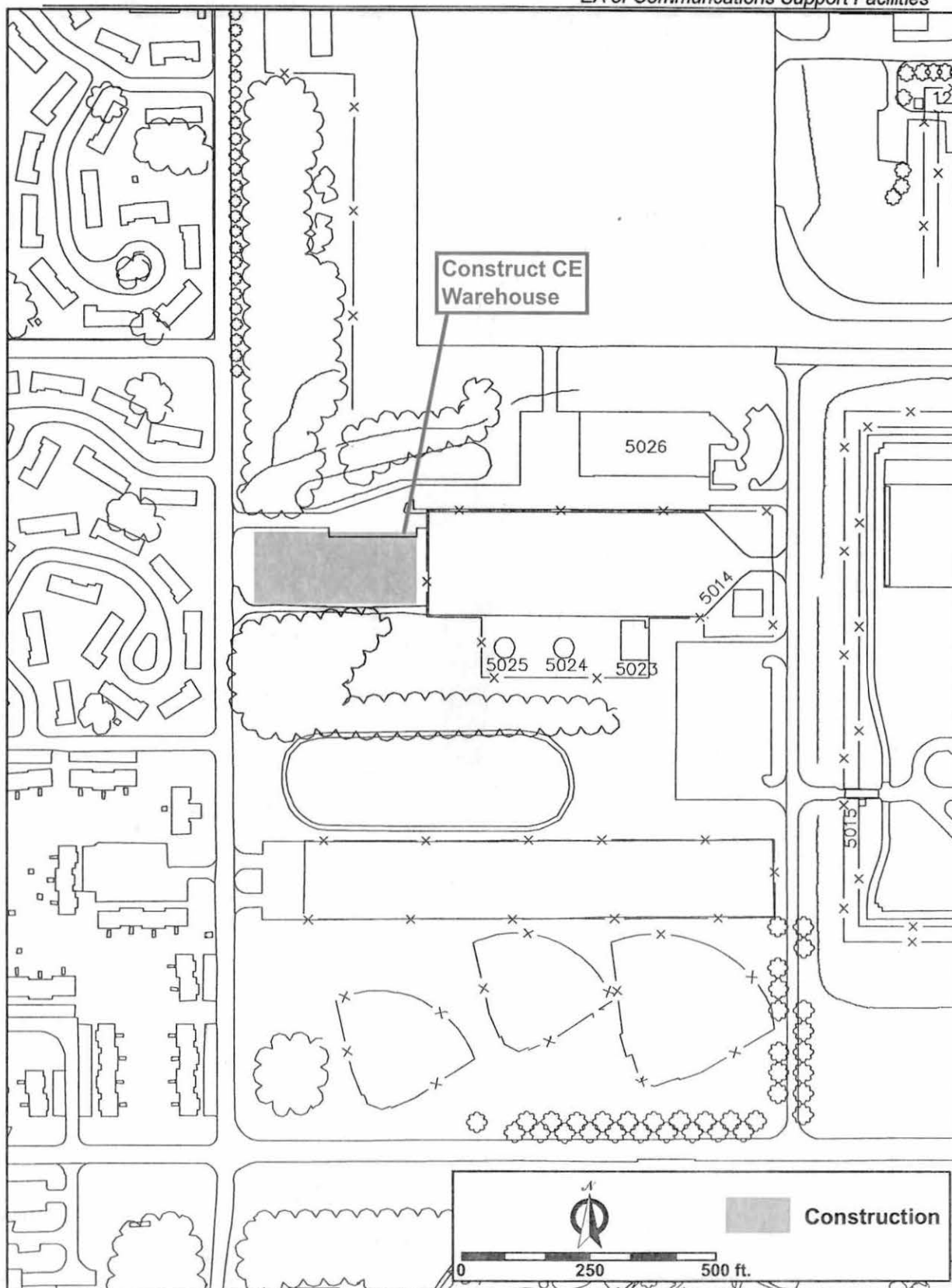


Figure 2-2. Location of Proposed CE Warehouse

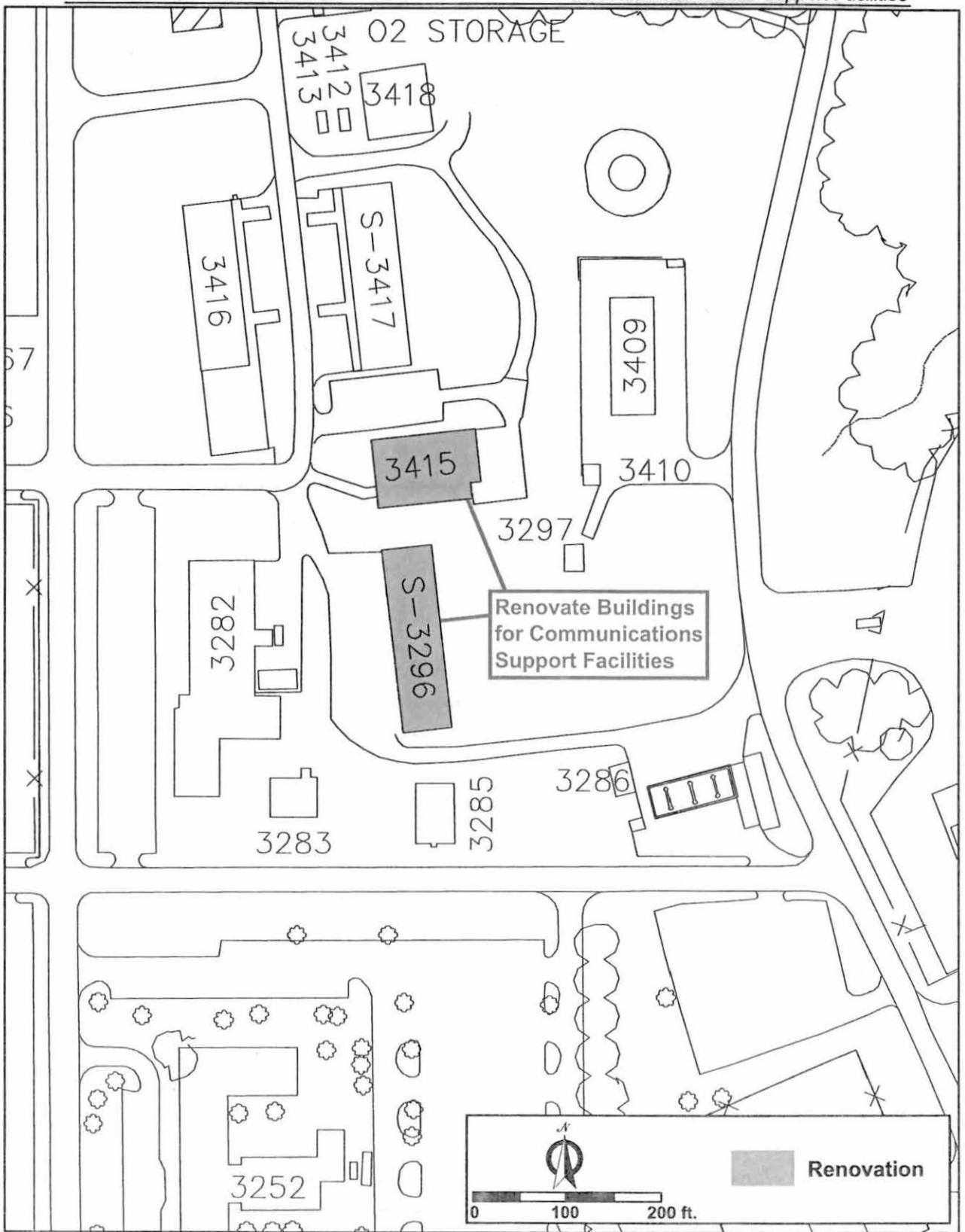


Figure 2-3. Locations of Proposed Modifications to Buildings 3296 and 3415



power outlets in the office and maintenance areas would be incorporated into the existing power. Heating, ventilation, and air conditioning (HVAC) for the facility would also be necessary to maintain proper climate for electronic equipment. Copper and fiber connectivity between Buildings 3296 and 3415 would also be provided. No ground-breaking is anticipated as part of the renovations to Building 3296.

**Renovate Building 3415.** Building 3415 would be renovated to provide secure operations and communications support for 80 personnel. Interior renovations would be made to Building 3415 to include bathroom facilities, commercial power system, Sensitive Compartmentalized Information Facility (SCIF) rooms, and administrative workspace. Bathroom facilities would be renovated to include at least one shower stall in each bathroom, and the hot water tank would be relocated to the loading dock area. Commercial power would be reworked to provide a 200 Amp 208VAC, three phase feed panel equipped for an emergency transfer switch assembly to support generator power and customer-provided uninterruptible power supply; the power panel would be located in the loading dock area. Five rooms (TC001, 004, 005, 006, and 007) would be constructed to operate as SCIF rooms, including insulated perimeter walls, true walls, true ceilings nine feet high, and metal or solid wood entry doors to rooms TC001, 004, and 006. Lastly, garage areas BAY001 and BAY002 would be converted into administrative workspace, including finishing walls and ceilings, reworking power circuits, and possibly a second exit. No ground-breaking is anticipated as part of the renovations to Building 3415.

As part of the proposed renovations to Buildings 3296 and 3415, additional parking would be provided to support 50 vehicles. Figure 2-3 shows the locations of Buildings 3296 and 3415. The proposed parking would be between the buildings.

### **2.3 Alternatives Considered but Eliminated from Further Consideration**

As part of the NEPA process, reasonable alternatives to the Proposed Action must be considered. Other modifications were originally considered; however, such alternatives would not meet the purpose and need criteria presented in Section 2.2. The rationale for eliminating these alternatives is presented below.

**Construct CE Warehouse.** The only alternative considered that would meet the purpose and need was another location for the CE warehouse. Available land in appropriate land uses is limited at



Andrews AFB. The site selected as the preferred site for the Proposed Action is the only site that was identified by 89 AW as meeting the screening criteria.

***Renovate Building 3296.*** An alternative to renovating Building 3296 is constructing a new facility. However, construction costs and the lack of available land at Andrews AFB eliminated new construction as a viable alternative.

***Renovate Building 3415.*** An alternative to renovating Building 3415 is constructing a new facility. However, construction costs and the lack of available land at Andrews AFB eliminated new construction as a viable alternative.

## **2.4 No Action Alternative**

Under the No Action Alternative, Andrews AFB would continue to use Buildings 3296 and 3415 in their current configurations, which would not meet the needs of the WHCA. The CE warehouse would not be constructed.

### 3. Affected Environment

Section 3.0 describes the environmental and socioeconomic resources and conditions most likely to be affected by the proposed construction projects. This section provides information to serve as a baseline from which to identify and evaluate environmental and socioeconomic changes likely to result from implementation of the Proposed Action. Baseline conditions represent current conditions. The potential environmental and socioeconomic impacts of the Proposed Action and No Action Alternative on the baseline conditions are described in Section 4.0.

In compliance with NEPA, CEQ guidelines, and 32 CFR Part 989, as amended, the description of the affected environment focuses on those resources and conditions potentially affected by the Proposed Action. Some aspects of the affected environment (noise, land use, biological resources, cultural and historic resources, and socioeconomics and environmental justice) are not present in the area or would not be affected by the Proposed Action. Those resource areas have been omitted from this analysis. The following details the basis for such exclusions:

**Noise.** Implementation of the Proposed Action does not involve permanent alterations to aircraft inventories, operations, or missions. No new, permanent ground-based heavy equipment operations are included in the Proposed Action. No activity included in the Proposed Action would result in a situation where residences would be impacted by an increase in present ambient noise levels. Furthermore, noise produced by construction activities associated with the Proposed Action would be short-term and not significantly affect sensitive receptors. Accordingly, USAF has omitted detailed examination of noise.

**Land Use.** All activities associated with the Proposed Action would be consistent with present and foreseeable land use patterns at Andrews AFB. Implementation of the Proposed Action would not significantly alter the existing land use at any of the construction project locations. Accordingly, USAF has omitted detailed examination of land use.

**Biological Resources.** The Proposed Action would not affect biological resources at Andrews AFB. Proposed construction projects would occur on previously disturbed, developed land that is not known to have any sensitive, threatened, or endangered species or their habitat. There are no wetlands near the proposed project locations. Any noise effects as a result of construction would be minor and short-term, having a negligible effect, if any, on biological resources. Some removal of trees and grassy vegetation would occur as a result of the CE warehouse construction. The Maryland Forest Conservation Act, which establishes standards for local authorities to enforce during

development, does not apply because the proposed construction is less than 40,000 square feet. Accordingly, USAF has omitted detailed examination of biological resources.

**Cultural Resources.** The *Integrated Cultural Resources Management Plan* for Andrews AFB indicates that the only cultural resources eligible for inclusion on the National Register of Historic Places are located in the Belle Chance area (AAFB 2003a). This section is in the northwest area of Andrews AFB, a considerable distance from the Area of Potential Effect for the proposed construction sites. Therefore, within the Area of Potential Effect there would be no effects to cultural, historic, or potentially historic resources as a result of the Proposed Action. The Maryland State Historic Preservation Office concurred that no properties would be affected by the Proposed Action (see Appendix B). Accordingly, USAF has omitted detailed examination of cultural resources.

**Socioeconomics and Environmental Justice.** The Proposed Action does not involve any activities that would contribute to changes in socioeconomic resources. The construction projects are relatively small and would not affect the local construction industry or the demand for construction workers or equipment. There would be no change in the number of personnel assigned to Andrews AFB; therefore, there would be no changes in area population or associated changes in demand for housing and services. Furthermore, all construction would occur within Andrews AFB boundaries, eliminating any disproportionate effects on minority or low-income populations outside the base under EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. Accordingly, USAF has omitted detailed examination of socioeconomics and environmental justice.

## **3.1 Air Quality**

### **3.1.1 Definition of the Resource**

Air quality in a given location is determined by the concentration of various pollutants in the atmosphere. National Ambient Air Quality Standards (NAAQS) are established by the U.S. Environmental Protection Agency (USEPA) for “criteria pollutants,” including ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>, or NO<sub>x</sub> when referring to any nitrogen oxide), sulfur dioxide (SO<sub>2</sub>, or SO<sub>x</sub> when referring to any sulfur oxide), particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>), particulate matter equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>), and lead (Pb). NAAQS represent maximum levels of background pollution in the ambient air that are considered safe, with an adequate margin of safety to protect public health and welfare (see Table 3-1).

Table 3-1. National Ambient Air Quality Standards

Pollutant	Standard Value <sup>b</sup>		Standard Type
<b>CO</b>			
8-hour Average	9 ppm	(10 mg/m <sup>3</sup> )	Primary
1-hour Average	35 ppm	(40 mg/m <sup>3</sup> )	Primary
<b>NO<sub>2</sub></b>			
Annual Arithmetic Mean	0.053 ppm	(100 µg/m <sup>3</sup> )	Primary and Secondary
<b>O<sub>3</sub></b>			
1-hour Average <sup>a</sup>	0.12 ppm	(235 µg/m <sup>3</sup> )	Primary and Secondary
8-hour Average	0.08 ppm	(157 µg/m <sup>3</sup> )	Primary and Secondary
<b>Pb</b>			
Quarterly Average		1.5 µg/m <sup>3</sup>	Primary and Secondary
<b>PM<sub>10</sub></b>			
Annual Arithmetic Mean		50 µg/m <sup>3</sup>	Primary and Secondary
24-hour Average		150 µg/m <sup>3</sup>	Primary and Secondary
<b>PM<sub>2.5</sub></b>			
Annual Arithmetic Mean		15 µg/m <sup>3</sup>	Primary and Secondary
24-hour Average		65 µg/m <sup>3</sup>	Primary and Secondary
<b>SO<sub>2</sub></b>			
Annual Arithmetic Mean	0.03 ppm	(80 µg/m <sup>3</sup> )	Primary
24-hour Average	0.14 ppm	(365 µg/m <sup>3</sup> )	Primary
3-hour Average	0.50 ppm	(1300 µg/m <sup>3</sup> )	Secondary

Notes:

<sup>a</sup> The ozone 1-hour standard applies only to areas that were designated nonattainment when the ozone 8-hour standard was adopted in July 1997. The new 8-hour ozone standard is currently being contested in Federal court. No areas have been deemed nonattainment with the new 8-hour standard pending resolution of this case.

<sup>b</sup> Parenthetical value is an approximately equivalent concentration.

ppm = parts per million

mg/m<sup>3</sup> = milligrams per cubic meter

µg/m<sup>3</sup> = micrograms per cubic meter

The Clean Air Act (CAA) places most of the responsibility to achieve compliance with the NAAQS on the individual states and/or local agencies that have been delegated CAA authority by USEPA. This is achieved through a State Implementation Plan (SIP), which is required under the CAA. The SIP is a compilation of goals, strategies, schedules, permitting programs, and enforcement actions that lead the state into compliance with all NAAQS. Any changes to the compliance schedule or plan must be incorporated into the SIP and approved by USEPA. Areas not in compliance with a standard can be declared "nonattainment areas" by USEPA or the appropriate state or local agency. Based on

the severity of an area's nonattainment (*i.e.*, number of times that ambient air quality exceeds the NAAQS), USEPA also categorizes nonattainment areas (*e.g.*, marginal, serious, severe, extreme). Areas designated by USEPA as being in nonattainment for one or more of the seven NAAQS may petition USEPA for redesignation as a maintenance area if they are able to demonstrate they have met the national standard for the three years preceding the redesignation request. At the time the state petitions USEPA for redesignation, it must also submit a revision of its SIP to provide for the maintenance of the applicable NAAQS for at least 10 years after redesignation ("maintenance plan") pursuant to CAA Section 175(A).

Under the General Conformity Rule, the CAA prohibits Federal agencies from performing projects that do not conform to a USEPA-approved SIP. In 1993, USEPA developed final rules for how Federal agencies must determine air quality conformity prior to implementing a proposed Federal action. Under these rules, certain actions are exempted from conformity determinations, while others are assumed to be in conformity if total project emissions are below *de minimis* levels established under 40 CFR 93.153. Total project emissions include both direct and indirect emissions caused by the Federal action.

The CAA and the CAA Amendments of 1990 also require states to permit "major" stationary sources. A major stationary source is a facility (*i.e.*, plant, base, or activity) that emits more than 100 tons per year (tpy) of any one criteria air pollutant, 10 tpy of a single hazardous air pollutant (HAP), or 25 tpy of any combination of HAPs. There are 188 listed HAPs regulated under the CAA. The purpose of the permitting rule is to establish regulatory control over large facilities or processes that routinely emit significant amounts of pollutant activities, and to assess and monitor their impact upon local and regional air quality.

USEPA classifies the air quality in an Air Quality Control Region (AQCR) or an air basin according to whether the concentration of criteria pollutants in ambient air exceeds the primary or secondary NAAQS. The State of Maryland is divided into six AQCRs; Andrews AFB is located in AQCR IV.

Areas within each AQCR are designated as "attainment," "nonattainment," or "unclassifiable" for each of the six criteria pollutants. Attainment means that the air quality within an air basin or AQCR is better than the NAAQS; nonattainment indicates that a specific air pollutant's concentration exceeds NAAQS; and an unclassifiable air quality designation by USEPA means that there is not enough information to classify an air basin or AQCR appropriately, so the area is considered attainment.

The General Conformity Rule requires that any Federal action conform to the requirements of a SIP or Federal Implementation Plan. More specifically, CAA Conformity is assured when a Federal action *does not do any one of the following*:

- Cause a new violation of a NAAQS
- Contribute to an increase in the frequency or severity of violations of NAAQS
- Delay the timely attainment of any NAAQS, interim progress milestones, or other milestones toward achieving compliance with the NAAQS

The Conformity Rule applies only to actions in nonattainment or maintenance areas, and considers both direct and indirect emissions. However, since stationary sources are addressed by local or state New Source Review (NSR) permitting requirements that ensure conformity with applicable CAA elements, this rule only addresses nonstationary/unpermitted emissions sources. Additionally, the rule applies only to Federal actions that are considered “regionally significant” or where the total emissions from the action meet or exceed the *de minimis* thresholds. An action is regionally significant when the total nonattainment pollutant emissions exceed 10 percent of the nonattainment areas total emissions inventory for that nonattainment pollutant. If a Federal action meets the *de minimis* threshold requirements and is not considered regionally significant, then a full Conformity Determination is not required.

### 3.1.2 Existing Condition

**Regional Climate.** The climate at Andrews AFB is temperate and influenced by an easterly air flow that produces frequent successions of high and low pressure systems. Rainfall is generally distributed throughout the year, with summer being the wettest season. The average annual temperature at Andrews AFB is 56 degrees Fahrenheit (°F), the mean annual precipitation is 42.46 inches, the mean average snowfall is 21.5 inches, and the average wind speed is 6 knots (USAF 2001).

**Regional Air Quality.** Andrews AFB is located in Prince George’s County, Maryland within the boundaries of Maryland AQCR IV, which is regulated by Maryland Department of the Environment (MDE). This region consists of Washington, D.C.; Prince George’s, Montgomery, Calvert, Charles, and Fredrick counties, Maryland; Stafford, Prince William, Loudoun, Arlington, and Fairfax counties, Virginia; and the cities of Falls Church and Alexandria, Virginia. Based on historical ambient air quality monitoring records, Maryland AQCR IV has been designated by the USEPA as a “severe” nonattainment area for O<sub>3</sub>. Ground-level O<sub>3</sub> is created by chemical reactions between NO<sub>x</sub> and volatile organic compounds (VOCs) in the presence of sunlight. Emissions from industrial facilities

and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NO<sub>x</sub> and VOCs. USEPA is also establishing dates by which Washington, D.C., the State of Maryland, and the Commonwealth of Virginia each must submit revisions to their SIPs to adopt severe area requirements. Maryland AQCR IV is in attainment for CO, PM<sub>10</sub>, SO<sub>x</sub>, NO<sub>2</sub>, and Pb.

Air quality regulations for the State of Maryland are in the Code of Maryland Regulations (COMAR) 26.11. As required under MDE rules and regulations, each year Andrews AFB compiles and submits an inventory of regulated pollutant emissions from permitted stationary sources (AFIERA 2002a). This comprehensive inventory includes stationary or permitted equipment, as well as fugitive and area sources of regulated pollutants generated during the reporting period.

## **3.2 Geological Resources**

### **3.2.1 Definition of the Resource**

Geological resources consist of the earth's surface and subsurface materials. Within a given physiographic province, these resources typically are described in terms of topography, soils, geology, minerals, and, where applicable, paleontology.

Geology, the study of the earth's composition, provides information on the structure and configuration of surface and subsurface features. Such information derives from field analysis based on observations of the surface and borings to identify subsurface composition. Hydrogeology extends the study of the subsurface to water-bearing structures. Hydrogeological information helps in the assessment of groundwater quality and quantity and its movement.

Topography pertains to the general shape and arrangement of a land surface, including its height and the position of its natural and human-made features.

Soils are the unconsolidated materials overlying bedrock or other parent material. Soils typically are 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 applications or uses. In appropriate cases, soil properties must be examined for their compatibility with particular construction activities or types of land use.



### **3.2.2 Existing Condition**

*Physiography and Topography.* Andrews AFB is near the western edge of the middle Atlantic Coastal Plain physiographic province with the fall line between the Piedmont and Coastal Plain located approximately 12 miles west of the main base. The Blue Ridge Mountains are about 60 miles west of the main base, and the Chesapeake Bay is 25 miles east. The Coastal Plain province is primarily characterized by unconsolidated substrata. The vast majority of this area is level to gently sloping with local relief generally being less than 100 feet, except for moderately steep stream banks. Andrews AFB is located in a level plateau between the Anacostia River on the west and the Patuxent River on the east. Land surface elevations on Andrews AFB vary from approximately 215 feet above mean sea level to about 281 feet above mean sea level (USAF 2001).

*Natural Hazards.* The mid-Atlantic and central Appalachian region, including Maryland, is characterized by a moderate amount of low-level earthquake activity, but their cause or causes are largely a matter of speculation. In Maryland, for example, there are numerous faults, but none are known or suspected to be active. Because of the relatively low seismic energy release, this region has received little attention from earthquake seismologists (MGS 2003).

*Soils.* Two major soil associations are present in the Andrews AFB area, the Sassafras-Croom association and the Beltsville-Leonardtown-Chillum association (USAF 2001). The Sassafras-Croom association is found along major drainage ways to Tinker Creek and Piscataway Creek. It consists of gently sloping to steep, well-drained, dominantly gravelly soils with a compact subsoil or substratum. This association consists of 30 percent Sassafras soils, 25 percent Croom soils, and 45 percent minor soils.

The Beltsville-Leonardtown-Chillum association covers most of the north end of main base, extends through the central portion of main base to the southern boundary and along the eastern boundary of the base. These soils are predominately gently to moderately sloping, but might include areas that are nearly level to fairly steep. This association consists mainly of moderately deep, well-drained soils with a compacted subsoil or substratum. This association is composed of about 45 percent Beltsville soils, 13 percent Leonardtown soils, and 42 percent Chillum and minor soils.



### **3.3 Water Resources**

#### **3.3.1 Definition of the Resource**

Water resources include groundwater, surface water, and floodplains. The quantity and quality of available water and the demand for potable, irrigation, and industrial water affect its value.

**Groundwater.** Groundwater consists of the subsurface hydrologic resources. It is an essential resource often used for potable water consumption, agricultural irrigation, and industrial applications. Groundwater typically may be described in terms of its depth from the surface, aquifer or well capacity, water quality, surrounding geologic composition, and recharge rate.

**Surface Water.** Surface water resources consist of lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale. Storm water flows, which can be exacerbated by high proportions of impervious surfaces associated with buildings, roads, and parking lots, are important to management of surface water. Storm water is important to surface water quality also because of the potential to introduce sediments and other contaminants into lakes, rivers, and streams.

Storm water systems convey precipitation away from developed sites to appropriate receiving surface waters. For a variety of reasons, storm water systems might employ many different devices to slow the movement of water. For instance, a large, sudden flow could scour a streambed and harm biological resources in that habitat. Storm water systems provide the benefit of reducing amounts of sediments and other contaminants that would otherwise flow directly into surface waters. Failure to size storm water systems appropriately to either hold or delay conveyance of the largest predicted precipitation event often leads to downstream flooding and the environmental and economic damages associated with flooding. As a general rule, higher densities of development, such as those found in urban areas, require greater degrees of storm water management because of the higher proportions of impervious surfaces that occur in urban centers.

**Floodplains.** Floodplains are areas of low-level ground present along a river or stream channel. Such lands might be 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, which evaluates the floodplain for 100- and 500-year flood events. EO 11988, *Floodplain Management*; state; and local regulations often limit floodplain development to passive

uses such as recreational and preservation activities in order to reduce the risks to human health and safety.

### **3.3.2 Existing Condition**

**Groundwater.** Andrews AFB is located in a section of the Inner Coastal Plain where several minor and regional aquifers exist. Several of these hydrogeologic units occur at or near the ground surface. The upland deposits are typically underlain by the Calvert Formation, consisting of stratified sand, silt, clay, and gravel. Groundwater is generally encountered at depths of less than 20 feet below ground level and probably exists under water table conditions. Precipitation is the main source of groundwater recharge to the upland deposits. The general direction of groundwater movement is believed to be downgradient toward local streams or downward to underlying aquifers.

Several major or regionally significant aquifers underlie the main base at significant depths (USAF 2001). In descending stratigraphic sequence, these include the Aquia, Magothy, Patapsco, and Patuxent formations. The lake supply well (depth of this well is approximately 385 feet) near the base lake at Andrews AFB draws water from the Patapsco formation. The Aquia formation, which lies at approximately 150 feet, is not a major aquifer at Andrews AFB; however, this formation receives recharge in the area northwest of Andrews AFB where the aquifer directly underlies the upland deposits.

**Surface Water.** Andrews AFB and the surrounding area are located within three significantly diverse watersheds: the Potomac River, Anacostia River, and Patuxent River. These watersheds drain 2,317 square miles of the east-central portion of the Chesapeake Bay Basin. The Potomac River Watershed drains approximately 158,000 acres of the eastern portion of Prince George's County, while 132,000 acres drain to the Anacostia River (USAF 2001). The majority of the base lies within the Potomac River Watershed. Several major tributaries to the Potomac River originate on Andrews AFB or fall within relatively short proximity of its boundaries.

**Floodplains.** Floodplains are defined as areas adjoining inland or coastal waters that are prone to flooding. These areas must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation more than a designated height. Once a floodplain is established, no additional obstruction (*e.g.*, a building) should be placed in the floodplain that would increase the 100-year flood water surface elevation. Floodplains occur in two locations on Andrews AFB, one on the far western boundary of the base and the other on the southern boundary near the base lake (USAF 2001).

## **3.4 Hazardous Materials and Wastes**

### **3.4.1 Definition of the Resource**

Hazardous material is defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and the Toxic Substances Control Act, as any substance with physical properties of ignitability, corrosivity, reactivity, or toxicity that might cause an increase in mortality, serious irreversible illness, incapacitating reversible illness, or pose a substantial threat to human health or the environment. Hazardous waste is defined by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste Amendments, as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes that poses a substantial present or potential hazard to human health or the environment.

Evaluation of hazardous materials and wastes focuses on underground storage tanks (USTs) and aboveground storage tanks and the storage; transport and use of pesticides and herbicides; fuels; and petroleum, oil, and lubricants (POL). Evaluation might also extend to generation, storage, transportation, and disposal of hazardous wastes when such activity occurs at or near the project site of a proposed action. In addition to being a threat to humans, the improper release of hazardous materials and wastes can threaten the health and well being of wildlife species, botanical habitats, soil systems, and water resources. In the event of release of hazardous materials or wastes, the extent of contamination varies based on the type of soil, topography, and water resources.

Special hazards are those substances that might pose a risk to human health but are not regulated as contaminants under the hazardous wastes statutes. Hazards associated with the Proposed Action are asbestos-containing material (ACM) and lead-based paint (LBP). The presence of special hazards or controls over them might affect, or be affected by, a proposed action. Information on special hazards describing their locations, quantities, and condition assists in determining the significance of a proposed action.

To protect habitats and people from inadvertent and potentially harmful releases of hazardous substances, the Department of Defense (DOD) has dictated that all facilities develop and implement Hazardous Material Emergency Planning and Response Plans or Spill Prevention, Control, and Countermeasure Plans. Also, DOD has developed the Environmental Restoration Program (ERP), intended to facilitate thorough investigation and cleanup of contaminated sites located on military installations. These plans and programs, in addition to established legislation (*i.e.*, CERCLA and

RCRA), effectively form the “safety net” intended to protect the ecosystems on which most living organisms depend.

AFPD 32-70, *Environmental Quality*, establishes the policy that USAF is committed to:

- Cleaning up environmental damage resulting from its past activities
- Meeting all environmental standards applicable to its present operations
- Planning its future activities to minimize environmental impacts
- Managing responsibly the irreplaceable natural and cultural resources it holds in public trust
- Eliminating pollution from its activities wherever possible

AFPD 32-70 and the AFI 32-7000 series incorporate the requirements of all Federal regulations, other AFIs and DOD Directives for the management of hazardous materials, hazardous wastes, and special hazards.

### 3.4.2 Existing Condition

**Hazardous Materials.** AFI 32-7086, *Hazardous Materials Management*, establishes procedures and standards that govern management of hazardous materials throughout the USAF. It applies to all USAF personnel who authorize, procure, issue, use, or dispose of hazardous materials; and to those who manage, monitor, or track any of those activities. The 89 AW has established a hazardous materials pharmacy in accordance with AFI 32-7086 (AFIERA 2002b). The pharmacy ensures that only the smallest quantities of hazardous materials necessary to accomplish the mission are purchased and used.

Hazardous and toxic material procurement at Andrews AFB are approved and tracked by the Bioenvironmental Engineering Office located at Andrews AFB. The Environmental Management Flight office supports and monitors environmental permits, hazardous material and hazardous waste storage, spill prevention and response, and participation on the Base Environmental Protection Committee.

**Hazardous Wastes.** Hazardous wastes generated within the State of Maryland must be managed in accordance with USEPA (40 CFR Parts 260–282), State of Maryland (COMAR 26.13, *Disposal of Controlled Hazardous Substances*), and USAF regulatory requirements (AFI 32-7042, *Solid and Hazardous Waste Compliance*). The 89 AW maintains a *Hazardous Waste Management Plan* as directed by AFI 32-7042 (AFIERA 2002b). This plan prescribes the roles and responsibilities of all

members of Andrews AFB with respect to the waste stream inventory, waste analysis plan, hazardous waste management procedures, training, emergency response, and pollution prevention. The plan establishes the procedures to comply with applicable Federal, state, and local standards for solid and hazardous waste management.

Wastes generated at Andrews AFB include pesticides, herbicides, POL, deicing fluids, flammable solvents, contaminated fuels and lubricants, paint/coating, stripping chemicals, waste oils, waste paint-related materials, municipal solid waste (MSW), and other miscellaneous wastes. Management of hazardous wastes is the responsibility of each waste-generating organization and environmental flight (89 CES/CEV). Andrews AFB has a USEPA permit for hazardous waste (AFIERA 2002b).

A USEPA identification number has been assigned to Andrews AFB for use in tracking hazardous waste once it leaves the base. It is the responsibility of hazardous waste generators to ensure that their hazardous waste is transferred daily to a designated 90-day hazardous waste site. Accumulation of hazardous wastes at Andrews AFB includes three different periods of accumulations: initial accumulation points, interim accumulation (accumulation site) at the centralized accumulation site (90-day storage area), and extended storage at the treatment, storage, and disposal facility. There are a number of initial accumulation points authorized on Andrews AFB. Each organization has appointed a primary and alternate manager for each hazardous waste site on Andrews AFB. Hazardous waste generators are required to maintain a listing of all the hazardous waste streams generated in their section, with proper identification, handling, storage, and record keeping.

**Pollution Prevention.** AFI 32-7080, *Pollution Prevention Program*, implements the regulatory mandates in the Emergency Planning and Community Right-to-Know Act, Pollution Prevention Act of 1990; EO 12856, *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements*; EO 12902, *Energy Efficiency and Water Conservation at Federal Facilities*; and EO 13101, *Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*. In accordance with EO 13101, USAF preferentially chooses recycled-content products where possible. AFI 32-7080 prescribes the establishment of Pollution Prevention Management Plans. The 89 AW fulfills this requirement with the following plans:

- Storm Water Pollution Prevention Plan (89 AW 1998)
- Hazardous Waste Management Plan Andrews AFB, Maryland (AFIERA 2002b)
- Pollution Prevention Management Plan (AAFB 2003b)
- Solid Waste Management Plan (AAFB 2003c)

These plans assist Andrews AFB in maintaining a waste reduction program and meeting the requirements of the Clean Water Act; the National Pollutant Discharge Elimination System (NPDES) permit program; and Federal, state, and local requirements for spill prevention control and countermeasures.

**Asbestos-Containing Material.** AFI 32-1052, *Facilities Asbestos Management*, provides the direction for asbestos management at USAF installations. This instruction incorporates by reference applicable requirements of 29 CFR Part 669 *et seq.*, 29 CFR 1910.1025, 29 CFR 1926.58, 40 CFR 61.3.80, Section 112 of the CAA, and other applicable AFIs and DOD Directives. AFI 32-1052 requires bases to develop an asbestos management plan for the purpose of maintaining a permanent record of the status and condition of ACM in installation facilities, as well as documenting asbestos management efforts. In addition, the instruction requires installations to develop an asbestos operating plan detailing how the installation accomplishes asbestos-related projects. ACM is regulated by the USEPA with the authority promulgated under the Occupational Safety and Health Act, 29 United States Code Section 669, *et seq.* Section 112 of the CAA and COMAR 26.11.21, *Control of Asbestos*, regulate emissions of asbestos fibers to ambient air. The USEPA policy is to leave asbestos in place if disturbance or removal could pose a health threat.

Asbestos at Andrews AFB is managed in accordance with the *Asbestos Management Program Plan* that was updated in 2002 (89 AW 2002). This plan specifies procedures for the removal, encapsulation, enclosure, and repair activities associated with ACM abatement projects. Additionally, it is designed to protect personnel who live and work on Andrews AFB from exposure to airborne asbestos fibers as well as to ensure the installation remains in compliance with Federal, state, and local regulations pertaining to ACM. Not all of the buildings on Andrews AFB have been surveyed to locate, identify, and evaluate all ACM (89 AW 2002). Materials that might contain asbestos include pipe insulation and floor tiles. ACM are removed on an as-needed basis to minimize health risks from release of asbestos fibers during normal activities, maintenance, renovation, or demolition.

**Lead-Based Paint.** The Residential Lead-Based Paint Hazard Reduction Act of 1992, Subtitle B, Section 408 (commonly called Title X), passed by Congress on October 28, 1992, 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.

USAF policy and guidance establishes LBP management at USAF facilities. The policy incorporates by reference the requirements of COMAR 26.16 (*Lead*), 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. Additionally, the policy requires each installation to develop and implement a facility management plan for identifying, evaluating, managing, and abating LBP hazards. LBP at Andrews AFB is managed in accordance with the *Lead-Based Paint Management Plan* that was updated in 2002 (USAF 2002). Not all of the buildings on Andrews AFB have been surveyed to locate, identify, and evaluate all materials containing LBP (USAF 2002).

***Environmental Restoration Program.*** ERP, formerly known as the Installation Restoration Program, is a subcomponent of the Defense Environmental Restoration Program that became law under SARA. The ERP requires each DOD installation to identify, investigate, and cleanup hazardous waste disposal or release sites.

Andrews AFB began its ERP in 1985 with the investigation of possible locations of hazardous wastes contamination (Amoako 2003). Andrews AFB was officially listed on the National Priorities List by USEPA in May 1999. The CERCLA sites are managed by the Andrews AFB's regulatory partnering group, which includes USEPA, MDE, and the Prince George's County Health Department. Petroleum sites exempted from regulation under CERCLA are delegated by USEPA to the MDE Waste Management Administration, Oil Control Program.

Andrews AFB manages 23 sites and 10 Areas of Concern (AOC), which includes three remote sites located in Brandywine and Davidsonville, Maryland. Numerous cleanup actions have taken place at Andrews AFB, including the removal of hundreds of USTs, installation of groundwater treatment systems at key locations, and removal of residual waste from areas to decrease the risk to human health and the environment.

Four of the 23 sites and 10 AOCs have been closed by MDE's Oil Control Program (Amoako 2003). All the contamination at the Andrews AFB ERP sites, with the exception of one (Landfill 5/LF-05), is contained within the base boundaries. An additional ERP site (SS01) is located off-base at the Bradywine Communications Site. A remedial investigation is currently ongoing to assess the off-base contamination, if any, resulting from past waste-disposal activities at LF-05.

Andrews AFB is still evaluating the potential risks posed by the contamination at their other ERP sites and AOCs. However, from information gathered so far, no surrounding communities are affected.



## 3.5 Infrastructure

### 3.5.1 Definition of the Resource

Infrastructure consists of the systems and physical structures that enable a population in a specified area to function. Infrastructure is wholly human-made, with a high correlation between the type and extent of infrastructure and the degree to which an area is characterized as “urban” or developed. The availability of infrastructure and its capacity to support growth are generally regarded as essential to economic growth of an area. The infrastructure information contained in this section was obtained from the *Andrews Air Force Base General Plan* and provides a brief overview of each infrastructure component and comments on its existing general condition (AAFB undated). The infrastructure components to be discussed in this section include transportation systems, utilities (electrical power, natural gas, liquid fuel, and water supply), solid waste, and sanitary systems.

Solid waste management primarily deals with the availability of landfills to support a population’s residential, commercial, and industrial needs. Alternative means of waste disposal may involve waste-to-energy programs or incineration. In some localities, landfills are designed specifically for, and limited to, disposal of construction and demolition debris. Recycling programs for various waste categories (*e.g.*, glass, metals, and papers) reduce reliance of landfills for disposal.

### 3.5.2 Existing Condition

*Transportation Systems.* Andrews AFB is located approximately five miles southeast of Washington, D.C. The base is situated at the confluence of major transportation arteries making it readily accessible to Washington, D.C., State of Maryland, and Commonwealth of Virginia.

The off-base transportation system consists of regional access to the base via Interstate 495, to the north. The base is bounded by Allentown Road (State Route [SR]-337) on the west and north, Branch Avenue (SR-5) on the west, Marlboro Pike and Pennsylvania Avenue (SR-4) on the northeast, Dower House Road on the east, and Old Alexandria Ferry Road on the south. Suitland Road provides direct access to the Main Gate at Andrews AFB. Other Andrews AFB gates are West Gate, North Gate, Virginia Avenue Gate, Maryland Gate, and Pearl Harbor Gate. The West, Maryland, and Pearl Harbor gates are not used. The Virginia Avenue Gate is open, and the North Gate is open with restrictions. Traffic patterns and gate openings are subject to change on short-notice to meet required Force Protection conditions. The transportation network on-base is delineated according to the road classifications outlined in AFI 32-7062, *Air Force Comprehensive Planning*. This AFI classifies the road network into three groups: arterial, collector, and local.



A network of major and minor collector roads provide vehicular circulation on the base. These roads are fed by local residential and limited-access streets. The major roads on-base are Perimeter Road, Patrick Avenue, Arnold Drive, Virginia Avenue, and Menoher Drive. Minor roads on-base are Pennsylvania Avenue/Fetchet Avenue, Brookley Avenue, Alabama Avenue/D Street, Arkansas Road/Arkansas Avenue, San Antonio Boulevard, Tuskegee Drive, and Atlanta Avenue.

***Electrical Power.*** The Potomac Electric Power Company (PEPCO) provides Andrews AFB with electrical power. The base receives power delivered through three high voltage primary feeders via overhead lines and a 69-kilovolt main substation. The primary electrical distribution system on base is via 13.2 kilovolt transmission lines. Power metering in the main substation belongs to PEPCO and all other electrical equipment in the main substation and throughout the base is government owned and maintained.

***Natural Gas.*** Washington Gas Light Company provides Andrews AFB housing units with natural gas. There are two separate 100-pounds per square inch gauge steam distribution systems serving the rest of the base. Each of these distribution systems is served by a central heating plant. Both systems consist of direct-buried piping; however, the western system is selectively being replaced with shallow-trench mains. All boilers in these two central heating plants have recently been converted to natural gas.

***Liquid Fuel.*** STS Services provides liquid fuel distribution to Andrews AFB via an 8-inch pipeline. This line enters the base and connects to three storage tanks owned by Piney Point Industries before finally connecting to USAF-owned POL systems. Andrews AFB uses JP-8, diesel, compressed natural gas, and motor gas fuels.

***Water Supply, Wastewater and Storm Water Systems.*** The Washington Suburban Sanitary Commission (WSSC) provides water supply to Andrews AFB via a 14-inch service connection.

No wastewater treatment plant is located on Andrews AFB. However, there are 128 lift stations located throughout the base. Domestic and industrial wastewater is piped to a wastewater treatment plant managed by the WSSC. Wastewater is monitored at two sites on Andrews AFB: one on the east side of the base, and one on the west side of the base.

There are five small ponds and one larger surface water impoundment on Andrews AFB. Storm water passes through oil/water separators in the industrial areas and through swales and ditches in other areas. Primarily, underground concrete pipes convey storm water runoff. Two major storm

drain outfalls discharge eventually into Henson Creek, Meeting House, and the Payne Branch to the west; Henson and Cabin Creeks and the Charles Branch to the east; and Piscataway Creek to the southeast. Ultimately, the discharges flow to the Patuxent and Potomac rivers (USAF 2001).

**Solid Waste.** MSW at Andrews AFB is managed in accordance with the guidelines specified in AFI 32-7042, *Solid and Hazardous Waste Compliance*. This AFI incorporates by reference the requirements of COMAR 26.04.07, *Solid Waste Management*; Subtitle D, 40 CFR Parts 240 through 244, 257, and 258; and other applicable Federal regulations, AFIs, and DOD Directives. In general, AFI 32-7042 establishes the requirement for installations to have a solid waste management program that incorporates the following: a Solid Waste Management Plan (AAAFB 2003c); procedures for handling, storage, collection, and disposal of solid waste; record-keeping and reporting; and pollution prevention.

The Environment Article Annotated Code of Maryland and COMAR Title 26 are the primary statute and regulations relating to environmental protection and regulation in the State of Maryland. These laws and regulations contain requirements for landfills, ACM, medical waste, tire recycling, industrial waste disposal, and wood waste, newsprint, plastic container labeling, telephone directory recycling, yard waste banned from disposal facilities, battery collection and battery recycling. The annual reporting of quantities of solid waste disposed in the state, and the jurisdictions where it originated is also governed by these laws. In addition, solid waste exported from the state for disposal is addressed within these laws and regulations.

A contractor handles the collection, transportation, and removal of nonhazardous MSW from Andrews AFB. Waste is collected in dumpsters located throughout the base and then removed. Currently, there are no operating landfills at Andrews AFB.

Subtitle 21-126 of the Prince George's County Code and Section 9-210(b) (2) and (3) of the Environment Article regulate the disposal of materials in a rubblefill. A rubblefill is a landfill in which construction or building demolition rubble is placed in a controlled manner. Rubble is a type of solid waste and includes land clearing debris, demolition debris and construction debris.

In Prince George's County, there is currently one operating rubblefill, the Ritchie-Marlboro facility (PGC 2002). The Ritchie-Marlboro Road Rubblefill has an approved state permit (1999-WRF-0126) and county license (RF-001-86) and is currently in operation. Recently, an additional 30 acres were purchased at the site. However, this additional land is not approved for use as part of the existing rubblefill operation. The projected capacity based on projected demands is an additional 20 years.

Nonhazardous MSW from Andrews AFB is primarily transported to the Brown Station Road Sanitary Landfill, located in Prince George's County approximately two miles northwest of the Town of Upper Marlboro. The Brown Station Road Sanitary Landfill is managed by Prince George's County.

In Fiscal Year (FY) 2002, Andrews AFB disposed 1,177 tons of nonhazardous MSW and 17.5 tons of construction and demolition (C&D) waste (AAFB 2003c). C&D wastes on Andrews AFB have been hard to quantify since historical records have not been kept and not all contractors report their C&D waste streams to 89 CES/CEV. Andrews AFB is currently trying to correct this problem to obtain a more accurate estimate of the C&D waste stream (AAFB 2003c). C&D waste generated from specific construction, renovation, and maintenance projects on Andrews AFB, most of which are performed by off-base contractors, is the responsibility of the contractor. All nonrecyclable C&D waste is collected in C&D dumpsters and stored on the project site until it is taken away by the contractor to an approved C&D landfill. C&D waste contaminated with hazardous waste, ACM, LBP, or other undesirable components are managed in accordance with AFI 32-7042.

## **3.6 Safety**

### **3.6.1 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 addresses (1) workers' health and safety during demolition and construction activities and facilities construction, and (2) public safety during demolition and construction activities and during subsequent operations of those facilities.

Construction work site safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that 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 USAF regulations designed to comply with standards issued by the Occupational Safety and Health Administration and USEPA. These standards specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors.

Other safety issues typically associated with and specific to military flying units and their airfields include the potential for mid-air aircraft mishaps, aircraft collisions with objects on the ground, weather-related accidents, and bird-aircraft collisions. However, since the Proposed Action does not

involve additions to or changes in any of the aircraft operations at Andrews AFB, information relating to the safety of aircraft is not presented in this EA.

### **3.6.2 Existing Condition**

All contractors performing construction activities at Andrews AFB 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 base personnel. An industrial hygiene program addresses exposure to hazardous materials, use of personal protective equipment, and availability of Material Safety Data Sheets. Industrial hygiene is the responsibility of contractors, as applicable. 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.

***THIS PAGE INTENTIONALLY LEFT BLANK***

## 4. Environmental Consequences

This section of the EA assesses potential environmental consequences associated with the Proposed Action. Potential impacts are addressed in the context of the scope of the Proposed Action as described in Section 2.0 and in consideration of the potentially affected environment as characterized in Section 3.0. The EA analysis includes direct, indirect, and cumulative impacts. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative effects are impacts that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). The cumulative impact analysis is provided in Section 5 of this EA.

### 4.1 Air Quality

#### 4.1.1 Evaluation Criteria

The potential impacts on local and regional air quality conditions near a proposed Federal action are determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. Specifically, the impact in NAAQS attainment areas would be considered significant if the net increases in pollutant emissions from the Federal action resulted in one of the following scenarios:

- Caused or contributed to a violation of any national or state ambient air quality standard
- Exposed sensitive receptors to substantially increased pollutant concentrations
- Represented an increase of ten percent or more emissions inventory in the affected AQCR

Impacts on air quality in NAAQS nonattainment areas would be considered significant if the net changes in project-related pollutant emissions resulted in one of the following scenarios:

- Caused or contributed to a violation of any national or state ambient air quality standard
- Increased the frequency or severity of a violation of any ambient air quality standard
- Exceeded any significance criteria established in a SIP
- Delayed the attainment of any standard or other milestone contained in the SIP

With respect to the General Conformity Rule, impacts on air quality would be considered significant if the proposed Federal action resulted in an increase of a nonattainment or maintenance area's emissions inventory by ten percent or more for one or more nonattainment pollutants. The project could also be significant if such 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 designated as a nonattainment or maintenance area. In such cases, a more detailed conformity determination is required.

The *de minimis* threshold emission rates were established by USEPA in the General Conformity Rule in order to focus analysis requirements on Federal actions with the potential to have significant air quality impacts. Table 4-1 presents these thresholds by regulated pollutant. These *de minimis* thresholds are similar, in most cases, to the definitions for major stationary sources of criteria and precursors to criteria pollutants under the CAA's NSR Program (CAA Title I). As shown in Table 4-1, *de minimis* thresholds vary depending upon the severity of the nonattainment area designation by USEPA.

**Table 4-1. General Conformity Rule *de minimis* Emission Thresholds**

Pollutant	Status	Nonattainment Classification	<i>de minimis</i> Threshold (tpy)
O <sub>3</sub> (measured as NO <sub>x</sub> or VOCs)	Nonattainment	Extreme	10
		Severe	25
		Serious	50
		Moderate/marginal (inside ozone transport region)	50 (VOCs)/100 (NO <sub>x</sub> )
		All others	100
Maintenance	Inside ozone transport region	50 (VOCs)/100 (NO <sub>x</sub> )	
	Outside ozone transport region	100	
CO	Nonattainment/ Maintenance	All	100
PM <sub>10</sub>	Nonattainment Maintenance	Serious	70
		Moderate	100
		Not Applicable	100
SO <sub>2</sub>	Nonattainment/ maintenance	Not Applicable	100
NO <sub>2</sub>	Nonattainment/ maintenance	Not Applicable	100

Source: 40 CFR 93.153(b)

Federal Prevention of Significant Deterioration (PSD) regulations also define air pollutant emissions to be significant if (1) a proposed major stationary source is within 10 kilometers of any Class I area, and (2) regulated pollutant emissions would cause an increase in the 24-hour average concentration of 1 microgram per cubic meter or more of any regulated pollutant in the Class I area (40 CFR 52.21(b)(23)(iii)). PSD regulations also define ambient air increments—limiting the allowable increases to any area’s baseline air contaminant concentrations, based on the area’s designation as Class I, II, or III (40 CFR 52.21(c)).

Local and regional pollutant impacts resulting from direct and indirect emissions from stationary emissions sources under the Proposed Action are addressed through Federal and state permitting program requirements under the NSR and PSD regulations (40 CFR Parts 51 and 52 and MDE regulations). As noted previously, Andrews AFB has appropriate permits in place and has met all applicable permitting requirements and conditions for specific stationary devices.

#### **4.1.2 Environmental Consequences**

The Proposed Action consists of three projects including construction and remodeling activities. A description of each construction project is provided in Section 2.2. The proposed construction activities would result in emissions of criteria pollutants as combustion products from construction equipment as well as evaporative emissions from architectural coatings and asphalt paving operations and would be of a temporary nature. These emissions would produce slightly elevated short-term PM<sub>10</sub> ambient air concentrations. However, the effects would be temporary, and would fall off rapidly with distance from the proposed construction site.

### **4.2 Geological Resources**

#### **4.2.1 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 potential impacts of a proposed action on geological resources. Generally, impacts can be avoided or minimized if proper construction techniques, erosion control measures, and structural engineering design are incorporated into project development.

Analysis of potential impacts on geological resources typically includes the following steps:



- Identification and description of resources that could potentially be affected
- Examination of a proposed action and the potential effects this action could have on the resource
- Assessment of the significance of potential impacts
- Provision of mitigation measures in the event that potentially significant impacts are identified

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

#### **4.2.2 Environmental Consequences**

The soils underlying the proposed CE warehouse construction site would be directly impacted from site preparation activities. Interior modifications to Buildings 3296 and 3415 would have no effect on geological resources. Land clearing and excavation for facility foundations and storm water systems would require that the upper layers of the soil strata be removed. Only short-term, adverse effects on geological resources are expected as a result of the Proposed Action, which would arise from new construction activities (*i.e.*, grading, excavating, and recontouring of the soil). The Proposed Action would comply with COMAR 26.17.01, *Maryland Erosion and Sediment Control Guidelines for State and Federal Projects*. To minimize adverse effects from sediment erosion and runoff, a Sediment and Erosion Control Plan must be prepared for all projects equaling or exceeding 5,000 square feet. The proposed CE warehouse (10,000 square feet) would require a site-specific Sediment and Erosion Control Plan. Sediment and Erosion Control Plans must be coordinated with the contracting office and 89 CES/CEV before submission to MDE.

Best management practices would be used to limit potential impacts resulting from construction activities. Fugitive dust from construction activities would be minimized by watering and soil stockpiling, thereby reducing to negligible levels the total amount of soil exposed. Standard erosion control means (*e.g.*, silt fencing, sediment traps, application of water sprays, and revegetation at disturbed areas) would also reduce potential impacts related to these characteristics. Therefore, impacts on soils at the base would not be significant.

The Proposed Action would not cause or create significant changes to the topography of Andrews AFB or the surrounding area. Therefore, no significant direct or indirect impacts on geological resources would result from implementation of the Proposed Action.

## 4.3 Water Resources

### 4.3.1 Evaluation Criteria

Significance criteria for water resources impacts are based on water availability, quality, and use; existence of floodplains; and associated regulations. A potential impact on water resources would be significant if it were to result in one of the following scenarios:

- Reduce water availability to existing users or interfere with the supply
- Create or contribute to overdraft of groundwater basins or exceed safe annual yield of water supply sources
- Adversely affect water quality or endanger public health by creating or worsening adverse health hazard conditions
- Threaten or damage unique hydrologic characteristics
- Violate established laws or regulations that have been adopted to protect or manage water resources of an area.

The impact of flood hazards on a proposed action is potentially significant if such an action is proposed in an area with a high probability of flooding.

### 4.3.2 Environmental Consequences

Construction activities associated with the CE warehouse could result in increased soil runoff, adversely impacting surface water quality. The new parking lot between Buildings 3296 and 3415 would increase impervious surfaces, which could also lead to an adverse effect on water quality due to a greater volume of storm water runoff. The interior modifications to Buildings 3296 and 3415 would not have any effect on water resources.

The Proposed Action would comply with COMAR 26.08.02, *Surface Water Quality Standards*; COMAR 26.17.01, *Erosion and Sediment Control Guidelines for State and Federal Projects*; and COMAR 26.17.02, *Storm Water Management Guidelines for State and Federal Projects*. By reference, 40 CFR Part 122 regarding NPDES permitting is incorporated into COMAR 26.17.02. Andrews AFB maintains a Storm Water Pollution Prevention Plan containing best management practices to control storm water runoff pertaining to Base activities (89 AW 1998). Adherence to proper engineering practices and applicable codes, ordinances, and plans would reduce storm water runoff-related impacts to a level of insignificance. The Proposed Action would require a Maryland NPDES General Permit for Construction Activity, Sediment and Erosion Control Plan, and Storm Water Management Plan. Erosion and sedimentation controls would be in place during construction

to reduce and control siltation or erosion impacts to areas outside of the construction site. Implementation of sediment and erosion controls, as specified in Section 4.2.2, during the proposed construction activities would maintain surface water runoff quality at levels comparable to existing conditions and would limit potential adverse effects on soils resulting from the Proposed Action.

Construction activities would require the use of water for dust suppression. The volume of water to be used for dust control would be minimal. Fugitive dust from construction activities would be minimized by watering and soil stockpiling, thereby reducing the total amount of soil impacted. No runoff would be expected to result for this process. Therefore, no significant direct or indirect impacts on surface water are expected to result from the use of water for dust control during construction.

Floodplains are not located near the region of influence and would not be affected, nor would the Proposed Action stimulate development in a floodplain.

Short-term, adverse effects from construction and demolition are expected as a result of the Proposed Action. The Proposed Action is not expected to have any long-term effects on water resources at Andrews AFB and so would not result in significant effects.

## **4.4 Hazardous Materials and Wastes**

### **4.4.1 Evaluation Criteria**

Numerous local, state, and Federal laws regulate the storage, handling, disposal, and transportation of hazardous materials and wastes. The primary purpose of these laws is to protect public health and the environment. Potential impacts associated with hazardous materials and wastes would be significant if the storage, use, transportation, or disposal of these substances increased substantially the risk to human health or exposure to the environment.

### **4.4.2 Environmental Consequences**

*Hazardous Materials.* Construction and renovation activities associated with the Proposed Action would require the use of certain hazardous materials such as paints, welding gases, solvents, preservatives, and sealants. It is anticipated that the quantity of products containing hazardous materials used during construction would be minimal, and they would be used only for a short time. Contractors would be responsible for the management of hazardous materials, which would be handled in accordance with Federal and state regulations; this includes contractors submitting a list of hazardous materials to the Contracting Officer prior to the start of a project.

Construction equipment that would be used contains fuel, lubricating oils, hydraulic fluid, and coolants that could be regulated hazardous substances if spilled or leaked on the construction site. During project activities, contractors would be required to minimize the potential for a release of hazardous substances from all construction equipment, inspect equipment daily to ensure that there are no discharges, maintain appropriate spill containment material on site, and store all fuels and other materials in appropriate containers. Equipment maintenance activities would not be conducted on the construction site.

**Hazardous Wastes.** 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. Construction of the proposed facility would not impact the Andrew AFB hazardous waste management program.

**Asbestos Containing Materials and Lead-Based Paint.** Any ACM or LBP encountered during modifications to Buildings 3296 or 3415 would be handled in accordance with established USAF policy and Andrew AFB's *Asbestos Management Program Plan* (89 AW 2002), *Final Lead-Based Paint Management Plan* (USAF 2002), and *Hazardous Waste Management Program Plan* (AFIERA 2002b). USAF regulations prohibit the use of ACM and LBP for new construction. Specifications for the building renovations would be in accordance with USAF policies and regulations.

**Pollution Prevention.** It is anticipated that the Proposed Action would not impact the pollution prevention program at Andrews AFB. It is the Contractor's responsibility to recycle, reclaim, or reuse all materials to avoid, to the greatest extent possible, disposing of waste generated as part of the project in landfills. The Contractor must also report (through the Contracting Office) the quantity of all wastes generated. Quantities of hazardous materials and chemical purchases, off-base transport of hazardous waste, disposal of MSW, and energy consumption would remain unchanged under with implementation of the Proposed Action. The Pollution Prevention Program at Andrews AFB would accommodate the Proposed Action.

**Environmental Restoration Program.** Two ERP sites are in the vicinity of the Proposed Action. AOC-26 is near the proposed CE warehouse, and SS-22 is underneath Buildings 3296 and 3415. The Proposed Action is not expected to have a significant effect on the ERP sites.

AOC-26, the Fuel Hydrant System (a RCRA petroleum site), is located just east of the proposed construction (AAFB 2001). The hydrant fueling system is 20 to 30 years old and inoperable. A 1995

study indicated residual petroleum in soil and groundwater adjacent to the hydrant system. Contamination is along the former hydrant system and primarily under the flightline.

SS-22, or Hangar 13 (also a RCRA petroleum site), is located in the eastern portion of Andrews AFB under the proposed renovations to Buildings 3296 and 3415 (AAFB 2001). During 1994 construction, contamination was encountered in the soil and groundwater. The site is believed to have originated from a leaking UST associated with pre-1961 aircraft refueling activities. Contaminants of concern include free-phase petroleum and dissolved petroleum constituents. Proposed interior modifications to Buildings 3296 and 3415 would not involve ground-breaking, so no effects on SS-22 are anticipated. However, soil grading and contours while paving the additional parking between Buildings 3296 and 3415 could expose contaminated soil.

Contaminated groundwater and soil from petroleum releases could be encountered in both the proposed CE warehouse and parking lot. To ensure the safety of site workers, a Health and Safety Officer would be present during all intrusive digging related to the Proposed Action to monitor air quality and to ensure all wastes are properly characterized. A site-specific health and safety plan would also be prepared in accordance with Occupational Safety and Health Administration requirements. A Certified Industrial Hygienist would review and approve the plan.

## **4.5 Infrastructure**

### **4.5.1 Evaluation Criteria**

Impacts on infrastructure are evaluated on their potential for disruption or improvement of existing levels of service and additional needs for energy and water consumption, wastewater systems, and transportation patterns and circulation. Impacts might arise from physical changes to circulation, construction activities, introduction of construction-related traffic on local roads, or changes in daily or peak-hour traffic volumes, and energy needs created by either direct or indirect workforce and population changes related to base activities.

### **4.5.2 Environmental Consequences**

*Transportation Systems.* A temporary, minor increase in traffic would be expected as a result of construction vehicles using existing roadways. However, following completion of the construction projects, traffic flow would resume to normal, resulting in no long-term significant direct or indirect effects on traffic from construction activities.

**Solid Waste.** In considering the basis for evaluating the significance of impacts on solid waste, several items were considered, including the degree to which the proposed construction projects could affect the existing solid waste management program and the capacity of the Brown Station Road Sanitary Landfill and the Ritchie-Marlboro Road Rubblefill. Solid waste generated from the proposed construction activities would consist of small amounts of building materials such as solid pieces of concrete, metals (conduit, piping, and wiring), and lumber. The Ritchie-Marlboro Road Rubblefill has an estimated 20 years of capacity, and has the capacity to handle the additional C&D solid waste stream from the Proposed Action (PGC 2003). Therefore, implementation of the Proposed Action at Andrews AFB would not impact the solid waste management program at Andrews AFB or the capacity of the Ritchie-Marlboro Road Rubblefill.

The Proposed Action would not result in net significant changes of use in electrical power, natural gas, liquid fuel, water supply, wastewater, or storm water systems. Modifications to the electrical power, water supply and wastewater, and communications system would be necessary under the Proposed Action, but they would be done in accordance with all applicable Maryland and Andrews AFB codes and regulations. Therefore, no effects would be expected.

## **4.6 Safety**

### **4.6.1 Evaluation Criteria**

If implementation of the Proposed Action would lead to a substantial increase in risks associated with the safety of personnel, contractors, or the local community at Andrews AFB, or hinder the ability to respond to an emergency, it would represent a significant impact. Furthermore, if implementation of the Proposed Action would result in incompatible land use with regard to safety criteria (*e.g.*, height restrictions), impacts on safety would be significant.

### **4.6.2 Environmental Consequences**

Implementation of the Proposed Action would slightly increase the short-term risk associated with construction workers performing work at Andrews AFB during the normal workday because the level of such activity would increase. Contractors would be required to establish and maintain safety programs. Projects associated with the Proposed Action would not pose a safety risk to base personnel or activities at the base. Short-term adverse effects are expected as a result of construction for the Proposed Action.

## **4.7 No Action Alternative**

Under the No Action Alternative, the CE warehouse would not be constructed and modifications to Buildings 3692 and 3415 would not occur. Conditions would remain as they are at present. While temporary construction-associated adverse effects would not occur, long-term adverse consequences would occur from implementation of the No Action Alternative. WHCA operations would continue without secure Communications Support Facilities at Andrews AFB.

## 5. Cumulative and Adverse Impacts

Cumulative impacts on environmental resources result from incremental effects of proposed actions, when combined with other past, present, and reasonably foreseeable future projects in the area. Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals. Informed decisionmaking is served by consideration of cumulative impacts resulting from projects that are proposed, under construction, recently completed, or anticipated to be implemented in the reasonably foreseeable future.

To evaluate for cumulative impacts, other projects were identified through a review of public documents, information gained from the IICEP, and coordination with multiple agencies. Recently, an EA involving the beddown of eight KC-135 Stratotankers and associated construction was completed for the Air Force Reserve Command at Andrews AFB. The project is located in the northern portion of Andrews AFB. Several small operations and maintenance projects are also underway, including demolition on an old incinerator on the east side of base, modifications to a small facility in the middle of the base, modifications to Building 1535, construction of a new CEV building, modifications that would upgrade the recycling center, construction of a consolidated Aircraft Supply Center facility, and construction of a new education center/library. These construction, demolition, and modification projects are small in scope and are located all over Andrews AFB. No cumulative impacts are anticipated from the Proposed Action in conjunction with any these projects.

### 5.1 Unavoidable Adverse Impacts

Unavoidable adverse impacts would result from implementation of the Proposed Action. None of these impacts would be significant.

*Geological Resources.* Under the Proposed Action, construction activities, such as grading, excavating, and recontouring of the soil, would result in soil disturbance. Implementation of best management practices during construction would limit potential impacts resulting from construction activities. Standard erosion control means would also reduce potential impacts related to these characteristics. Although unavoidable, the effect on soils at Andrews AFB is not considered significant.



**Hazardous Materials and Waste.** The generation of hazardous materials and wastes are unavoidable conditions associated with the Proposed Action. However, the potential for these unavoidable situations would not significantly increase over baseline conditions and, therefore, are not considered significant.

**Energy.** The use of nonrenewable resources is an unavoidable occurrence, although not considered significant. The Proposed Action would require the use of fossil fuels, a nonrenewable natural resource. Energy supplies, although relatively small, would be committed to the Proposed Action or No Action Alternative.

## **5.2 Compatibility of the Proposed Action and Alternatives with the Objectives of Federal, Regional, State, and Local Land Use Plans, Policies, and Controls**

Construction of the CE warehouse and modifications to Buildings 3296 would be located entirely within Andrews AFB boundaries. The proposed projects have been sited according to existing land use zones. Consequently, construction activities would not be in conflict with base land use policies or objectives. The Proposed Action would not conflict with any applicable off-base land use ordinances or designated clear zones.

## **5.3 Relationship Between Short-term Use and Long-term Productivity**

Short-term uses of the biophysical components of man's 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 five years. Long-term uses of man's environment include those impacts occurring over a period of more than five years, including permanent resource loss.

Several kinds of activities could result in short-term resource uses that compromise long-term productivity. Filling of wetlands or loss of other especially important habitats and consumptive use of high-quality water at nonrenewable rates are examples of actions that affect long-term productivity.

The Proposed Action would not result in an intensification of land use at Andrews AFB. Implementation of the Proposed Action would not represent a loss of open space.

## 5.4 Irreversible and Irretrievable Commitments of Resources

The irreversible environmental changes that could result from implementation of the Proposed Action involve the consumption of material resources, energy resources, land, and human resources. The use of these resources is considered to be permanent.

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that use of these resources will have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable time frame (*e.g.*, energy and minerals).

**Material Resources.** Material resources utilized for the Proposed Action include building materials (for construction of facilities), concrete and asphalt (for roads), and various material supplies (for infrastructure). Most of the materials that would be consumed are not in short supply, would not limit other unrelated construction activities, and would not be considered significant.

**Energy Resources.** Energy resources utilized for the Proposed Action would be irretrievably lost. These include petroleum-based products (such as gasoline and diesel), natural gas, and electricity. During construction, gasoline and diesel would be used for the operation of construction vehicles. During operation, gasoline would be used for the operation of private and government-owned 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.

**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.

***THIS PAGE INTENTIONALLY LEFT BLANK***

## 6. List of Preparers

This EA has been prepared under the direction of Andrews AFB. The individuals who contributed to the preparation of this document are listed below.

**Suane Collinworth**

engineering-environmental Management, Inc. (e<sup>2</sup>M)  
M.S. Environmental Sciences and Engineering  
B.S. Geology  
Certificate of Water Quality Management  
Years of Experience: 6

**Timothy Demorest**

e<sup>2</sup>M  
A.M. Classical Studies  
B.A. Classical Studies  
Years of Experience: 2

**Brian Hoppy–Program Manager**

e<sup>2</sup>M  
B.S. Biology  
Certificate of Environmental Management  
Years of Experience: 13

**Ron Lamb**

e<sup>2</sup>M  
M.S. Environmental Science  
M.A. Political Science/International Economics  
B.S. Political Science  
Years of Experience: 18

**Rachel Schneider**

e<sup>2</sup>M  
B.A. Chemistry with Environmental Studies  
Years of Experience: 3

**Mary Young**

e<sup>2</sup>M  
B.S. Environmental Science  
Years of Experience: 2

***THIS PAGE INTENTIONALLY LEFT BLANK***

## 7. References

- 89 AW 1998 89th Airlift Wing (89 AW). 1998. *Storm Water Pollution Prevention Plan*. 89th Airlift Wing Andrews Air Force Base, Maryland. August 1998.
- 89 AW 2002 89 AW. 2002. *89 AW OPLAN 32-1052 Asbestos Management Program Plan*, Andrews Air Force Base, Maryland. 1 August 2002.
- AAFB 2001 Andrews Air Force Base (AAFB). 2001. *Andrews Air Force Base Installation Restoration Program Summary Status Report*. Revision 1. December 2001.
- AAFB 2003a AAFB. 2003. *Integrated Cultural Resources Management Plan*. Andrews Air Force Base, Maryland. Prepared for 8CES/CEV. June 2003.
- AAFB 2003b AAFB. 2003. *Pollution Prevention Management Plan Volume I: Basic Plan*.
- AAFB 2003c AAFB. 2003. *PreFinal Solid Waste Management Plan Andrews Air Force Base, Maryland*. Prepared by Geo-Marine, Inc. March 2003.
- AAFB undated AAFB. Undated. *Andrews Air Force Base General Plan*.
- AFIERA 2002a Air Force Institute for Environment, Safety, and Occupational Health Risk Analysis (AFIERA). 2002. *2001 Emissions Certification Report and Air Emissions Inventories for Andrews Air Force Base*. Prepared for 8CES/CEVQ. March 2002.
- AFIERA 2002b AFIERA. 2002. *Hazardous Waste Management Plan Andrews Air Force Base, Maryland*. March 2002.
- Amoako 2003 Amoako, Eugene (89 CES/CEV). 2003. Electronic communication with Mr. Amoako regarding ERP sites and ERP site mitigation measures in the vicinity of the Proposed Action. 26 March 2003.
- MGS 2003 Maryland Geological Survey (MGS). 2003. "Geologic Maps of Maryland." <<http://www.mgs.md.gov/esic/brochures/earthquake.html>>. Verified on March 2003.
- PGC 2002 Prince George's County (PGC), Maryland. 2002. *Prince George's County, Maryland Ten Year Solid Waste Management Plan*. 2002.
- PGC 2003 PGC. 2003. Verbal communication with Ms. Carol Bracaglia (Department of Environmental Resources, Waste Management) regarding sanitary landfills and rubblefills in Prince George's County. March 2003.
- USAF 2001 U.S. Air Force (USAF). 2001. *Integrated Natural Resources Management Plan, Andrews Air Force Base, Maryland*. November 2001.
- USAF 2002 USAF. 2002. *Final Lead-Based Paint Management Plan. Andrews Air Force Base*. 31 May 2002.

***THIS PAGE INTENTIONALLY LEFT BLANK***

## **APPENDIX A**

### **APPLICABLE LAWS, REGULATIONS, POLICIES, AND PLANNING CRITERIA**





## **APPENDIX A**

### **APPLICABLE LAWS, REGULATIONS, POLICIES, AND PLANNING CRITERIA**

When considering the affected environment, physical, biological, economic, and social environmental factors must be considered. In addition to the National Environmental Policy Act (NEPA) there are other environmental laws as well as Executive Orders (EOs) to be considered when preparing Environmental Assessments (EAs) and Environmental Impact Statements (EISs). These laws are summarized below.

#### **Noise**

*The Air Installation Compatible Use Zone (AICUZ) Program, (Air Force Instruction [AFI] 32-7063),* provides guidance to air bases and local communities in planning land uses compatible with airfield operations. The AICUZ program describes existing aircraft noise and flight safety zones on and near U.S. Air Force (USAF) installations.

#### **Land Use**

Land use guidelines established by the U.S. Department of Housing and Urban Development (HUD) and based on findings of the Federal Interagency Committee on Noise (FICON) recommend acceptable levels of noise exposure for land use.

#### **Air Quality**

*The Clean Air Act (CAA) of 1970, and Amendments of 1977 and 1990,* recognizes that increases in air pollution result in danger to public health and welfare. To protect and enhance the quality of the Nation's air resources, the CAA authorizes the U.S. Environmental Protection Agency (USEPA) to set six National Ambient Air Quality Standards (NAAQSs) which regulate carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter pollution emissions. The CAA seeks to reduce or eliminate the creation of pollutants at their source, and designates this responsibility to state and local governments. States are directed to utilize financial and technical assistance as well as leadership from the Federal government to develop implementation plans to achieve NAAQS. Geographic areas are officially designated by the USEPA as being in attainment or non-attainment to pollutants in relation to their compliance with NAAQS. Geographic regions established for air quality planning purposes are designated as Air Quality Control Regions (AQCR). Pollutant concentration levels are measured at designated monitoring stations within the AQCR. An area with insufficient monitoring data is designated as unclassifiable. Section 309 of the CAA authorizes the USEPA to review and comment on impact statements prepared by other agencies.

An agency should consider what effect an action may have on NAAQS due to short-term increases in air pollution during construction as well as long-term increases resulting from changes in traffic patterns. For actions in attainment areas, a Federal agency may also be subject to USEPA's Prevention of Significant Deterioration (PSD) regulations. These regulations apply to new major stationary sources and modifications to such sources. Although few agency facilities will actually emit pollutants, increases in pollution can result from a change in traffic patterns or volume. Section 118 of the CAA waives Federal immunity from complying with the CAA and states all Federal agencies will comply with all Federal and state approved requirements.

### **Safety**

*AFI 91-202, the USAF Mishap Prevention Program, implements Air Force Policy Directive (AFPD) 91-2, Safety Programs.* It establishes mishap prevention program requirements (including the Bird/Wildlife Aircraft Strike Hazard [BASH] Program), assigns responsibilities for program elements, and contains program management information. This instruction applies to all USAF personnel.

*AFI 91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program, implements AFPD 91-3, Occupational Safety and Health, by outlining the AFOSH Program.* The purpose of the AFOSH Program is to minimize loss of USAF resources and to protect USAF personnel from occupational deaths, injuries, or illnesses by managing risks. In conjunction with the USAF Mishap Prevention Program, these standards ensure all USAF workplaces meet Federal safety and health requirements. This instruction applies to all USAF activities.

### **Water Resources**

*The Clean Water Act (CWA) of 1977* is an amendment to the Federal Water Pollution Control Act of 1972, is administered by the USEPA and sets the basic structure for regulating discharges of pollutants into U.S. waters. The CWA requires the USEPA to establish water quality standards for specified contaminants in surface waters and forbids the discharge of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits are issued by USEPA or the appropriate state if it has assumed responsibility. Section 404 of the CWA establishes a Federal program to regulate the discharge of dredged and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE). Waters of the United States include interstate and intrastate lakes, rivers, streams, and wetlands which are used for commerce, recreation, industry, sources of fish, and other purposes. The objective of the Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Each agency should

consider the impact on water quality from actions such as the discharge of dredge or fill material into U.S. waters from construction, or the discharge of pollutants as a result of facility occupation.

*The Coastal Zone Management Act (CZMA) of 1972* declares a National policy to preserve, protect and develop, and where possible restore or enhance the resources of the Nation's coastal zone. The coastal zone refers to the coastal waters and the adjacent shorelines including islands, transitional and intertidal areas, salt marshes, wetlands, and beaches, and includes the Great Lakes. The CZMA encourages states to exercise their full authority over the coastal zone, through the development of land and water use programs in cooperation with Federal and local governments. States may apply for grants to help develop and implement management programs to achieve wise use of the land and water resources of the coastal zone. Development projects affecting land or water use or natural resources of a coastal zone, must ensure the project is, to the maximum extent practicable, consistent with the state's coastal zone management program.

*The Safe Drinking Water Act (SDWA) of 1974* establishes a Federal program to monitor and increase the safety of all commercially and publicly supplied drinking water. Congress amended the SDWA in 1986, mandating dramatic changes in nationwide safeguards for drinking water and establishing new Federal enforcement responsibility on the part of the USEPA. The 1986 amendments to the SDWA require the USEPA to establish Maximum Contaminant Levels (MCLs), Maximum Contaminant Level Goals (MCLGs), and Best Available Technology (BAT) treatment techniques for organic, inorganic, radioactive, and microbial contaminants, and turbidity. MCLGs are maximum concentrations below which no negative human health effects are known to exist. The 1996 amendments set current Federal MCLs, MCLGs, and BATs for organic, inorganic, microbiological, and radiological contaminants in public drinking water supplies.

*The Wild and Scenic Rivers Act of 1968* provides for a wild and scenic river system by recognizing the remarkable values of specific rivers of the Nation. These selected rivers and their immediate environment are preserved in a free-flowing condition, without dams or other construction. The policy not only protects the water quality of the selected rivers but also provides for the enjoyment of present and future generations. Any river in a free-flowing condition is eligible for inclusion, and can be authorized as such by an Act of Congress, an act of state legislature, or by the Secretary of Interior upon the recommendation of the Governor of the State(s) through which the river flows.

*EO 11988, "Floodplain Management," May 24, 1977*, directs agencies to consider alternatives to avoid adverse effects and incompatible development in floodplains. An agency may locate a facility in a

floodplain if the head of the agency finds there is no practicable alternative. If it is found there is no practicable alternative, the agency must minimize potential harm to the floodplain, and circulate a notice explaining why the action is to be located in the floodplain prior to taking action. Finally, new construction in a floodplain must apply accepted floodproofing and flood protection to include elevating structures above the base flood level rather than filling in land.

### **Biological Resources**

*The Endangered Species Act (ESA) of 1973* establishes a Federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. The ESA specifically charges Federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All Federal agencies must insure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction of critical habitat for these species, unless the agency has been granted an exemption. The Secretary of the Interior, using the best available scientific data, determines which species are officially endangered or threatened, and the U.S. Fish and Wildlife Service (USFWS) maintains the list. A list of Federal endangered species may be obtained from the Endangered Species Division, USFWS (703-358-2171). States may also have their own lists of threatened and endangered species which may be obtained by calling the appropriate State Fish and Wildlife office. Some species, such as the bald eagle, also have laws specifically for their protection (e.g., Bald Eagle Protection Act).

*The Migratory Bird Treaty Act of 1918, amended in 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989,* implements treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless otherwise permitted by regulations, the Act makes it unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver, or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. The Act also makes it unlawful to ship, transport or carry from one state, territory or district to another, or through a foreign country, any bird, part, nest, or egg that was captured, killed, taken, shipped, transported, or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest, or egg obtained contrary to the laws of the province from which it was obtained. The U.S. Department of the Interior has authority to arrest, with or without a warrant, a person violating the Act.

*EO 11514 "Protection and Enhancement of Environmental Quality," March 5, 1970,* states that the President, with assistance from the Council on Environmental Quality (CEQ), will lead a national effort to provide leadership in protecting and enhancing the environment for the purpose of sustaining and

enriching human life. Federal agencies are directed to meet national environmental goals through their policies, programs, and plans. Agencies should also continually monitor and evaluate their activities to protect and enhance the quality of the environment. Consistent with NEPA, agencies are directed to share information about existing or potential environmental problems with all interested parties, including the public, in order to obtain their views.

*EO 11990, "Protection of Wetlands," May 24, 1977*, directs agencies to consider alternatives to avoid adverse effects and incompatible development in wetlands. Federal agencies are to avoid new construction in wetlands, unless the agency finds there is no practicable alternative to construction in the wetland, and the proposed construction incorporates all possible measures to limit harm to the wetland. Agencies should use economic and environmental data, agency mission statements, and any other pertinent information when deciding whether or not to build in wetlands. EO 11990 directs each agency to provide for early public review of plans for construction in wetlands.

*EO 13186, "Conservation of Migratory Birds," January 10, 2001*, creates a more comprehensive strategy for the conservation of migratory birds by the Federal government. The Order provides a specific framework for the Federal government's compliance with its treaty obligations to Canada, Mexico, Russia, and Japan. The EO provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in a Memorandum of Understanding (MOU). The EO will be coordinated and implemented by the USFWS. The MOU will outline how Federal agencies will promote conservation of migratory birds. The EO requires the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.

### **Cultural Resources**

*The American Indian Religious Freedom Act of 1978 and Amendments of 1994* recognize that freedom of religion for all people is an inherent right, and traditional American Indian religions are an indispensable and irreplaceable part of Indian life. It also recognized the lack of Federal policy on this issue and made it the policy of the U.S. to protect and preserve the inherent right of religious freedom for Native Americans. The 1994 Amendments provide clear legal protection for the religious use of peyote cactus as a religious sacrament. Federal agencies are responsible for evaluating their actions and policies to determine if changes should be made to protect and preserve the religious cultural rights and practices of Native Americans. These evaluations must be made in consultation with native traditional religious leaders.

*The Archaeological Resource Protection Act (ARPA) of 1979* protects archaeological resources on public and Indian lands. It provides felony-level penalties for the unauthorized excavation, removal, damage, alteration, or defacement of any archaeological resource, defined as material remains of past human life or activities which are at least 100 years old. Before archaeological resources are excavated or removed from public lands, the Federal land manager must issue a permit detailing the time, scope, location, and specific purpose of the proposed work. ARPA also fosters the exchange of information about archaeological resources between governmental agencies, the professional archaeological community, and private individuals. ARPA is implemented by regulations found in 43 CFR Part 7.

*The National Historic Preservation Act (NHPA) of 1966* sets forth national policy to identify and preserve properties of state, local, and national significance. The NHPA establishes the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers (SHPOs), and the National Register of Historic Places (NRHP). ACHP advises the President, Congress, and Federal agencies on historic preservation issues. Section 106 of the Act directs Federal agencies to take into account effects of their undertakings (actions and authorizations) on properties included in or eligible for the NRHP. Section 110 sets inventory, nomination, protection, and preservation responsibilities for federally owned cultural properties. Section 106 of the act is implemented by regulations of the ACHP, 36 CFR Part 800. Agencies should coordinate studies and documents prepared under Section 106 with NEPA where appropriate. However, NEPA and NHPA are separate statutes and compliance with one does not constitute compliance with the other. For example, actions which qualify for a categorical exclusion under NEPA may still require Section 106 review under NHPA. It is the responsibility of the agency official to identify properties in the area of potential effects, and whether they are included or eligible for inclusion in the NRHP. Section 110 of the NHPA requires Federal agencies to identify, evaluate, and nominate historic property under agency control to the NRHP.

*The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990* establishes rights of Indian tribes to claim ownership of certain “cultural items,” defined as native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, held or controlled by Federal agencies. Cultural items discovered on Federal or tribal lands are, in order of primacy, the property of lineal descendants, if these can be determined and then, the tribe owning the land where the items were discovered, of the tribe with the closest cultural affiliation with the items. Discoveries of cultural items on Federal or tribal land must be reported to the appropriate Indian tribe and the Federal agency with jurisdiction over the land. If the discovery is made as a result of a land use, activity in the area must stop and the items must be protected pending the outcome of consultation with the affiliated tribe.



*EO 11593 "Protection and Enhancement of the Cultural Environment," May 13, 1971*, directs the Federal Government to provide leadership in the preservation, restoration, and maintenance of the historic and cultural environment. Federal agencies are required to locate and evaluate all Federal sites under their jurisdiction or control which may qualify for listing on the NRHP. Agencies must allow the ACHP to comment on the alteration, demolition, sale, or transfer of property which is likely to meet the criteria for listing as determined by the Secretary of the Interior in consultation with the SHPO. Agencies must also initiate procedures to maintain federally owned sites listed on the NRHP.

*EO 13007 "Indian Sacred Sites," May 24, 1996*, provides that agencies managing Federal lands, to the extent practicable, permitted by law, and not inconsistent with agency functions, shall accommodate Indian religious practitioners' access to and ceremonial use of Indian sacred sites, shall avoid adversely affecting the physical integrity of such sites, and shall maintain the confidentiality of such sites. Federal agencies are responsible for informing tribes of proposed actions that could restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites.

*EO 13287 "Preserve America," March 3, 2003*, orders the Federal Government to take a leadership role in protection, enhancement, and contemporary use of historic properties owned by the Federal Government, and promote intergovernmental cooperation and partnerships for preservation and use of historic properties. The EO established new accountability for agencies with regard to inventories and stewardship.

### **Socioeconomics and Environmental Justice**

*EO 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," February 11, 1994*, directs Federal agencies to make achieving environmental justice part of their mission. Agencies must identify and address adverse human health and/or environmental effects its activities have on minority and low-income populations, and develop agency-wide environmental justice strategies. The strategy must list "programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations, ensure greater public participation, improve research and data collection relating to the health of and environment of minority populations and low-income populations, and identify differential patterns of consumption of natural resources among minority populations and low-income populations." A copy of the strategy and progress reports must be provided to the Federal Working Group on Environmental Justice. Responsibility for compliance with this EO lies with each Federal agency.



## **Hazardous Materials and Waste**

*The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980* authorizes the USEPA to respond to spills and other releases of hazardous substances to the environment, and authorizes the National Oil and Hazardous Substances Pollution Contingency Plan. CERCLA also provides a Federal “Superfund” to respond to emergencies immediately. Although the “Superfund” provides funds for clean up of sites where potentially responsible parties cannot be identified, the USEPA is authorized to recover funds through damages collected from responsible parties. This funding process places the economic burden for cleanup on polluters.

*The Pollution Prevention Act (PPA) of 1990* encourages manufacturers to avoid the generation of pollution by modifying equipment and processes, redesigning products, substituting raw materials, and making improvements in management techniques, training, and inventory control. *EO 12856, “Federal Compliance with Right-to Know Laws and Pollution Prevention Requirements, August 3, 1993,”* requires Federal agencies to comply with the provisions of the PPA and requires Federal agencies to ensure all necessary actions are taken to prevent pollution. In addition, in Federal Register Volume 58 Number 18 (January 29, 1993), CEQ provides guidance to Federal agencies on how to “incorporate pollution prevention principles, techniques, and mechanisms into their planning and decision making processes and to evaluate and report those efforts, as appropriate, in documents pursuant to NEPA.”

*The Resource Conservation and Recovery Act (RCRA) of 1976* is an amendment to the Solid Waste Disposal Act. RCRA authorizes USEPA to provide for “cradle-to-grave” management of hazardous waste and sets a framework for the management of non-hazardous municipal solid waste. Under RCRA, hazardous waste is controlled from generation to disposal through tracking and permitting systems, and restrictions and controls on the placement of waste on or into the land. Under RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by the USEPA as being hazardous. With *The Hazardous and Solid Waste Amendments (HSWA) of 1984*, Congress targeted stricter standards for waste disposal and encouraged pollution prevention by prohibiting the land disposal of particular wastes. The HSWA amendments strengthen control of both hazardous and nonhazardous waste and emphasize the prevention of pollution of groundwater.

*The Superfund Amendments and Reauthorization Act (SARA) of 1986* mandates strong cleanup standards, and authorizes the USEPA to use a variety of incentives to encourage settlements. Title III of SARA authorizes the Emergency Planning and Community Right to Know Act (EPCRA), which requires facility operators with “hazardous substances” or “extremely hazardous substances” to prepare comprehensive emergency plans and to report accidental releases. EO 12856 requires Federal agencies to comply with

the provisions of EPCRA. If a Federal agency acquires a contaminated site it can be held liable for clean up as the property owner/operator. A Federal agency can also incur liability if it leases a property, as the courts have found lessees liable as “owners.” However, if the agency exercises due diligence by conducting a Phase I Environmental Site Assessment, it may claim the “innocent purchaser” defense under CERCLA. According to Title 42 U.S. Code (U.S.C.) 9601(35), the current owner/operator must show it undertook “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” before buying the property to use this defense.

*The Toxic Substance Control Act (TSCA) of 1976* consists of four titles. Title I established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. TSCA authorized the USEPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. TSCA also singled out polychlorinated bi-phenyls (PCBs) for regulation, and as a result PCBs are being phased out. TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, clean-up, and release reporting requirements for numerous chemicals like PCBs. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse health effects on laboratory animals and may cause adverse health effects in humans. TSCA Title II provides statutory framework for “Asbestos Hazard Emergency Response,” which applies only to schools. TSCA Title III, “Indoor Radon Abatement,” states indoor air in buildings of the U.S. should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. TSCA Title IV, “Lead Exposure Reduction,” directs Federal agencies to “conduct a comprehensive program to promote safe, effective, and affordable monitoring, detection, and abatement of lead-based paint and other lead exposure hazards.” Further, any Federal agency having jurisdiction over a property or facility must comply with all Federal, state, interstate, and local requirements concerning lead-based paint.

*THIS PAGE INTENTIONALLY LEFT BLANK*

**APPENDIX B**

**INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR  
ENVIRONMENTAL PLANNING CORRESPONDENCE  
AND PUBLIC INVOLVEMENT**





November 8, 2004

*Name*  
*Job Title*  
*Agency*  
*Address*  
*City, State ZIP*

Dear *Salutation Name*:

The 89th Airlift Wing is preparing an Environmental Assessment (EA) of Establishment of Communication Support Facilities at Andrews Air Force Base, Maryland. The EA and Draft Finding of No Significant Impact (FONSI) are included with this correspondence as Attachments 1 and 2.

The environmental impact analysis process for this proposal is being conducted by the Air Mobility Command (AMC) in accordance with the Council on Environmental Quality guidelines pursuant to the requirements of the National Environmental Policy Act of 1969. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation by reviewing the attached EA and Draft FONSI and solicit your comments concerning the proposal and any potential environmental consequences. Please provide written comments or information regarding the action at your earliest convenience but no later than December 8, 2004. Attachment 3 includes a listing of those Federal, state, and local agencies that have been contacted. If there are any additional agencies that you feel should review and comment on the proposal, please include them in your distribution of this letter and the attached materials.

Please address questions or comments regarding the proposal to Ms. Mary Young at engineering-environmental Management, Inc. (e<sup>2</sup>M). I can be reached at (703) 273-7171. Please forward your written comments, in care of e<sup>2</sup>M, Inc., to 3949 Pender Drive, Suite 120, Fairfax, VA 22030. Thank you for your assistance.

Sincerely,  
**engineering-environmental Management, Inc.**

*Mary C. Young*

Mary C. Young  
Environmental Scientist

Attachments:

1. EA of Establishment of Communications Support Facilities at Andrews Air Force Base, Maryland
2. Draft FONSI for Establishment of Communications Support Facilities at Andrews Air Force Base, Maryland
3. Interagency and Intergovernmental Coordination for Environmental Planning List

3949 Pender Drive, Suite 120, Fairfax, VA 22030 • (703) 273-7171 • Fax (703) 273-1711

DENVER • JACKSONVILLE • PHILADELPHIA • SACRAMENTO • SAN ANTONIO • SAN DIEGO • TULSA • WASHINGTON, DC



*Interagency and Intergovernmental Coordination for Environmental Planning List  
Andrews AFB, Maryland*

---

Ms. Susan Essig  
Chief, Division of Habitat Conservation  
USFWS Region 5  
300 Westgate Center Drive  
Hadley, MA 01035-9589

Mr. Bill Arguto  
Environmental Review Coordinator  
USEPA Region 3  
1650 Arch St.  
Philadelphia, PA 19106

Mr. John Wolflin  
Field Supervisor  
USFWS, Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, Maryland 21401

Mrs. Linda C. Janey, J.D.  
Manager, Maryland State Clearinghouse  
Maryland Office of Planning  
Room 1104, 301 West Preston St.  
Baltimore, MD 21201-2365

Mr. J. Rodney Little  
SHPO  
Maryland Historical Trust  
100 Community Place, Third Floor  
Crownsville, MD 21032-2023

Mr. Nick Motta  
Chief, Countywide Planning Division  
Prince George's County Planning Board and Planning Department  
14741 Governor Oden Bowie Drive  
Upper Marlboro, MD 20772







Maryland Department of Planning

Robert L. Ebrlich, Jr.  
Governor  
Michael S. Steele  
Lt. Governor

Audrey E. Scott  
Secretary  
Florence E. Burian  
Deputy Secretary

November 15, 2004

Ms. Mary C. Young  
Environmental Scientist  
Engineering - Environmental Management, Inc  
3949 Pender Drive  
Suite 120  
Fairfax, VA 22030

**STATE CLEARINGHOUSE REVIEW PROCESS**

**State Application Identifier:** MD20041109-1283

**Reply Due Date:** 12/12/2004

**Project Description:** Environmental Assessment and FONSI: Establishment of Communication Support Facilities at Andrews Air Force Base: new construction and some renovation

**Project Location:** County(ies) of Prince George's

**Clearinghouse Contact:** Bob Rosenbush

Dear Ms. Young:

Thank you for submitting your project for intergovernmental review. Your participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps to ensure that your project will be consistent with the plans, programs, and objectives of State agencies and local governments.

We have forwarded your project to the following agencies and/or jurisdictions for their review and comments: the Maryland Department(s) of the Environment, Natural Resources, Housing and Community Development, including the Maryland Historical Trust; the Maryland Military Department; the Governor's Office of Homeland Security; the County(ies) of Prince George's; and the Maryland Department of Planning; A composite review and recommendation letter will be sent to you by the reply due date. Your project has been assigned a unique State Application Identifier that you should use on all documents and correspondence.

Please be assured that we will expeditiously process your project. The issues resolved through the MIRC process enhance the opportunities for project funding and minimize delays during project implementation.

A "Project Survey" form is enclosed with this letter. Please complete and return it within 14 days of the date of this letter. If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at brosenbush@mdp.state.md.us. Thank you for your cooperation with the MIRC process.

Sincerely,

Linda C. Janey, J.D., Director  
Maryland State Clearinghouse for Intergovernmental Assistance

LCJ:BR  
Enclosure(s)

04-1283\_NRR.NEW.doc



Maryland Department of Planning

Robert L. Ehrlich, Jr.
Governor
Michael S. Steele
Lt. Governor

Audrey E. Scott
Secretary
Florence E. Burian
Deputy Secretary

PROJECT SURVEY

Would you please take a few moments and tell us the source of information used by your agency to apply to the U.S. Department of Defense (DOD/USAF) for this grant and/or service. Please complete this form and return it to the State Clearinghouse within 14 days of November 12, 2004, to the address or fax number noted below.

TO: Maryland State Clearinghouse
Maryland Department of Planning
301 West Preston Street
Room 1104
Baltimore, MD 21201-2305

DATE: (Date form completed)

FROM: (Name of person completing this form.)

PHONE: (Area Code & Phone number)

RE: State Application Identifier: MD20041109-1283

Project Description: Environmental Assessment and FONSI: Establishment of Communication Support Facilities at Andrews Air Force Base: new construction and some renovation

Table with 3 columns and 10 rows of checkboxes for information sources like Chronicle of Philanthropy, GrantsNet, Nonprofit Organization Website, etc.

Thank you.



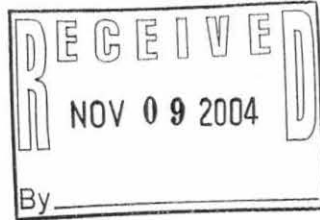
F  
USAF

ESC / JES

November 8, 2004

Mr. J. Rodney Little  
SHPO  
Maryland Historical Trust  
100 Community Place, Third Floor  
Crownsville, MD 21032-2023

200403658



Dear Mr. Little:

PRC.

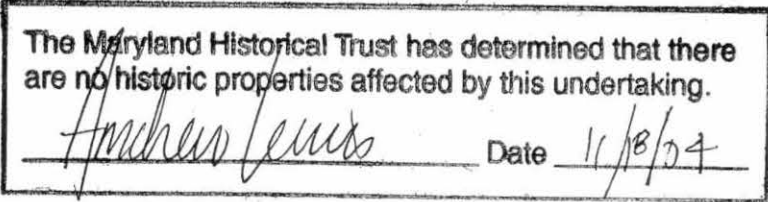
The 89th Airlift Wing is preparing an Environmental Assessment (EA) of Establishment of Communication Support Facilities at Andrews Air Force Base, Maryland. The EA and Draft Finding of No Significant Impact (FONSI) are included with this correspondence as Attachments 1 and 2.

The environmental impact analysis process for this proposal is being conducted by the Air Mobility Command (AMC) in accordance with the Council on Environmental Quality guidelines pursuant to the requirements of the National Environmental Policy Act of 1969. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation by reviewing the attached EA and Draft FONSI and solicit your comments concerning the proposal and any potential environmental consequences. Please provide written comments or information regarding the action at your earliest convenience but no later than December 8, 2004. Attachment 3 includes a listing of those Federal, state, and local agencies that have been contacted. If there are any additional agencies that you feel should review and comment on the proposal, please include them in your distribution of this letter and the attached materials.

Please address questions or comments regarding the proposal to Ms. Mary Young at engineering-environmental Management, Inc. (e<sup>2</sup>M). I can be reached at (703) 273-7171. Please forward your written comments, in care of e<sup>2</sup>M, Inc., to 3949 Pender Drive, Suite 120, Fairfax, VA 22030. Thank you for your assistance.

Sincerely,  
engineering-environmental Management, Inc.

*Mary C. Young*  
Mary C. Young  
Environmental Scientist



- Attachments:
1. EA of Establishment of Communications Support Facilities at Andrews Air Force Base, Maryland
  2. Draft FONSI for Establishment of Communications Support Facilities at Andrews Air Force Base, Maryland
  3. Interagency and Intergovernmental Coordination for Environmental Planning List

*Archeo: IA BC 11/12/04  
No properties*

*IA  
JES  
11/16/04*

3949 Pender Drive, Suite 120, Fairfax, VA 22030 • (703) 273-7171 • Fax (703) 273-1711





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

December 7, 2004

Ms. Mary Young  
engineering-environmental Management, Inc.  
3949 Pender Drive, Suite 120  
Fairfax, VA 22030

Re: Establishment of Communications Support Facilities, Andrews Air Force Base, Maryland

Dear Ms. Young:

In accordance with the National Environmental Policy Act of 1969 and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the Environmental Assessment (EA) for the Establishment of Communications Support Facilities at Andrews Air Force Base (AFB), Maryland. EPA understands that the purpose of the proposed action is to provide facilities for the White House Communications Agency (WHCA) to support its headquarters operations and the operation of a Communications Support Facilities from Andrews AFB. The infrastructure at Andrews AFB is inadequate to support the proposed WHCA Communications Support Facilities. Therefore, the proposed action requires the renovation of two existing buildings to support secure operations and communications for 80 personnel as well as construction of a warehouse space to house the functions that would be displaced by the Communications Support Facilities. To better analyze the environmental impacts, EPA offers the following comments for your consideration.

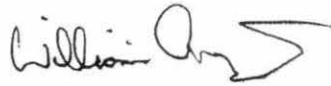
Alternatives/Land Use

As indicated in the EA, the site proposed for the construction of the Civil Engineering Warehouse was selected because it met the need for approximately 10,000 square feet. It is also noted in the EA that available land in appropriate land uses is limited. However, the EA does not discuss the conditions of the selected construction site. Is the site an open area with grass and/or trees? Does the site have an existing building that needs to be demolished? If there is an existing building, what is the history of the building and its use? Thus, the project area should be described in detail and quantified, specifying the type and acreage of land impacted as well as a description of the existing buildings on the site including their use.



Thank you for providing EPA with the opportunity to review this project. If you need assistance in the future, the staff contact for the project is Karen DelGrosso; she can be reached at 215-814-2765.

Sincerely,

A handwritten signature in black ink, appearing to read "William Arguto", with a stylized flourish extending to the right.

William Arguto  
NEPA Team Leader