

Environmental Assessment

U.S. Army Reserve

Proposed Military Construction Project

Aberdeen Proving Ground

Harford County, Maryland

Prepared for:

Department of the Army
5231 South Scott Plaza
Fort Dix, New Jersey 08640-5000



Prepared by:

PARS Environmental, Inc.

July 2013

DISTRIBUTION RESTRICTION
STATEMENT APPROVED FOR PUBLIC RELEASE:
DISTRIBUTION IS UNLIMITED.
CONTROL NUMBER 11412-A-7

**FINAL ENVIRONMENTAL ASSESSMENT
U.S. ARMY RESERVE PROPOSED MILITARY CONSTRUCTION
ABERDEEN PROVING GROUND
HARFORD COUNTY, MARYLAND
JULY 2013**

Prepared By:


Scott Duncanson
Senior Planner
The PARS Team

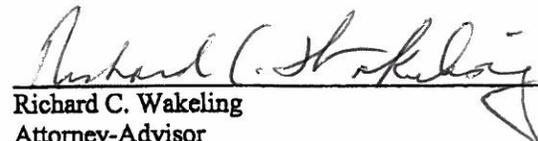
*U.S. Army Garrison
Aberdeen Proving Ground, Maryland*

Approved By:


For: Joseph Kaffl
Installation OPSEC Officer

*The U.S. Army Reserve
99th Regional Support Command*

Legally Sufficient:


Richard C. Wakeling
Attorney-Advisor
CECOM Legal Office

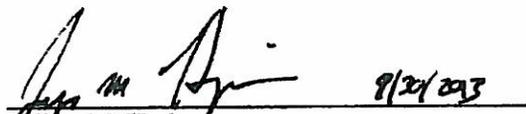
Reviewed By:


Amanda Murphy
NEPA Program Coordinator (Contractor)
Directorate of Public Works

Approved By:


Vance G. Hobbs
Chief, Environmental Division
Directorate of Public Works

Approved By:


Jeffrey M. Hrzic
Chief, Environmental Division
Directorate of Public Works

Approved By:


Thomas P. Kuchar
Director, Public Works
Directorate of Public Works

Approved By:


Gregory R. McClinton
Colonel, LG
Commanding
U.S. Army Garrison
Aberdeen Proving Ground, Maryland

DEC 26 2013
Date

LEAD AGENCY/PROPONENT: Department of the Army

TITLE OF PROPOSED ACTION: U.S. Army Reserve Proposed Military Construction Project, Aberdeen Proving Ground, Maryland

APPROVED BY: Jeffrey M. Hrzic, Chief, Environmental Division, 99th Regional Support Command

REVIEW PERIOD: The EA and Draft FNSI were available for review for a period of 30 days. Copies were available for review at the Harford County Library, Edgewood Branch, 629 Edgewood Road, Edgewood, MD 21040 (410-612-1600), and on-line at the following URL Address: <http://www.parsenviro.com/FTP/comments/EdgewoodEA.pdf>.

Written comments were to be submitted within 30 days of the publishing date of the Notice of Availability to Ms. Amanda Murphy at 99th Regional Support Command, DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, New Jersey 08640-5000, or by email at amanda.w.murphy.ctr@mail.mil.

EXECUTIVE SUMMARY

ES.1 Introduction

Pursuant to the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] 1500-1508) for implementing the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code [USC] 4321 et seq.) and Environmental Analysis of Army Actions (32 CFR Part 651), the Department of the Army has prepared this Environmental Assessment (EA) to identify, document, and discuss the possible natural, cultural, and socioeconomic impacts from the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland. The objective of an EA is to determine if the Proposed Action or its alternatives would result in significant impacts to the environment.

ES.2 Purpose and Need

The purpose of the Proposed Action is to support the training and mobilization of ten U.S. Army Reserve (USAR) units. The ten USAR units currently occupy approximately 8,175 square feet of space located in a Reserve Center on the APG and approximately 18,296 square feet of space at a facility in Abingdon, Maryland, approximately five miles north.

The Proposed Action is needed because the existing facilities do not meet the current training and mission requirements for the units and the ten units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives. The facility on the APG has a utilization rate of over 200 percent and is in disrepair. The facility in Abingdon, Maryland is overcrowded at 200 percent and is deficient in administrative, storage, educational areas, and parking. This facility cannot be expanded and minimum force protection standoff distances cannot be achieved. Existing overcrowded facilities restrict unit capacity to meet Command Focus Areas for improved mobilization and deployment. As units react to Department of Defense (DOD) Transformation, existing facilities will continue placing unnecessary stress on limited training operations and maintenance budgets.

ES.3 Setting

Harford County is in northeastern Maryland on the Chesapeake Bay. Harford County abuts Cecil County to the east, Baltimore County to the west, and Pennsylvania to the north. The Preferred Site is located at APG in the Edgewood Area (APG-EA). Harford County has a population of approximately 244,826 residents and a land area of 440 square miles.

ES.4 Proposed Action

The U.S. Army proposes to construct and operate a 500-member USARC on approximately 15 acres of land at APG-EA. After securing a suitable site, the U.S. Army would construct a USARC having approximately 78,000 square feet of space, consisting of a 69,000 square-foot training building, a 6,250 square-foot organizational maintenance shop, and a 2,750 square-foot unheated storage facility. The proposed USARC would accommodate up to 500 new soldiers on a rotating basis. The maximum expected use of the facility would be approximately 260 personnel per weekend. Vehicle parking and stormwater retention facilities would be constructed. No additional expansion to or demands on training areas or airspace would be needed for the Proposed Action. No live weapons systems would be associated with the establishment or operation of the USARC.

ES.5 Alternatives

Two alternatives were analyzed in detail for this EA, the Preferred Alternative and No Action Alternative.

The site of the Preferred Alternative is a government-owned, approximately 15 acre site located in the northeast quadrant of the intersection of Austin and Wise Road in APG-EA, in Harford County, Maryland (hereafter referred to as the Preferred Site). The Preferred Site is an open field and contains a ball field. The Preferred Site is designated by APG as being in the 'troop' land use category (this land use is designated for operational facilities for Table of Organization and Equipment units, Basic Combat Training and One Station Unit Training complexes and for selected Initial Entry Training complexes). Utilities are available to the site and would be extended to serve the Preferred Site.

Inclusion of the No Action Alternative is prescribed by CEQ regulations. Under the No Action Alternative, the U.S. Army would not implement the Proposed Action. No new facilities would be constructed at the APG. The No Action Alternative would not address the purpose and need for the Proposed Action; however, inclusion of the No Action Alternative serves as a benchmark for evaluation of the potential impacts of the Proposed Action. The No Action Alternative is evaluated in this EA.

ES.6 Environmental Consequences

The Preferred Alternative and the No Action Alternative were evaluated for their potential direct, indirect, and cumulative impacts on the natural and human environment. The Preferred Alternative and the No Action Alternative are not expected to have significant impacts to the natural or human environment based on the analysis in this EA (Exhibit ES.1). No significant contribution to cumulative impacts is anticipated.

Exhibit ES.1 Summary Matrix of Conclusions of Potential Impacts

Impact Category	Preferred Alternative Degree of Impact			Discussion within EA
	Significant	Insignificant	No Impact	
Air Space			x	Section 3.1
Communication Systems			x	Section 3.1
Geology			x	Section 3.1
Prime Farmland Soils			x	Section 3.1
Floodplains			x	Section 3.1
Land Use		x		Section 3.2.
Aesthetics and Visual Resources		x		Section 3.3
Air Quality		x		Section 3.4
Noise		x		Section 3.5
Soil Resources		x		Section 3.6
Water Resources		x		Section 3.7
Biological Resources		x		Section 3.8
Coastal Zones		x		Section 3.9
Cultural Resources			x	Section 3.10

Impact Category	Preferred Alternative Degree of Impact			Discussion within EA
	Significant	Insignificant	No Impact	
Socioeconomic Resources		x		Section 3.11
Transportation		x		Section 3.12
Utilities		x		Section 3.13
Hazardous and Toxic Substances		x		Section 3.14

ES.8 Mitigation, Best Management Practices and Permitting

Mitigation actions are used to reduce, avoid, or compensate for significant adverse impacts. This EA does not identify the need for mitigation measures because the Proposed Action would not result in a significant impact to affected resources. The U.S. Army would consider the use of best management practices (BMPs) in the construction and operation of these facilities. The following BMPs are to be considered for implementation as a part of the Preferred Alternative:

- Air Quality – BMPs aimed to minimize fugitive dust during construction such as applying water to disturbed soil and covering open-bodied vehicles, when in motion, transporting materials likely to create air pollution.
- Noise – Limit construction activities to 7:00 a.m. – 10:00 p.m. and require contractor to maintain construction equipment in accordance with manufacturer’s specifications to keep unnecessary noise impacts to a minimum
- Soils – BMPs to minimize potential for soil erosion such as installing silt fencing and sediment traps, applying water to disturbed soil, or re-vegetating disturbed areas after disturbance
- Water Resources – BMPs to minimize erosion and control stormwater runoff both during and after construction and follow low impact design (LID) and environmental site design (ESD) principles that would prevent the degradation of the water quality of nearby surface waters such as installing silt fencing and sediment traps, re-vegetating disturbed areas after disturbance and using bioretention areas
- Utilities and Energy – BMPs to incorporate sustainability and green practices in daily operations of the Preferred Alternative through waste reduction, recycling of reusable materials and purchase of items produced using recovered materials, in compliance with EO 13148 (Greening the Government Through Leadership in Environmental Management)

The U.S. Army would need to submit the following plans and acquire the following applicable permits and consistency determinations, as may be required by law, and work with governmental agencies to comply with regulations and avoid adverse impacts:

- Excavation Permit (administered by APG)
- Stormwater Pollution Prevention Plan (Maryland Stormwater Management Act administered by the Maryland Department of the Environment)
- National Pollution Discharge Elimination System / Stormwater Discharge Permit for General Construction (Maryland Stormwater Management Act administered by the Maryland Department of the Environment)
- Forest Stand Delineation and a Forest Conservation Plan (Coastal Zone Management Act administered by the Maryland Department of the Natural Resources)
- Federal Coastal Zone Consistency Determination (Coastal Zone Management Act administered by the Maryland Department of the Natural Resources)

ES.9 Conclusion

This EA documents that the proposed construction and operation of the USARC at the Preferred Site would not result in significant adverse impacts on any aspect of the area's human and natural environment. The preparation of an Environmental Impact Statement is not required, and the issuance of a Finding of No Significant Impact is appropriate to conclude the NEPA process.

Table of Contents

1.0	PURPOSE, NEED, AND SCOPE	1
1.1	Introduction	1
1.2	Purpose and Need	1
1.3	Public and Agency Involvement.....	1
2.0	DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	4
2.1	Introduction	4
2.2	Description of the Proposed Action.....	4
2.3	Alternatives	5
2.3.1	Alternatives Considered but Eliminated	5
2.3.2	Alternatives Considered in Detail.....	6
3.0	AFFECTED ENVIRONMENT AND CONSEQUENCES.....	9
3.1	Introduction	9
3.2	Land Use.....	9
3.2.1	Affected Environment	9
3.2.2	Environmental Consequences.....	11
3.3	Aesthetics and Visual Resources	11
3.3.1	Affected Environment	11
3.3.2	Environmental Consequences.....	12
3.4	Air Quality.....	12
3.4.1	Affected Environment	12
3.4.2	Environmental Consequences.....	14
3.5	Noise	15
3.5.1	Affected Environment	15
3.5.2	Environmental Consequences.....	17
3.6	Soils	18
3.6.1	Affected Environment	18
3.6.2	Environmental Consequences.....	19
3.7	Water Resources.....	19
3.7.1	Affected Environment	19
3.7.2	Environmental Consequences.....	20
3.8	Biological Resources.....	22
3.8.1	Affected Environment	22
3.8.2	Environmental Consequences.....	23
3.9	Coastal Zone Management	24
3.9.1	Affected Environment	24
3.9.2	Environmental Consequences.....	25
3.10	Cultural Resources.....	26
3.10.1	Affected Environment	26
3.10.2	Environmental Consequences.....	27

3.11 Socioeconomic Resources	28
3.11.1 Affected Environment	28
3.11.2 Environmental Consequences	31
3.12 Transportation	32
3.12.1 Affected Environment	32
3.12.2 Environmental Consequences	33
3.13 Utilities	34
3.13.1 Affected Environment	34
3.13.2 Environmental Consequences	36
3.14 Hazardous and Toxic Substances	37
3.14.1 Affected Environment	37
3.14.2 Environmental Consequences	39
3.15 Cumulative Impacts	40
3.15.1 Preferred Alternative	40
3.15.2 No Action Alternative	42
4.0 CONCLUSIONS	43
5.0 REFERENCES	44
6.0 LIST OF PREPARERS	47
7.0 ACRONYMS AND ABBREVIATIONS	48
8.0 DISTRIBUTION LIST	51
8.1 Federal Agencies	51
8.2 State Agencies	51
8.3 Persons of Interest	51

List of Exhibits

Exhibit 2.1 Preferred Site Location	7
Exhibit 2.2 Preferred Alternative Conceptual Site Plan	8
Exhibit 3.1 Surrounding Land Use	10
Exhibit 3.2 National Ambient Air Quality Standards	13
Exhibit 3.4 Federal and State Endangered Species Known to Possibly Inhabit APG	23
Exhibit 3.5 Population and Race	28
Exhibit 3.6 Per Capita Income	29
Exhibit 3.7 Total Number of Jobs and Employment	29
Exhibit 3.8 Poverty and Median Income	29
Exhibit 3.9 Housing Units	30
Exhibit 3.10 Population of Persons Younger than Eighteen Years Old	31
Exhibit 3.11 Characteristics of People who Speak a Language other than English at Home	31

Appendices

Appendix A. Agency Coordination

Appendix B. Notice of 30-Day Period for Public Comment

Appendix C. Emissions Calculations

Appendix D. Record of Non-Applicability

1.0 PURPOSE, NEED, AND SCOPE

1.1 Introduction

The U.S. Army Reserve (USAR) proposes to construct a new U.S. Army Reserve Center (USARC) at the U.S. Army Garrison Aberdeen Proving Ground (APG) within the Edgewood Area (APG-EA) in Harford County, Maryland that would provide a 500-member training facility for ten existing USAR units.

This Environmental Assessment (EA) analyzes and documents environmental impacts from the Army's Proposed Action at the APG. This EA has been prepared for the U.S. Army in accordance with the National Environmental Policy Act of 1969 (NEPA) and implementing regulations found at 40 Code of Federal Regulations (CFR) Part 1500 through 1508 (Council on Environmental Quality [CEQ] 1978), and 32 CFR (Part 651 *Environmental Analysis of Army Actions; Final Rule*, March 2002).

The objective of this EA is to determine the magnitude of the environmental impacts from the range of alternatives considered for the Proposed Action. If the environmental impacts from the Preferred Alternative are found to be insignificant, a Finding of No Significant Impact (FNSI) document would be prepared and the Preferred Alternative could proceed. If the environmental impacts from the Preferred Alternative are found to be significant according to criteria established in 40 CFR 1508.27, a Notice of Intent (NOI) would be published in the Federal Register, and an Environmental Impact Statement (EIS) would be prepared.

1.2 Purpose and Need

The purpose of the Proposed Action is to support the training and mobilization of ten existing USAR units. The existing ten USAR units currently occupy approximately 8,175 square feet of space in an existing Reserve Center on the APG within the Aberdeen Area (APG-AA), approximately 13 miles north of APG-EA; and approximately 18,296 square feet of space at a leased facility in Abingdon, Maryland, approximately five miles north of APG-EA.

The Proposed Action is needed because the existing facilities do not meet the current training and mission requirements for the units and the ten units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives. The facility on the APG-AA has a utilization rate of over 200 percent and is in disrepair. The facility in Abingdon, Maryland is overcrowded at 200 percent and is deficient in administrative, storage, educational areas, and parking. This facility cannot be expanded and minimum force protection standoff distances cannot be achieved. Existing overcrowded facilities restrict unit capacity to meet Command Focus Areas for improved mobilization and deployment. As units react to Department of Defense (DOD) Transformation, existing facilities will continue placing unnecessary stress on limited training operations and maintenance budgets.

1.3 Public and Agency Involvement

Public participation opportunities for the EA and decision making on the Proposed Action are guided by 32 CFR Part 651. The purpose of this EA is to provide the U.S. Army and the public with a full account of the likely environmental consequences of the Proposed Action and alternatives developed to meet the purpose and need. This EA serves as the primary document

to facilitate environmental review of the Proposed Action by federal, state and local agencies and the public.

The U.S. Army invites public participation in the NEPA process. Consideration of the views and information of interested persons promotes open communication and enables better decision making. Agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American Tribes, are urged to participate in the decision-making process. Early consultation letters were sent to the following agencies to request information regarding environmental resources on or near the Preferred Site:

- U.S. Fish and Wildlife Service (USFWS)
- Maryland Historical Trust (MHT)
- Maryland Department of Planning (MDP)
- Maryland Department of Natural Resources (MDNR)

Additional agency consultation was performed when the EA was submitted for review by state and county agencies through the Maryland State Clearinghouse. Agencies consulted through this process were:

- Maryland Department of the Environment (MDE)
- Maryland Department of Transportation
- MHT
- MDP
- MDNR
- Maryland Military Department
- Harford County

A letter requesting information about traditional cultural properties or sites of interest near the Preferred Site was sent to ten Native American Tribes. Consultation letters sent and responses received are in Appendix A.

The EA and draft FNSI were available to the public for comment for a period of 30 days. The EA was available for review at the Harford County Library, Edgewood Branch, 629 Edgewood Road, Edgewood, MD 21040 (410-612-1600), and on-line at the following URL Address: <http://www.parsenviro.com/FTP/comments/EdgewoodEA.pdf>. A copy of the Notice of Availability (NOA) for the EA was published in the *Aegis* and the *Baltimore Sun* on 21 June 2013 and is in Appendix B.

Comments were to be postmarked within 30 days of the publishing date of the NOA to be considered during the NEPA process. Comments were submitted to:

Ms. Amanda Murphy
U.S. Army Reserve
99th Regional Support Command, DPW-ENV
5231 South Scott Plaza
Fort Dix, New Jersey 08640-5000
Email: amanda.w.murphy.ctr@mail.mil

Two agencies commented during the 30-day review period; 1) The U.S. Army Garrison, APG and 2) The MDP through the Maryland State Clearinghouse. Copies of the comment letters are

in Appendix A. The U.S. Army Garrison, APG commented on wetland buffers, hazardous waste generation, and stormwater permitting, as well as providing a few minor editorial suggestions. The MDP through the Maryland State Clearinghouse coordinated the review of the EA by state and local agencies. Agencies that provided comments as summarized in the MDP comment letter were: MDNR, the Maryland Department of Transportation, MDP, MHT, MDE and Harford County. As noted in the MDP comment letter, the MDNR, Maryland Department of Transportation, Harford County, MDP and MHT found the Proposed Action was consistent with their agencies' plans, programs and objectives. The MDE found the Proposed Action to be generally consistent with their plans, programs, and objectives but included certain qualifying comments related to a variety of State requirements, permitting processes and programs under MDE's jurisdiction for the following areas: asbestos handling, particulate matter from materials handling and construction, air quality, potential soil contamination, energy conservation and efficiency, aboveground and underground storage tanks, solid waste management, hazardous materials generation or handling, brownfields development, and water quality. The Proposed Action will comply with all applicable federal laws and will be designed and constructed to be consistent with current applicable state and local building and development laws and regulations to the extent practicable.

At the end of the 30-day public review period, the U.S. Army considered comments postmarked within 30 days of the publishing date of the NOA submitted by individuals, agencies, or organizations on the Proposed Action, the EA, or draft FNSI.

The U.S. Army will execute the FNSI and proceed with implementation of the Proposed Action as it has been determined that implementation of the Proposed Action would not result in significant impacts, and therefore the U.S. Army would not publish A NOI to prepare an EIS in the Federal Register nor commit to mitigation measures sufficient to reduce impacts to less than significant levels.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This section describes the U.S. Army's Proposed Action. The details of the facilities and operations, equipment, and personnel for the Proposed Action are described with the alternatives considered to meet the purpose and need.

2.2 Description of the Proposed Action

The Proposed Action is the construction and operation of a new 500-member USARC on the APG-EA consisting of the following facilities:

- 69,000 square-foot training building
- 6,250 square-foot organizational maintenance shop (OMS)
- 2,750 square-foot unheated storage facility near the OMS
- 208 space parking lot for privately owned vehicles (POVs)
- 4,520 square-yard fenced military equipment parking lot

Additional construction activities would consist of paving, fencing, general site improvements, and extending utilities to serve the new facilities. Anti-terrorism/force protection (AT/FP) safety and security measures, including minimum standoff distance from roads, parking areas, and vehicle unloading areas, would be incorporated into the facility design and siting. Accessibility for disabled persons would be provided in public areas.

The USARC training building would provide administrative offices, classrooms, library, learning center, assembly hall, arms vault, weapons simulator, kitchen, unit storage, locker and shower rooms and physical readiness areas for the units. Activities at the USARC would be training-related with no live weapons firing. Activities at the OMS would include vehicle maintenance and repairs (e.g., oil change, tire rotation, etc.), as well as parts storage and maintenance administrative support.

Buildings would be of permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; plumbing; heating, ventilation, and air conditioning (HVAC) systems; and mechanical, security, and electrical systems. The new APG-EA USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards and have an energy reduction of 40 percent from a building meeting the minimum requirements of American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) 90.1-2007. The design, construction, and operation of the USARC would be consistent with and meet the intent of Executive Order (EO) 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 and APG's Net Zero Water Strategy.

The military vehicles and equipment kept on-site would be parked empty or loaded with equipment for training. Occasionally, some of these vehicles could be staged and moved as a convoy for off-site training.

The USARC would employ approximately 31 permanent full-time personnel and would serve about 500 personnel on a rotating basis, mostly on weekends. The maximum expected use of the facility would be approximately 260 members per peak weekend, and there would be

parking for 208 POVs, which considers those that would carpool. Construction funding has been approved for fiscal year 2013.

2.3 Alternatives

A key principle of the NEPA is that agencies consider a range of reasonable alternatives to a Proposed Action. Considering alternatives helps to avoid impacts and allows analysis of reasonable ways to achieve the stated purpose. To be considered reasonable and warrant detailed evaluation, an alternative must be viable, capable of implementation and satisfactory with respect to meeting the purpose of, and need for, the action.

2.3.1 Alternatives Considered but Eliminated

Government-owned land is available at APG; therefore, the USAR did not conduct a search for additional alternate construction sites owned by others. This decision is consistent with the intent of Army Regulation 140-483 (July 2007), 5-6 Acquisition priorities (a), which states:

Select and acquire sites for the construction of Army Reserve facilities according to the following priorities: (1) Priority one – Army-controlled property or other Government – owned land. Use only suitable and available Army or government-owned land for construction for MCAR projects. Consider an addition to or alteration of existing Army Reserve facilities, or other RC sites, if any are located in the same geographical area as the intended project.

Three sites within APG-EA were considered and dismissed as possible alternative sites because they were not reasonable to meet the purpose and need of the Proposed Action.

2.3.1.1 E5800 Block

The partially wooded E5800 Block site is on 41st Street within APG-EA and contains several occupied buildings that range in size from approximately 1,000 to 8,000 square feet each. This site was not reasonable because of environmental concerns (within 100-year floodplain and tree removal requiring mitigation) and the demolition and consolidation of two to four facilities.

2.3.1.2 Weide Army Airfield Site 1

The Weide Army Airfield Site 1 is a vacant lot on 14th Street within APG-EA that is partially an open grass field and partially wooded. It is along the north bank of the East Branch Canal Creek. This site was not reasonable because of environmental concerns (within 100-year floodplain, creek encroachment, and tree removal requiring mitigation).

2.3.1.3 Eagle Point

The Eagle Point site is a vacant lot along Bush River Road within APG-EA that is occupied by a gravel lot with a grass field and wooded areas. This site was not reasonable because of environmental concerns (within 100-year floodplain, Maryland's Chesapeake Bay Critical Area, and tree removal requiring mitigation).

2.3.2 Alternatives Considered in Detail

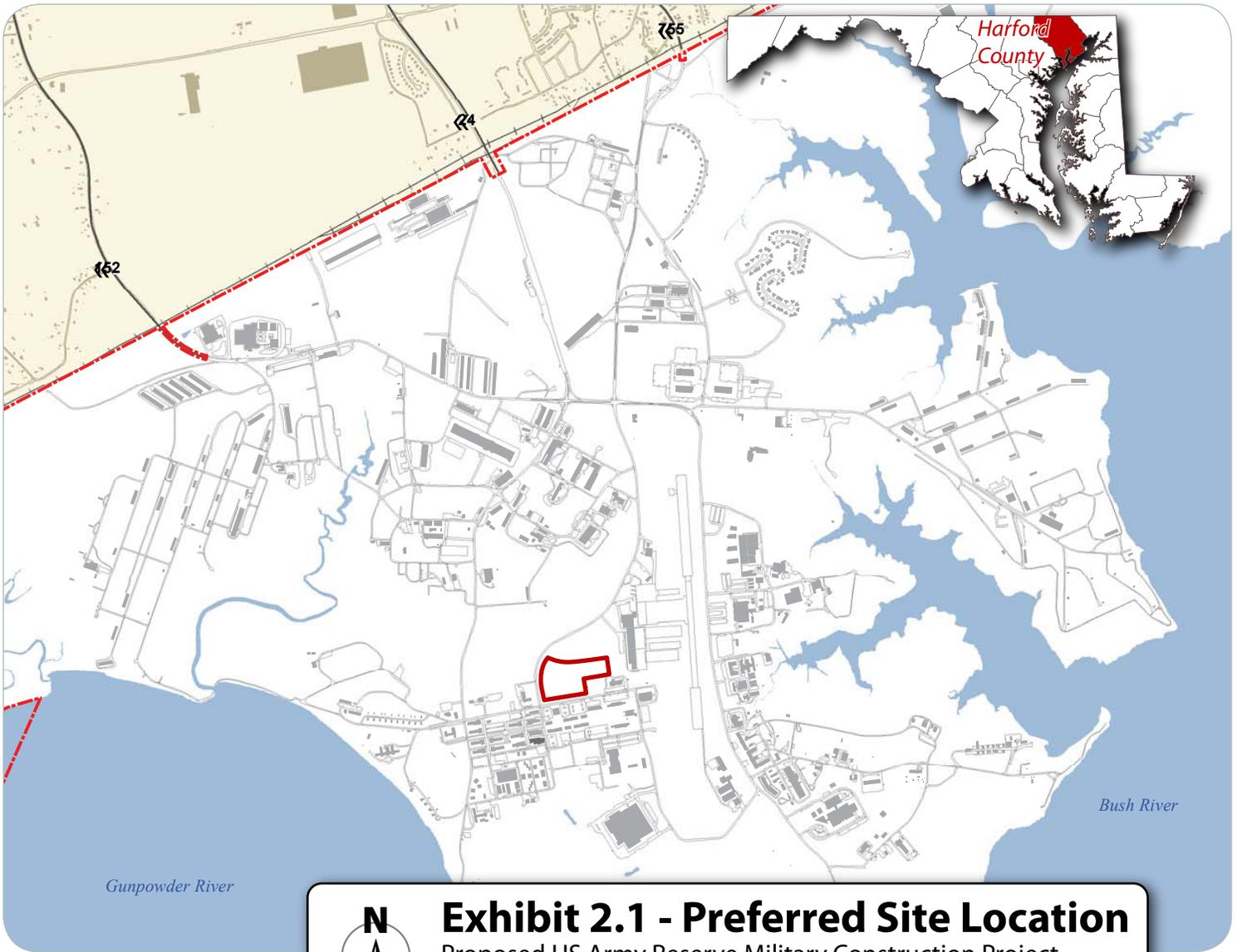
The Army determined the following alternatives were reasonable to meet the purpose and need of the Proposed Action. The Preferred Alternative and No Action Alternative were evaluated and will be analyzed in this EA.

2.3.2.1 Preferred Alternative

The site of the Preferred Alternative is a government-owned, approximately 15 acre site located in the northeast quadrant of the intersection of Austin and Wise Road in APG-EA, in Harford County, Maryland (hereafter referred to as the Preferred Site) (Exhibit 2.1). The Preferred Site is an open field and contains a ball field. The Preferred Site is designated by APG as being in the 'troop' land use category (this land use is designated for operational facilities for Table of Organization and Equipment units, Basic Combat Training and One Station Unit Training complexes and for selected Initial Entry Training complexes). Utilities are available to the site and would be extended to serve the Preferred Site (Exhibit 2.2).

2.3.2.2 No Action Alternative

Inclusion of the No Action Alternative is prescribed by Council on Environmental Quality (CEQ) regulations. Under the No Action Alternative, the U.S. Army would not implement the Proposed Action. No new facilities would be constructed at the APG. The No Action Alternative would not address the purpose and need for the Proposed Action; however, inclusion of the No Action Alternative serves as a benchmark for evaluation of the potential impacts of the Proposed Action. The No Action Alternative is evaluated in this EA.

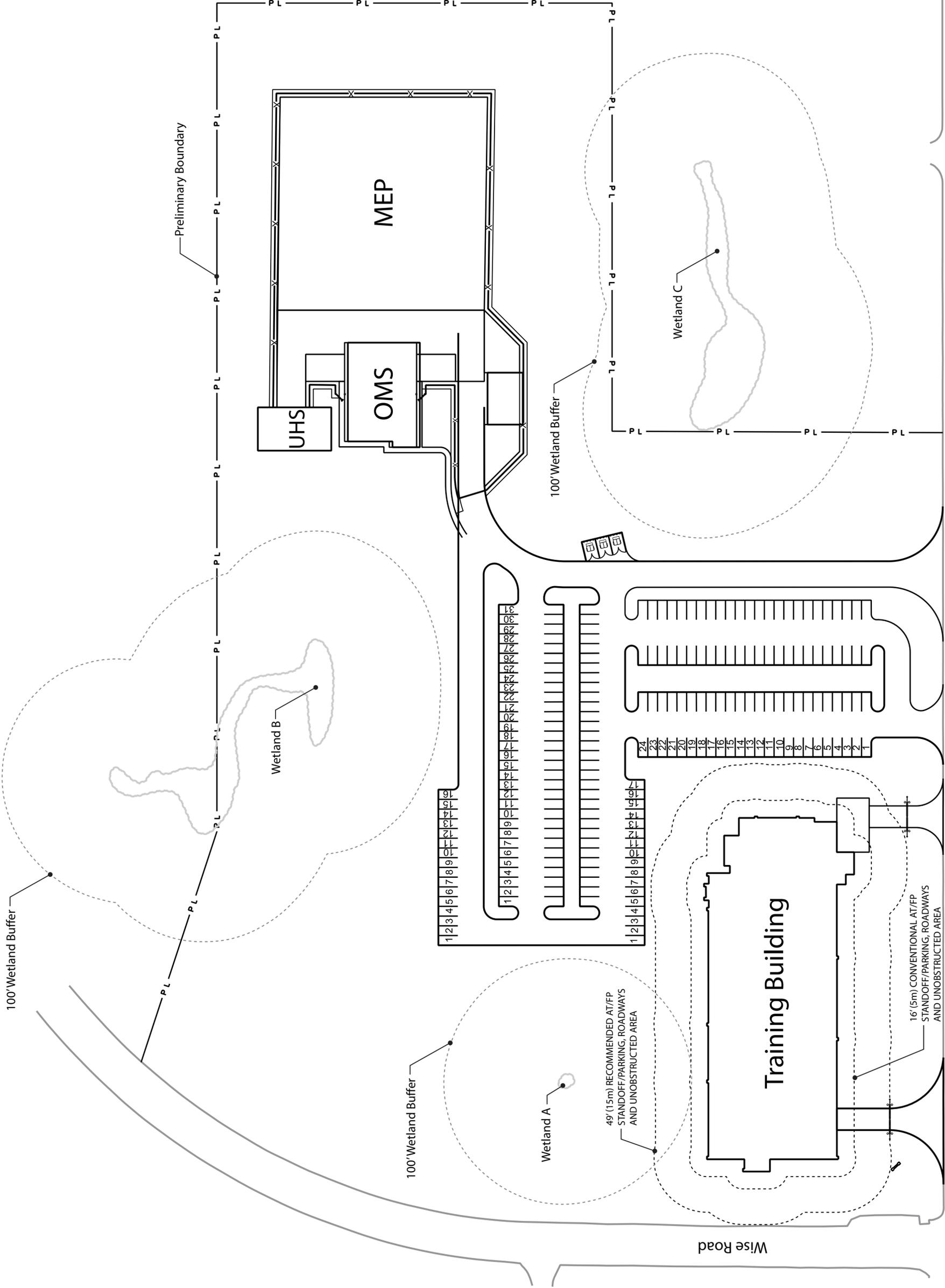


N


Exhibit 2.1 - Preferred Site Location
Proposed US Army Reserve Military Construction Project
APG, Harford County, Maryland

Legend

-  Approximate Site Boundary
-  Installation Boundary



3.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 Introduction

This section of the EA describes the current conditions of, and possible impacts to, environmental resources by implementation of the Preferred Alternative or the No Action Alternative. The project area, or Region of Influence (ROI), consists of the lands immediately surrounding the Preferred Site unless stated otherwise.

Only those resources or features that have the potential to be affected by the Proposed Action and alternatives were analyzed in detail, as per CEQ guidance (40 CFR 1501.7 [3]). Therefore, resources and items such as, air space, geology, communication systems, prime farmland soils, and floodplains are not addressed for the following reasons:

- Air space—the Proposed Action does not involve aircraft training and air space would not be affected.
- Communication systems—the Proposed Action would have negligible additional demand or other impact on local or regional communication systems.
- Geology—no geologic resources or geologic outcrops of importance are present and no impacts on surface or subsurface geology would occur from the Proposed Action.
- Prime farmland soils—according to the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), there are no prime farmland soils at the Preferred Site (NRCS 2013); therefore the Federal Farmland Protection Policy Act does not apply and no impacts to prime farmland soils would occur from the Proposed Action.
- Floodplains—review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map of APG indicates that the Preferred Site is not within the 100-year floodplain (FEMA 2013); therefore, there would be no impact to the 100-year floodplain.

Three types of potential impacts were evaluated: direct, indirect, and cumulative. A direct impact is the result of direct action and occurs at the same time and place. An indirect impact is caused by an action and “are later in time or farther removed in distance, but is still reasonably foreseeable” (40 CFR 1501.8). Cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time.

In the following sections, the duration of each impact is described either as short-term, such as construction related impacts, or long-term, such as impacts related to the operation of the proposed USARC. The type of impact, either beneficial or adverse, is described and the intensity of each impact is described either as significant or insignificant. Measures that would be implemented to avoid or minimize potential impacts to the environment, including those that would otherwise be significant, are presented.

3.2 Land Use

3.2.1 Affected Environment

3.2.1.1 Regional Setting

APG is a 72,000-acre U.S. Army Garrison managed by the U.S. Army Installation Management Command. The majority of APG is located within Harford County, while two small sections, Graces Quarters and Carroll Island, are located in Baltimore County. The Preferred Site is within the APG-EA in Harford County. The population of APG is approximately 19,200 with

5,100 military members assigned to APG (Atkins 2011a). The population of APG-EA is approximately 6,000 (Atkins 2011a). The population of Harford County is approximately 244,800 residents and a land area of 440 square miles. The census tract containing the Preferred Site has a population of approximately 2,200 residents and a land area of approximately 126 square miles (U.S. Census Bureau 2010).

3.2.1.2 Existing Land Use and Zoning

The Preferred Site is used for recreation and is currently developed with a ball field, bleachers and light poles. The Preferred Site is designated for “Troop” use consisting of operational facilities for training complexes according to the APG *Real Property Master Plan Update Long Range Component* (Atkins 2011a). The Preferred Site is bound to the north by open field and Wise Road, to the east by open field and Wiede Army Airfield, to the south by Austin Road, and to the west by Wise Road. Buildings associated with APG are located beyond the field to the east and across the roads to the south and west. Surrounding land uses are summarized in Exhibit 3.1.

Exhibit 3.1 Surrounding Land Use

Direction	Adjacent Properties	Surrounding Properties
North	Wise Road and East Branch Canal Creek	Former East Canal Creek Landfill and Chemical Center Complex
South	Austin Road and vacant residential housing	Residential housing
East	Weide Army Heliport	Kings Creek and Bush River
West	Wise Road and a recreation facility	East Branch Canal Creek

The Preferred Site is not zoned because APG is owned by the U.S. Government and is not subject to local zoning.

3.2.1.3 Planned Development and Future Land Use

According to the APG *Real Property Master Plan Update Long Range Component*, the future land use of the Preferred Site remains designated for “Troop” use (see section 3.2.1.2). However, the amount of land designated for Troop land use would be reduced as compared to existing land area for troop use, as areas surrounding the Preferred Site to the north, west and south have a future land use designation of “Professional/Institutional.” The Troop land use type would provide for non-tactical organizations consisting of military schools, headquarters, major commands, and non-industrial research, development, test and evaluations (Atkins 2011a). Land to the east would remain designated for use as an airfield.

The APG *Real Property Master Plan Update Long Range Component* also presents a “Future Development Plan” for APG-EA in which the Preferred Site is designated for future expansion of National Guard facilities. Adjacent areas to the east are designated for airfield improvements. Adjacent areas to the south are designated for redevelopment with dense administrative use consisting of U.S. Army Research, Development and Engineering Command and USAR administrative functions. Adjacent areas to the southwest and west are proposed to serve as a “community hub” consisting of outdoor recreation center with playgrounds. Adjacent areas to the north across Wise Road have no future land use planning designation.

Current proposed development near the Preferred Site consists of the conversion of vacant former barracks to administrative uses south of the Preferred Site across Austin Road and upgrades to the underground steam utility line along Austin Road. There are no other known developments immediately adjacent to the Preferred Site (Atkins 2011b).

3.2.2 Environmental Consequences

The threshold for significant impacts to land use is defined as actions that negatively affect or displace an existing use, or alter the suitability of the surrounding area for its current, designated, or formally planned use.

3.2.2.1 Preferred Alternative

No impacts to the regional setting would occur from implementing the Proposed Action at the Preferred Site. Under the Preferred Alternative, there would be an irretrievable commitment of land required for construction and operation of the Proposed Action; this commitment of land is irreversible because the land likely cannot be completely restored to its original condition and other uses would be precluded during the time the land is used for the Preferred Alternative. The Proposed Action would result in the conversion of 15 acres of “Troop” land to a USARC. The development of the Preferred Site as a USARC is consistent with the existing and proposed land use designations and nearby proposed redevelopment of barracks to administrative uses. Implementing the Proposed Action at the Preferred Site would result in the displacement of the existing ball field. The future development within the *APG Real Property Master Plan Update Long Range Component* calls for adjacent lands to the west and southwest of the Preferred Site to be redeveloped as a community hub consisting of an outdoor recreation center with playgrounds; this area would be a prime location for the ball field to be relocated to as it is consistent with the future development plan for the area. Therefore, a significant impact to land use is not anticipated.

3.2.2.2 No Action Alternative

The No Action Alternative would not impact land use.

3.3 Aesthetics and Visual Resources

3.3.1 Affected Environment

Visual resources consist of natural and manmade physical features that provide the landscape its character and value as an environmental resource. Landscape features that form a viewer's overall impression of an area consist of landform, vegetation, water, color, adjacent scenery, scarcity, and constructed modifications to the natural setting. The ROI for aesthetics and visual resources consists of the areas visible from the Preferred Site and areas from which the Preferred Site is visible.

The Preferred Site is currently used as recreational fields with bleachers and light poles. The Preferred Site is bound to the north by open field and Wise Road, to the east by open field and Wiede Army Airfield, to the south by Austin Road and to the west by Wise Road. Buildings visible from the Preferred Site are a dispensary to the southeast, vacant former military housing south of Austin Road that is being converted to administrative use, a recreation center across Wise Road to the west, and a historic district consisting of former World War I (WWI) era military

barracks diagonally opposite the Preferred Site in the southwest quadrant of the intersection of Wise and Austin roads.

3.3.2 Environmental Consequences

The threshold for significant impacts to visual resources is defined as a change in the viewshed that causes the viewshed to be dominated by views that are inconsistent with the existing visual character of the area.

3.3.2.1 Preferred Alternative

Implementing the Proposed Action at the Preferred Site would result in long-term, insignificant, direct, impacts to visual resources. Adverse impacts to visual resources would occur as a result of the construction of the proposed USARC facilities within an open ball field. During construction of and once constructed, the new facility would be visible from the northwest portion of the WWI Barracks Historic District situated diagonally across the intersection of Wise and Austin roads from the Preferred Site. The adverse impacts would not be significant because the overall appearance of the area would be consistent with the visual character of the surrounding governmental buildings to the southeast, south, west and southwest within the APG-EA. The U.S. Army determined that the Proposed Action would have no adverse effect on historic properties and the MHT concurred on April 30, 2013 (Appendix A).

3.3.2.2 No Action Alternative

The No Action Alternative would not impact aesthetics and visual resources.

3.4 Air Quality

3.4.1 Affected Environment

The U.S. Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS) for specific pollutants determined to be of concern to the health and welfare of the general public (USEPA 2013a). Ambient air quality standards are classified as either "primary" or "secondary." Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The major pollutants of concern, or criteria pollutants, are carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone (O₃), particulate matter less than ten microns (PM₁₀), particulate matter less than 2.5 microns (PM_{2.5}) and lead. The NAAQS represent the maximum levels of background pollution that are considered safe, with an adequate margin of safety, to protect the public health and welfare (Exhibit 3.2). Each state has the authority to adopt standards stricter than those established under the federal program; however, Maryland accepts the federal standards (Maryland Department of the Environment (MDE) 2013).

Exhibit 3.2 National Ambient Air Quality Standards

Pollutant		Primary	Averaging Time	Level	Form	
		Secondary				
Carbon Monoxide		primary	8-hour	9 ppm	Not to be exceeded more than once per year	
			1-hour	35 ppm		
Lead		primary	Rolling 3 month average	0.15 µg/m ³ (1)	Not to be exceeded	
		secondary				
Nitrogen Dioxide		primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
		primary	Annual	53 ppb (2)	Annual Mean	
		secondary				
Ozone		primary and secondary	8-hour	0.075 ppm (3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution		PM _{2.5}	primary	Annual	12 µg/m ³	annual mean, averaged over 3 years
			secondary	Annual	15 µg/m ³	annual mean, averaged over 3 years
			primary	24-hour	35 µg/m ³	98th percentile, averaged over 3 years
			secondary			
		PM ₁₀	primary	24-hour	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
			secondary			
Sulfur Dioxide		primary	1-hour	75 ppb (4)	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	

(1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

(2) The official level of the annual NO₂ standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

(3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

(4) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO₂ standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

Areas that do not meet the NAAQS standards are called non-attainment areas; areas that meet both primary and secondary standards are known as attainment areas. Areas which once violated the NAAQS (previous nonattainment areas) but now achieve the standards as a result of management practices (e.g., oxygenated fuels, "lowest achievable emission rate" control technology, etc.) are classified as maintenance areas. The Federal Conformity Final Rule (40 CFR Parts 51 and 93) specifies criteria or requirements for conformity determinations for federal

projects. The Federal Conformity Rule was promulgated in 1993 by the USEPA, following the passage of Amendments to the Clean Air Act (CAA) in 1990. The rule mandates that a conformity analysis must be performed when a federal action generates air pollutants in a region that has been designated a non-attainment or maintenance area for one or more NAAQS.

A conformity analysis is the process that determines whether a federal action meets the requirements of the General Conformity Rule. It requires the responsible federal agency to evaluate the nature of a proposed action and associated air pollutant emissions and calculate emissions as a result of the proposed action. If the emissions exceed established limits, known as *de minimis* thresholds, the proponent is required to implement mitigation measures. The USEPA considers Harford County to be in nonattainment with the NAAQS for ozone and PM_{2.5}, and a maintenance area for carbon monoxide (USEPA 2013b).

3.4.2 Environmental Consequences

Potential air quality impacts associated with the Preferred Alternative were evaluated based on the following factors: (1) whether potential emissions are localized and temporary; and (2) whether a reasonable potential exists for a violation of an ambient air quality standard or regulatory threshold.

3.4.2.1 Preferred Alternative

Short-term air quality impacts would occur from construction equipment. Construction would be temporary and occur in a localized area. Contaminants generated from construction would consist of particulate matter, vehicle emissions, and increased wind-borne dust (i.e., fugitive dust). Best management practices (BMPs) would be implemented to minimize fugitive dust in conformance with State regulations pertaining to Particulate Matter from Materials Handling and Construction (Code of Maryland Regulations 26.11.06.03D). BMPs could consist of applying water to disturbed soil and covering open-bodied vehicles, when in motion, transporting materials likely to create air pollution. Vehicle and construction equipment exhaust would be a source of pollutant emissions but would have an insignificant impact on air quality. The emissions from construction activities and workers traveling to and from the site would be insignificant compared to the total existing vehicle emissions in the area. Because of the short duration of construction, increases or impacts on ambient air quality are expected to be short-term and not significant.

Calculations were performed to estimate the total air emissions from construction. Calculations were made for standard construction equipment such as bulldozers, excavators, front end loaders, backhoes, cranes, and dump trucks (USACE 2009a). Assumptions were made regarding the type of equipment, duration of the total number of days each piece of equipment would be used, and the number of hours per day each piece of equipment would be used. The assumptions and resulting calculations are presented in Appendix C.

The total air quality emissions, as presented in Exhibit 3.3, were calculated to determine the applicability of the General Conformity Rule. The General Conformity Rule applies to areas that have been designated as a non-attainment zone for an air pollutant, such as Harford County. Regulations set forth in 40 CFR 51 Subpart W-Determining Conformity of the General Federal Action to State or Federal Implementation Plans determine if additional permits are needed. According to 40 CFR 51.853(b), federal actions require a Conformity Determination for each pollutant where the total of direct and indirect emissions in a non-attainment or maintenance

area caused by a federal action would equal or exceed any of the rates in paragraphs 40 CFR 51.853(b)(1) or (2). The proposed construction activities would not exceed thresholds and would not require a Conformity Determination.

Exhibit 3.3 Total Air Emissions (tons/year) from Construction Activities (18 month Schedule vs. the *de minimus* Thresholds)

Pollutant	Total	<i>de minimus</i> Thresholds
Nitrogen oxides (NOx)	8.99	100
Volatile Organic Compounds	1.46	100

Long-term impacts from the Proposed Action are anticipated to be insignificant. No fueling facilities or paint booths are proposed. The HVAC system would not significantly contribute to air emissions. Insignificant long-term air quality impacts would result from minor increases in motor vehicle use by personnel traveling to and from the facility (Appendix C). The minor increase in vehicles on roadways in the immediate vicinity of the Preferred Site would not result in significant impacts to air quality because the existing facilities and the Preferred Site are in the same airshed; therefore, the staff daily commuter traffic, as well as weekend training traffic, would not increase emissions in the airshed but would shift the emission sources from one part of the airshed to another. A general conformity Record of Non-Applicability for the Preferred Alternative is provided in Appendix D.

3.4.2.2 No Action Alternative

Implementation of the No Action Alternative would not create additional air emissions. The No Action Alternative would not impact air quality.

3.5 Noise

3.5.1 Affected Environment

Noise is generally defined as unwanted sound. Sound is around us; it becomes noise when it interferes with normal activities such as speech, concentration, or sleep. Noise from military installations is a factor in land use planning both on- and off-site. Noise emanates from vehicle traffic associated with new facilities and from project sites during construction. Ambient noise (the existing background noise environment) can be generated by a number of noise sources, including mobile sources, such as automobiles and trucks, and stationary sources, such as construction sites, machinery, or industrial operations. There is an existing and variable level of natural ambient noise from sources such as wind, streams and rivers, and wildlife.

The physical characteristics of sound consist of intensity, frequency, and duration. Sound is created by acoustic energy, which produces pressure waves that travel through air and are sensed by the eardrum. As the acoustic energy increases, the intensity or amplitude of these pressure waves increase, and the ear senses louder noise. The unit used to measure the intensity of sound is the decibel (dB).

Sound is measured with instruments that record instantaneous sound levels in dB. A-weighted sound level measurements (dBA) are used to characterize sound levels that can be sensed by the human ear. A-weighting emphasizes sounds in the range of human hearing (USEPA 1974). The typical measurement for quieter sounds, such as rustling leaves or a quiet room, is from 20 to 30 dBA. Conversational speech is commonly 60 dBA, and a residential lawn mower measures approximately 98 dBA. Sound levels discussed in this EA are A-weighted.

The standard threshold for determining when noise becomes a nuisance is a day-night average sound level (Ldn) of 65 dBA. This threshold is often used to determine residential land use compatibility around airports, highways, or other transportation corridors. The Ldn measure is a cumulative noise metric that integrates multiple time-varying noise events. This metric sums the individual noise events and averages the resulting level over a specified length of time; thus, it is a composite metric that considers the maximum noise levels, duration of the events, number of events that occur, and time of day during which they occur. This metric adds 10 dB to those events that occur between 10:00 p.m. and 7:00 a.m. to account for the increased intrusiveness of noise events that occur at night, when ambient noise levels are normally lower.

The USEPA established Ldn levels at 55 dBA to protect public health and welfare with an adequate safety margin (USEPA 1974). An Ldn level of 75 dBA is considered a threshold above which effects other than annoyance may occur, but is 10 to 15 dBA below levels where hearing damage is considered to be at risk (Occupational Safety and Health Administration [OSHA] 1983).

Maryland state noise regulations set overall noise environment and the maximum intruding sound level limits statewide for three different land uses (industrial, commercial, and residential) for both day (7 a.m. to 10 p.m.) and night (10 p.m. to 7 a.m.).

The environmental noise standards are:

- Industrial = 70 dBA
- Commercial = 64 dBA
- Residential = 55 dBA

The maximum allowable noise level for receiving land use categories are:

- Industrial
 - Day/Night = 75 dBA
- Commercial
 - Day = 67 dBA
 - Night = 62 dBA
- Residential
 - Day = 65 dBA
 - Night = 55 dBA

Construction and demolition activities are exempt from the above standards. For construction activities, a person may not cause or permit noise levels that exceed 90 dBA during the daytime hours or the levels specified in the maximum allowable noise level for receiving land use categories during the nighttime hours (MDE 1974).

The Army has established an Environmental Noise Management Program (ENMP) to protect the general public from noise hazards associated with military activities and to prevent degradation of mission capability due to encroachment; noise impacts at APG are managed under the ENMP. In 2006, APG finalized and implemented an Operational Noise Management Plan (ONMP). The ONMP establishes three Noise Zones (NZs) to provide guidance for appropriate types of land use.

The Preferred Site is within NZ I. NZ I is considered to have moderate to minimal noise exposure from aircraft operations, weapons firing, and other noise sources; NZ I is considered acceptable for noise sensitive land uses including housing, schools, and medical facilities. Noise

sensitive receptors can be defined as lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. Noise sensitive receptors may include residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums. The nearest noise-sensitive receptor is a military dispensary approximately 100 feet to the east/southeast of the Preferred Site.

The Weide Army Heliport is approximately 1,000 feet northeast of the Preferred Site. The Weide Army Heliport is home to the Maryland Army National Guard. The Guard's Army Aviation Support Activity provides services to ten Army National Guard Aviation Units. The Maryland National Guard's primary responsibility is providing support to state and federal missions as directed by the President and the Governor of Maryland. The Weide Army Heliport consists of a 1,600-foot, rotary-wing-only runway with adjacent air operations support facilities consisting of one flight operations building, one raid building utilized for the counterdrug observation mission, two main hangars, and one warehouse. Aircraft that are supported at Weide Army Heliport range in size from small to large helicopters consisting of Blackhawks, Chinooks, and Kiowas (Atkins 2011a).

3.5.2 Environmental Consequences

The threshold of significance for noise is defined as exceeding the day-night average sound level of greater than 65 dBA at a noise sensitive receptor for a prolonged period of time or a violation of local noise regulations.

3.5.2.1 Preferred Alternative

Short-term adverse direct noise impacts from the construction of the Proposed Action at the Preferred Site would occur. Noise would be generated from machinery such as bulldozers, graders, excavators, dump trucks, and cement trucks. Construction noise would have the greatest impact on the nearest receptor, which is a military dispensary approximately 100 feet to the east/southeast of the Preferred Site. Noise and sound levels would be typical of construction and intermittent.

The U.S. Department of Transportation (USDOT) provides a methodology for estimating potential noise levels in the *Construction Noise Handbook* (USDOT 2006). The Federal Highway Administration (FHWA) *Roadway Construction Noise Model* (RCNM) version 1.1, dated December 2008, was used to estimate construction noise levels at the Preferred Site. Equipment types were typical of construction activity and were entered into the RCNM to obtain the maximum noise level that occurs during an event (Lmax) and the average sound level over the period of the measurement (Leq) at the sensitive receptors closest to the Preferred Site.

Construction equipment source levels and usage factors were assumed to be the RCNM default values. The following RCNM baseline levels were assumed to be representative of background noise levels in a suburban area:

- Daytime Leq = 60 dBA
- Evening Leq = 55 dBA
- Nighttime Leq = 50 dBA

It was assumed that the proposed OMS building would be the closest proposed building on the Preferred Site to the receptor of interest. Construction operations were assumed to be limited to the hours of 7:00 a.m. – 10:00 p.m.

Ldn were calculated for the military dispensary and is estimated at:

- Ldn = 65 dBA at the military dispensary approximately 390 feet east/southeast of the OMS building on the Preferred Site

The calculated Ldn value was compared to U.S. Department of Housing and Urban Development (HUD) *Land Use Compatibility Guidelines* (HUD 2011). This comparison indicated that temporary construction noise levels for the military dispensary to the southeast are acceptable since they are equal to or below 65 dBA. To minimize these temporary impacts, construction activities would be limited to 7:00 a.m. – 10:00 p.m. in compliance with the Maryland state noise regulations and the contractor would be required to maintain construction equipment in accordance with manufacturer's specifications to keep unnecessary noise impacts to a minimum. Temporary construction related noise impacts would end once construction is complete. The short-term direct noise impacts related to construction would not be significant.

Once the Proposed Action is operational, long-term noise would be generated by facility operations and the vehicles from the facilities. Aside from HVAC-related noise, the facilities would not generate high levels of noise. Noise would be created by vehicles at the USARC, including organizational vehicles used for training and operations, government and private delivery vehicles, and POVs. The noise created by vehicles would mainly consist of the operation of up to 105 light-duty and heavy-duty wheeled vehicles that would enter and exit the premises and would be moved from the military equipment parking area to the OMS. Vehicular maintenance operations would be performed inside the OMS. Occasionally, some of these vehicles could be staged and moved as a convoy for off-site training. The loudest vehicle would be a five-axle truck. Noise levels at 50 feet from the five-axle truck vary with vehicle speed. Noise at 50 feet ranges from 76.9 dBA at 12 mph to 85.2 dBA at 40 mph (U.S. Army 2004). Although noise generated by the five-axle truck is estimated as pass-by noise, the noise receptor would interpret the noise as a stationary source. Therefore, with the geometric spreading of noise of 6 dBA per each doubling of distance for stationary sources, the noise levels at the nearest sensitive receptor, the military dispensary, would be approximately 59 dBA. The operational noise levels would be acceptable since they are below 65 dBA. The direct noise impact created by the facility and vehicle operations would not be significant compared to existing ambient noise in the area.

3.5.2.2 No Action Alternative

The No Action Alternative would not impact ambient noise levels.

3.6 Soils

3.6.1 Affected Environment

The Preferred Site consists of Mattapex-Udorthents-Urban land complex, 0 to 2 percent slope soils (NRCS 2013). The Mattapex series consists of very deep (80 inches), moderately well-drained, fine sandy loam to silt loam. Slopes range from 0 to 2 percent.

3.6.2 Environmental Consequences

The Preferred and No Action alternatives were evaluated to determine whether either would result in a significant impact with the threshold being a substantial loss of or change to the character of soils over a relatively wide area.

3.6.2.1 Preferred Alternative

Short-term direct not significant impacts on soils would result from the implementation of the Proposed Action at the Preferred Site because of the removal of vegetation and the exposure of soil during construction. The Preferred Site is primarily flat and would require grading during construction. Construction BMPs would be implemented to minimize the potential for soil erosion. BMPs could consist of installing silt fencing and sediment traps, applying water to disturbed soil, and re-vegetating disturbed areas after disturbance.

Due to the history of weapons development and testing within APG-EA, the potential to encounter unexploded ordnance (UXO) or chemical warfare material cannot be completely discounted. Therefore, excavation of soil at APG is subject to review and approval of an excavation permit by APG personnel. Prior to construction, an excavation permit would be obtained and appropriate safety procedures followed during excavation activities to minimize potential contact with underground utilities or UXO materials that may be present. An excavation permit would typically require renewal after a period of two weeks. Excavation of soils associated with construction activities must be conducted according to APG's *Guidance for Proper Management of Excavated Soil*.

Long-term impacts would consist of site grading to create nearly level grades for the new buildings and the permanent conversion of up to 15 acres of Mattapex-Udorthents-Urban land complex to developed land with impermeable surfaces. Operation of the proposed facility would not result in further soil disturbance. No significant direct impact or change in character of the soils would result from the grading and development activities proposed.

3.6.2.2 No Action Alternative

The No Action Alternative would not impact soils.

3.7 Water Resources

3.7.1 Affected Environment

3.7.1.1 Surface Water

The Preferred Site is within the Upper Western Shore Watershed, the Gunpowder River sub-watershed, and within APG-EA's Canal Creek area watershed. There are no surface waters on the Preferred Site. The East Branch of Canal Creek, a tributary to Canal Creek and Gunpowder River, is approximately 250 feet north and across Wise Road from the Preferred Site.

3.7.1.2 Groundwater

The groundwater system at the Preferred Site consists of (from shallow to deep) a discontinuous surficial aquifer, an upper confining unit, the Canal Creek Aquifer, a lower

confining unit, and lower confined aquifer. Water levels in the surficial aquifer at the Preferred Site are approximately three to seven feet below ground surface, based on monitoring well data. Local groundwater is estimated to flow to the northeast toward the East Branch Canal Creek, with an average estimated gradient of approximately 0.02 feet per foot (HydroGeologic, Inc. 2013). The Canal Creek Aquifer in this location flows regionally to the southeast.

3.7.1.3 Wetlands

EO 11990 (Protection of Wetlands) directs federal agencies to avoid undertaking or providing assistance for new construction in wetlands unless there is no practicable alternative to construction or the proposed action consists of practicable measures to minimize harm to wetlands, which may result from its use.

Section 404 of the Clean Water Act (CWA) of 1977 (PL 95-217) authorizes the Secretary of the Army, acting through the USACE, to issue permits for the discharge of dredged or fill material into Waters of the U.S., including wetlands. Wetlands are those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE 1987).

During the 1 May 2012 site visit, three isolated areas within or immediately adjacent to the Preferred Site were identified as displaying wetland-like features. These areas appeared to be isolated (no inlet or outlet) depressions with seasonal saturation possibly due to a perched water table or compacted soils. The areas exhibited sporadic emergent wetland vegetation consisting of spike rush, sedges, and smartweed (PARS 2013).

A wetland delineation was completed for the Preferred Site in December 2012. Three areas that lie either entirely or partially within the Preferred Site were determined to meet the USACE's criteria for wetlands. Wetland A, in the western portion of the Preferred Site is 0.003 acre. Wetland B, in the northwestern portion of the Preferred Site is 0.17 acre. Wetland C, to the southeast of the Preferred Site is 0.15 acre. The three wetlands have been classified as Flats (subclass Mineral), using the Hydrogeomorphic Classification System. Flats are associated with slow surface drainage, often combined with slow permeability, which causes water to remain at or near the surface. These characteristics are consistent with the dominant soil unit, Mattapex. Wetland hydrology in Flat wetlands is precipitation driven, and water loss is primarily through evapotranspiration (Environmental Concern Inc. 2012).

3.7.2 Environmental Consequences

The Preferred Alternative and No Action Alternative were evaluated for significant impacts (chemical, physical, or biological effects) with the threshold being a detectable change that would be frequently altered from the historical baseline or desired water quality conditions; and/or chemical, physical, or biological water quality standards or criteria would be locally, slightly and singularly, exceeded on either a short-term or prolonged basis.

3.7.2.1 Preferred Alternative

No direct or indirect significant impacts to surface waters, groundwater, or wetlands would result from implementing the Proposed Action at the Preferred Site. Soil disturbance during construction would temporarily increase the potential for soil erosion and impacts to nearby surface waters. A soil erosion control plan would be developed prior to construction. A

Stormwater Pollution Prevention Plan (SWPPP) would be prepared in accordance with Maryland Stormwater Management Act permit regulations and implemented to prevent impacts to nearby surface water bodies. Through the permitting process, the USACE would develop methods to minimize erosion and control stormwater runoff both during and after construction by using BMPs, such as installing silt fencing and sediment traps, re-vegetating disturbed areas after disturbance and using bioretention areas, and meeting performance standards established by the MDE.

The Proposed Action would incorporate stormwater control strategies following low impact design (LID) and MDE's Environmental Site Design (ESD) principles aimed at preventing the degradation of the water quality of the surface waters near the Preferred Site to the maximum extent practicable. The use of curb and gutter would be minimized, and sheet flow would be the preferred method to address stormwater management. The use of curb and gutter, catch basins and piped stormwater systems would be kept to the minimum necessary to handle the site soil and grading specific conditions. Runoff from roads and parking would be allowed to sheet flow over grassed areas and treated in small bioretention or detention areas in the medians of the parking lot or the side of the roads. The runoff that cannot be managed by ESD principles would be routed to a wet detention pond in the northwest portion of the Preferred Site for final water quality and quantity control (CH2M Hill 2012).

The Proposed Action would increase the amount of impervious surfaces within the Gunpowder River drainage basin. Impervious surfaces reduce rainwater infiltration and percolation, which is the primary source of groundwater recharge. Impervious surfaces increase the flow of migrating rainwater, and sheet and rill erosion of adjacent exposed soils can occur. Streambed and bank scouring and erosion often result from accelerated flows from impervious surfaces. Incorporation of post-construction stormwater controls would minimize long-term impacts to nearby surface waters and allow for groundwater recharge. Insignificant impacts to groundwater resources would occur as a result of an increase of impervious surfaces at the Preferred Site.

Three wetlands were identified on or immediately adjacent to the Preferred Site. The Proposed Action would avoid and not directly impact the three wetlands. Temporary protective fencing would be placed around the boundaries of each wetland during construction, thereby avoiding indirect impacts. The Proposed Action would not directly impact wetlands and would be in compliance with EO 11990. During operation of the facility, the USAR is considering installing signs to deter the parking of vehicles in the wetland areas.

The USAR would comply with Section 438 of the Energy Independence and Security Act of 2007 which states that projects "involving a federal facility with a footprint that exceeds 5,000 square feet shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow." These maintenance strategies may consist of green infrastructure, LID and ESD practices such as reducing impervious surfaces, using vegetative practices, porous pavements, cisterns, and green roofs.

3.7.2.2 No Action Alternative

The No Action Alternative would not impact water resources.

3.8 Biological Resources

3.8.1 Affected Environment

3.8.1.1 Vegetation

The Preferred Site is composed of a maintained recreation field consisting of mowed grass. The fields are comprised mostly of common grasses but have vegetation consistent with wetlands surrounding a few isolated depressions. Single rows of native and ornamental trees line Austin and Wise roads bordering the Preferred Site to the south and west. Grasses on the Preferred Site are kept short with frequent mowing to provide recreational space for base personnel.

3.8.1.2 Wildlife

The Preferred Site is a maintained recreation field consisting of mowed grass with several native and ornamental trees lining Austin and Wise roads. Ecological communities within this area are isolated and provide limited cover, shelter, forage, nesting, or breeding habitat for wildlife species. Although wildlife species can be found inhabiting the Preferred Site, it does not provide a significant resource unique to the surrounding habitat area for wildlife because the surrounding habitat area has already been disturbed due to agricultural or developmental activities.

Wildlife observed during a site visit consisted of a groundhog, Canada goose, turkey vulture, and evidence of white-tailed deer. No other observations or evidence indicating the presence of wildlife was noted during the site visit (PARS 2012).

3.8.1.3 Sensitive Species

In accordance with the Natural Resource Management on Military Lands Act of 1960, APG has a cooperative agreement with USFWS and Maryland Department of Natural Resources (MDNR) concerning the conservation, protection, and management of fish and wildlife resources at the installation. As part of the agreement, USFWS is the primary federal agency for issues regarding fish and wildlife management, as well as the regulatory authority for the Endangered Species Act (ESA) of 1973, the Migratory Bird Treaty Act (MBTA), and Bald and Golden Eagle Protection Act (BGEPA). Below is the species list from the Integrated Natural Resource Management Plan (INRMP) for APG:

Exhibit 3.4 Federal and State Endangered Species Known to Possibly Inhabit APG

Common Name	Federal Status	State Status
Bald eagle	Protected	Protected
Golden eagle	Protected	Protected
Peregrine falcon	None	INC
Least bittern	None	INC
Sedge wren	None	E
Black rail	None	E
Henslow's sparrow	None	T
Least tern	None	T
Atlantic Sturgeon	E	E
Shortnose sturgeon	E	E
Maryland darter	E	E
Puritan tiger beetle	T	E
Northeastern beach tiger beetle	T	E
Bog turtle	T	T
Eastern tiger salamander	None	E
Indiana bat	E	E
Dwarf wedge mussel	E	E
Notes:		
INC	In Need of Conservation	
E	Endangered	
T	Threatened	

The bald eagle is a species recently delisted nationally from the ESA and currently federally protected under the BGEPA and MBTA. The largest concentration of bald eagles in the northern Chesapeake Bay area occurs at APG. Bald eagles are found in both APG-AA and APG-EA. APG's Bald Eagle Management Plan implements 500-meter protective buffer zones around nests and roosts. These buffers are adaptively managed to address allowable activities, taking into consideration routine and customary activities. There are year-round restrictions on habitat alteration (land clearing, timber harvesting, and construction) within the 500-meter buffers. Other protective measures addressed in the APG Bald Eagle Management Plan include the burial of overhead power lines in select areas and the installation of protective equipment (bird diverters and conductor insulators) on electrical infrastructure. The closest known bald eagle nesting site is approximately 1 mile west of the Preferred Site.

According to the INRMP, studies have been conducted by APG environmental staff to determine the presence of rare and endangered species on the installation. To date, the only protected, rare, threatened or endangered species that has been identified is the bald eagle. No specific studies have been conducted to determine the presence of the bog turtle or the dwarf wedge mussel. Interviews with APG environmental personnel confirm that no other protected, rare, threatened, or endangered species are known to be present at the Preferred Site (PARS 2012).

3.8.2 Environmental Consequences

The threshold of significance for natural and biological resources is defined as either a potential "take" of an endangered, threatened or species of concern, as defined by the ESA or the loss or impairment of sensitive or other native habitats such that the loss or impairment of habitat negatively impacts the population of a sensitive species.

3.8.2.1 Preferred Alternative

The implementation of the Proposed Action at the Preferred Site would result in the loss of approximately 15 acres of a mowed grass and potentially a few trees. Because the Preferred Site is primarily a mowed field in an area identified in APG Management Plans for future development, there would be no significant direct impacts to natural vegetation or wildlife.

Implementing the Proposed Action at the Preferred Site would entail the disturbance of 40,000 square feet or more of land and would need to comply with the Maryland Forest Conservation Act by submitting a Forest Stand Delineation and a Forest Conservation Plan.

New power lines installed for the Proposed Action would need to be buried underground. Protective avian measures (i.e. bird diverters and conductor insulators) would need to be maintained on existing overhead lines.

Bald eagles, which are a federally protected species under the MBTA and BGEPA, are known to inhabit portions of APG. However, the closest known bald eagle nesting site is approximately 1 mile west of the Preferred Site and the Preferred Site lies outside of the 500-meter protection zone of this nest.

The Preferred Site would not impact listed threatened or endangered species. A biological evaluation (BE) was prepared in accordance with Section 7 of the ESA (PARS 2012). The BE concluded that the Preferred Alternative would have no effect on federally or state listed threatened, endangered, or candidate species or on designated critical habitat. Listed species were eliminated because of no potential occurrence on the Preferred Site (PARS 2012). The USFWS concurred with this determination in a letter dated 29 January 2013 (Appendix A) noting that the Proposed Action was in compliance with the ESA and the BGEPA.

The MBTA states that taking, killing, or possessing migratory birds is unlawful, unless permitted by regulation. The MBTA requires federal agencies to ensure that actions it authorizes, funds, or conducts do not “adversely impact” migratory bird species or “destroy or adversely modify” a part, nest, or egg of such bird. Several native and ornamental trees, primarily along the western and southern borders of the Preferred Site, may be removed in preparation for construction. As an open active recreational field (ball field) with a few scattered native ornamental trees the Preferred Site offers marginal habitat for migratory birds.

3.8.2.2 No Action Alternative

The No Action Alternative would not impact vegetation, wildlife or sensitive species.

3.9 Coastal Zone Management

3.9.1 Affected Environment

The Federal Coastal Zone Management Act (CZMA) of 1972, as amended, is administered by National Oceanic Atmospheric Administration (NOAA). The CZMA provides for management of the nation’s coastal resources and balances economic development with environmental conservation. The CZMA is a voluntary federal/state partnership designed to encourage state coastal management programs. The overall objectives of the CZMA are to “preserve, protect, develop, and where possible, to restore or enhance the resources of the nation’s Coastal Zone”.

Maryland's Coastal Zone consists of land, water, and sub-aqueous land in the Chesapeake Bay, coastal bays, and Atlantic Ocean. The Coastal Zone falls within the Atlantic Coast region, including the Atlantic Coastal Bays, and the Chesapeake Bay that together equal 7,719 miles of shoreline. Maryland's Coastal Zone extends three miles out in the Atlantic Ocean to the inland boundaries of the 16 counties that border the Atlantic Ocean, Chesapeake Bay, and the Potomac River up to the District of Columbia. All of APG is within Maryland's Coastal Zone.

Maryland's Coastal Zone Management Program (CZMP) is managed by MDNR's Coastal Zone Management Division of the Watershed Services Unit. The CZMP is a comprehensive program based on existing laws and authorities for the protection, preservation, and orderly development of the State's coastal resources. Specific goals, objectives, and policies have been established for the management of activities that have a direct and potentially significant effect on coastal resources. As a requirement of the CZMA, federal actions that have a reasonably foreseeable effect on any land or water use or natural resource of the Coastal Zone must go through Federal Consistency review. Coordination with the MDNR's Coastal Zone Management Division of the Watershed Services unit has been initiated.

The Maryland Chesapeake Bay Critical Area Protection Act was enacted in 1984 to address the impacts of land development on habitat and aquatic resources. The law identified the Critical Area as all land within 1,000 feet of the Mean High Water Line of tidal waters or the landward edge of tidal wetlands and all waters of and lands under the Chesapeake Bay and its tributaries (APG 2009).

The Preferred Site is approximately 2,500 feet from the nearest shoreline (Gunpowder River) and outside of the 100-year floodplain. The Preferred Site is not located within the Critical Area.

3.9.2 Environmental Consequences

The Preferred and No Action alternatives were evaluated to determine whether either would result in a significant impact with the threshold being a location within the Critical Area and inconsistent with the CZMA.

3.9.2.1 Preferred Alternative

The Preferred Site is not located within the Critical Area. No impacts to the Critical Area would occur from implementing the Proposed Action at the Preferred Site. The Proposed Action is consistent with Maryland's CZMP and the Federal CZMA. A Federal Consistency Determination will be made prior to the start of construction.

3.9.2.2 No Action Alternative

The No Action Alternative would not impact the Critical Area or coastal zones.

3.10 Cultural Resources

3.10.1 Affected Environment

3.10.1.1 Cultural Overview

Cultural resources are defined as prehistoric or historic districts, sites, buildings, structures, or objects considered important to a culture, subculture, or community for scientific, traditional, religious, or other purposes. They include archaeological resources, historic architectural or engineering resources, and other traditional resources.

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies identify whether any historic properties that are listed or eligible for listing, in the National Register of Historic Places (NRHP) could be affected by a proposed action. The NRHP is a list of America's historic properties significant in history, architecture, engineering, and culture.

3.10.1.2. Archeological Resources

An inventory of both archaeological resources and completed investigations performed at APG are summarized in the Integrated Cultural Resource Management Plan (ICRMP) prepared by R. Christopher Goodwin & Associates, Inc. (RCG&A) in 2008.

A Phase I archaeological survey of the Preferred Site was performed in December 2012 (PARS 2013a). Background research consisting of a review of the APG ICRMP and a prehistoric resources predictive model prepared for APG suggested that the Preferred Site has a low potential to contain prehistoric archaeological resources eligible for the NRHP. Historic research suggested that prior to its acquisition by the federal government and subsequent development as APG, the area was largely agricultural fields. No evidence of structures within the Preferred Site was identified by the background research. Review of historical aerial photos revealed that the Preferred Site was landscaped flat prior to 1959 and establishment of the ball field. Land use since the middle of the 20th century appears to be confined to recreational activities with localized disturbance from several utilities including storm drainage and sanitary sewers (PARS 2013b).

A pedestrian reconnaissance of the Preferred Site was performed and 59 shovel test pits (STPs) were dug. A lone prehistoric artifact was recovered during the survey. Subsequent five foot radial testing around this location did not yield additional cultural material. One historic artifact, two non-diagnostic historic to recent artifacts, and several pieces of trash were recovered in the course of the survey (PARS 2013b).

3.10.1.3. Architectural Resources

An inventory of historic buildings, structures, objects, districts, and sites are presented in APG's ICRMP. The APG Cultural Resources Manager maintains the most current list of the status of historic property evaluations (RCG&A 2008).

The World War I Barracks Historic District is the only previously identified historic property located within the immediate vicinity of the Preferred Site. The WWI Historic Barracks district is diagonally opposite the Preferred Site in the southwest quadrant of the intersection of Wise and Austin roads and extends several blocks south and west from the Preferred Site. This district formerly housed Army personnel employed to operate the chemical plant facilities and the

buildings are considered to be rare examples of permanent construction dating from WWI (RCG&A 2008).

3.10.1.4. Traditional Cultural Properties and Sacred Sites

A traditional cultural property is defined generally as a place that is eligible for inclusion in the NRHP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community. Traditional cultural properties are most often eligible for the NRHP under Criterion A because of associations with important events, or patterns of events, in a community's traditional history and culture. Native American sacred sites fall within the definition of traditional cultural properties. The NHPA provides very specifically that certain kinds of traditional cultural properties—Native American sacred sites—can be eligible for the NRHP, and that Federal agencies have to consult with Native American groups that may value such sites (RCG&A 2008).

In 1999, the U.S. Army Corps of Engineers, Baltimore District, completed an ethnohistory of APG. In 1999-2000, APG undertook consultation with the following Indian tribes who had been identified as having an interest in the land that became APG: Cayuga Nation of New York; Delaware Tribe of Western Oklahoma; Delaware Tribe of Indians, Oklahoma; Tuscarora Nation of New York; Oneida Nation of New York; Oneida Tribe of Wisconsin; Onondaga Nation of New York; Seneca Nation of New York; Seneca-Cayuga Tribe of Oklahoma; Tonawanda Band of Seneca Indians of New York; and, St. Regis Band of Mohawk Indians of New York. No traditional cultural properties or sacred sites have been identified within APG either through the development of an ethnohistory of the facility or the tribal consultation process (RCG&A 2008).

3.10.2 Environmental Consequences

For cultural resources, a significant effect is defined as an impact that diminishes or destroys the integrity of an NRHP eligible property or site. This equates to adverse effect under Section 106 of the National Historic Preservation Act.

3.10.2.1 Preferred Alternative

The Proposed Action would not directly impact archeological resources as construction of the facility would take place in areas where the ground has already been disturbed and where no known cultural or archaeological resources exist.

During construction of and once constructed, the new facility would be visible from the northwest portion of the WWI Barracks Historic District situated diagonally across the intersection of Wise and Austin roads from the Preferred Site. The U.S. Army has determined that the Proposed Action would have no adverse effect on historic properties.

A letter was submitted to the MHT on 8 February 2013 requesting concurrence of the U.S. Army's determination of no historic properties adversely effected by the Proposed Action as per 36 CFR 800.4 (d)(1). The MHT concurred on 30 April 2013 (Appendix A).

In accordance with 36 CFR Part 800.2(d) and Part 800.3(c), federally recognized Native American tribes in the area were notified about the project in letters dated 4 June 2012 (Appendix A). Consultation is on-going, but to date no traditional cultural properties have been reported for the Preferred Site, and it is unlikely that resources considered significant to Native

American or other traditional communities would be impacted by the Proposed Action. In correspondence dated 19 June 2012 the Delaware Nation requested a copy of the Phase I Archaeology Survey (Appendix A).

The USACE would brief the construction crews on procedures to follow in case of an unexpected discovery of cultural resources. If cultural resources are uncovered during construction, the U.S. Army, APG Cultural Resources Manager and the MHT would be notified, and construction activities would stop until a qualified archaeologist could assess the significance of the cultural remains. If human remains are encountered, the local coroner and law enforcement would be contacted. If the remains are of Native American origin, compliance with the Native American Graves and Repatriation Act regulations would be required.

3.10.2.2 No Action Alternative

The No Action Alternative would not impact cultural resources.

3.11 Socioeconomic Resources

3.11.1 Affected Environment

3.11.1.1 Population

Harford County and the 2010 census tract containing the Preferred Site are considered the ROI for the Proposed Action. The racial mix of the ROI consists predominantly of Caucasians and African Americans (Exhibit 3.5).

Exhibit 3.5 Population and Race

Geographic Region	Total Population	White (%)	African American (%)	Native American (%)	Asian (%)	Native Hawaiian or other Pacific Islander (%)	Some Other Race (%)	Two or more Races (%)	Hispanic or Latino Origin of any Race (%)
Maryland	5,773,552	58.2	29.4	0.4	5.5	0.0	3.6	2.9	8.2
Harford County	244,826	81.2	12.7	0.3	2.4	0.0	0.9	2.5	3.5
2010 Census Tract 3065	2,216	66.5	20.9	0.7	2.1	0.7	4.2	4.8	14.5

Source: U.S. Census Bureau (2010)

3.11.1.2 Income and Employment

In 2011, the areas in the ROI had a lower per capita income (PCI) than the state of Maryland. Harford County had a PCI above the national average, while 2010 Census Tract 3065 was below the national average (Exhibit 3.6).

Exhibit 3.6 Per Capita Income

	Per Capita Income	Percent State Average	Percent National Average
Nation (Average)	\$26,708	NA	100.0
Maryland	\$35,751	100.0	133.9
Harford County	\$34,659	96.9	129.8
2010 Census Tract 3065	\$18,797	52.6	70.3
Source: U.S. Census Bureau, 2011 American Community Survey			

The total number of jobs in the ROI was over 134,000 for Harford County and over 1,000 jobs for 2010 Census Tract 3065 in 2011 (Exhibit 3.7). The number of jobs in 2011 increased more than 14 percent over 2000 levels for Maryland and Harford County and decreased approximately 47 percent for the census tract. The unemployment rate for Harford County was lower than the unemployment rate for Maryland in 2000 and 2011. The unemployment rate for Census Tract 3065 was lower than Maryland in 2000, but higher in 2011.

Exhibit 3.7 Total Number of Jobs and Employment

	Total Number of Jobs			Unemployment Rate	
	2000	2011	% Change	2000 (%)	2011 (%)
Maryland	2,769,525	3,166,018	14.3	4.7	7.3
Harford County	116,981	134,743	15.2	3.0	6.3
2010 Census Tract 3065	1,936	1,022	-47.2	1.0	9.1
Source: U.S. Census Bureau, 2011 American Community Survey; 2000 Census					

APG is a major contributor to the local, regional, and state economy, with an annual operating budget in excess of \$1 billion. Federal, state, and local government employment, including the military, constitutes almost 20 percent of the total employment in Harford County. An impact analysis was performed which estimated that APG stimulates over \$1.8 billion in economic activity in the State of Maryland, and supports almost 24,000 jobs statewide (APG 2012).

In 2011, the percentage of people in poverty in Harford County and 2010 Census Tract 3065 (each 6.5 percent) was lower than the Nation (14.3 percent) and the state (9.0 percent) (Exhibit 3.8). The median household income in Harford County is higher than that for the state and the Nation. 2010 Census Tract 3065 has a median household income that is lower than each of the comparison geographies, except for the Nation.

Exhibit 3.8 Poverty and Median Income

	Number in Poverty of All Ages	Percentage in Poverty	Median Household Income
Nation	42,739,924	14.3	\$52,762
Maryland	502,610	9.0	\$72,419
Harford County	15,718	6.5	\$79,953
2010 Census Tract 3065	628	6.5	\$55,986
Source: U.S. Census Bureau, 2011 American Community Survey			

3.11.1.3 Housing

The total number of housing units in the ROI for 2010 was over 95,000 in 2010 for Harford County and over 850 for the census tract where the Preferred Site is located (Exhibit 3.9). Approximately 94 percent of the housing units were occupied for Harford County, and approximately 42 percent for the census tract where the Preferred Site is located (U.S. Census Bureau 2010).

Exhibit 3.9 Housing Units

	Total Housing Units	Status	
		Occupied	Vacant
Maryland	2,378,814	2,156,411	222,403
Harford County	95,554	90,218	5,336
2010 Census Tract 3065	867	362	505
Source: U.S. Census Bureau (2010)			

APG supplies both unaccompanied enlisted personnel housing and family housing, totaling over 4,500 units. The family housing provided at APG began an overhaul in 2008 under the Residential Communities Initiative. Older housing is being renovated or demolished and new housing is being constructed (APG 2012).

3.11.1.4 Environmental Justice

EO 12898 (Environmental Justice) requires federal agencies to identify and address disproportionately high and adverse impact of their programs, policies, and activities on minority and low-income populations. EO 12898 was enacted to ensure fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal programs and policies. Approximately 19 percent of the people living in Harford County are non-white and 34 percent are non-white in the census tract where the Preferred Site is located. Six and one half percent of the ROI population is considered to live below the poverty level in Harford County and Census Tract 3065, respectively. There is limited potential to encounter environmental justice populations within the ROI.

3.11.1.5 Protection of Children

EO 13045 (Protection of Children) requires each federal agency to identify and assess environmental health risks and safety risks that may disproportionately affect children, and ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. In the ROIs, between six and 13 percent of the population is five years old or less and between 23 and 39 percent are younger than 18 years (Exhibit 3.10). Potential issues related to the protection of children arise when an action is to be implemented near residential areas, schools or daycare centers. There are no residential areas, schools or daycare centers at or in the immediate vicinity of the Preferred Site.

Exhibit 3.10 Population of Persons Younger than Eighteen Years Old

	5 Years Old or Less (Percent)	Less than 18 Years Old (Percent)
Maryland	6.4	23.7
Harford County	6.2	25.0
2010 Census Tract 3065	12.4	38.4
Source: U.S. Census Bureau, 2011 American Community Survey		

3.11.1.6 Limited English Proficiency

EO 13166 (Limited English Proficiency) (LEP) requires federal agencies to ensure that they take reasonable steps to provide meaningful access for LEP individuals. In 2011, the percentage of people who speak a language other than English at home in Harford County (7.5 percent) and the state of Maryland (16.2 percent) is lower than the percentage of people who speak a language other than English at home in 2010 Census Tract 3065 (18.3 percent (Exhibit 3.11).

Exhibit 3.11 Characteristics of People who Speak a Language other than English at Home

	People who speak only English at home	People who speak a language other than English at home	People who speak Spanish	People who speak Indo- European languages	People who speak Asian and other Pacific Island languages	People who speak other languages
Maryland	83.8%	16.2%	355,654	235,711	188,509	89,909
Harford County	92.5%	7.5%	6,351	6,001	3,392	1,343
2010 Census Tract 3065	81.7%	18.3%	188	132	37	20
Source: U.S. Census Bureau, 2011 American Community Survey						

3.11.2 Environmental Consequences

The threshold of significance for impacts to socioeconomics would be a substantial increase in population or displacement of people or housing. The threshold for significant impacts to environmental justice populations is defined as the level at which disproportionately high and adverse impacts to these populations would occur. The threshold for significant impacts to children is defined as the level at which disproportionate impacts to children's health and safety would occur.

3.11.2.1 Preferred Alternative

Socioeconomic impacts from the Preferred Alternative would not be significant. The Proposed Action does not consist of construction in excess of \$100 million or more than 1000 new U.S. Army employees (full-time and part-time). As a result, no socioeconomic analyses were required. This determination was based on a study commissioned in 2008 and 2009 (Webster

2009). This study analyzed the potential socioeconomic effects of the construction and operation of 21 proposed new USARCs, spanning a cross-section of communities and a variety of USARC sizes (from \$7.5 million to \$26.4 million in construction cost and from 73 to 734 new Reservists). These analyses were accomplished using the Economic Impact Forecast System (EIFS) and the Rational Threshold Value (RTV) technique (Huppertz et al. 1994), consistent with the requirements of the Army NEPA implementation regulation 32 CFR Part 651, "Environmental Analysis of Army Actions" (Office of the Deputy Assistant Secretary of the Army 2002). This analysis found that the proposed actions were well below the RTV thresholds for significance and calculated necessary project sizes to cross the thresholds. These calculations indicated that the smallest of these project sizes was \$200 million for new construction projects and 5000 new Reservists, recognizing that Reservist salaries and expenditure are relatively small when compared to that of a new full-time employee. As a conservative measure, the U.S. Army has established \$100 million and 1000 Reservists as thresholds for further socioeconomic analyses for new USARC construction or operation. Furthermore, the personnel in the 10 existing USAR units to be assigned to the new APG-EA USARC already reside, work and train in the area; therefore, a significant change in population or socioeconomics would not be expected.

The Preferred Site is an open recreational field. There are no known concentrations of minority populations, low income populations, children or limited English proficiency populations on or near the Preferred Site. No displacements of residences or businesses would be required and the construction area would be restricted to authorized personnel. No disproportionate impacts to minority or low income families or impacts to children or LEP populations would result from the Proposed Action at the Preferred Site, and the Proposed Action would be in compliance with EO 12898, EO 13045 and EO 13166. Socioeconomic impacts would be insignificant.

3.11.2.2 No Action Alternative

The No Action Alternative would not impact socioeconomic conditions.

3.12 Transportation

3.12.1 Affected Environment

Being located approximately 30 miles northeast of Baltimore and approximately 70 miles from Philadelphia, Pennsylvania and Washington, DC, APG is served by a well-developed regional roadway network and a multi-modal transportation system consisting of highway, rail, and air transportation.

The roadways in the vicinity of APG serve several purposes: they provide local access to adjacent land uses; they serve as major commuter routes that connect to locations in Maryland, Pennsylvania, and the Washington, DC core; and they provide long-distance travel along the Eastern Seaboard. Interstate 95 (I-95) is located approximately 3 miles west of APG. This major freeway connects APG to Baltimore and Washington, DC to the southwest and Philadelphia to the northeast. U.S. Route 40 (US 40, Pulaski Highway) is situated between I-95 and APG. Both of these major arteries generally parallel the APG's north/northwestern boundary and run from Baltimore through portions of Harford and Cecil Counties. Several state highways and local roads feed from these major routes onto the streets of APG-AA and APG-EA. Roadways that support access to APG-EA include: MD 152 (Mountain Road), MD 24 (Emmorton Road), and Wise Road. The APG internal road system consists of over 300 miles of paved roads with APG-AA experiencing a larger volume of traffic than APG-EA. Within APG-EA vehicular access to the

Preferred Site would be via Wise and Austin Roads. Average daily weekday traffic volumes on Wise Road approximately 1.5 miles north of the Preferred Site are approximately 4,100 vehicles per day (APG 2013). Traffic volume data was not available for Austin Road. In general, roadway congestion within APG is minimal and the capacity of the existing roadways is sufficient to maintain unconstrained traffic movement during peak periods of the day (Atkins, 2011a). There are no existing dedicated pedestrian or bicycle facilities that provide access to or from APG.

Amtrak, MTA via Maryland Area Rapid Commuter (MARC) and Commuter Bus, and Harford County Transportation Services provide mass transit service to the area surrounding APG. Rapid transit is provided by Amtrak and MARC. The Amtrak rail line physically bounds APG to the north/northwest. This line is part of Amtrak's Northeast Corridor, which provides regional high-speed rail service from Virginia to Massachusetts. Amtrak's only station in Harford County is at the Aberdeen Station, located north of APG-AA near the intersection of Bel Air Avenue and U.S. 40. MARC's Penn Line utilizes Amtrak's Northeast Corridor track and runs between Washington, DC and Perryville, Maryland. MARC has two stations in the vicinity of APG: the Aberdeen Station shared with Amtrak and the Edgewood Station, which is located north of APG-EA on the west side of Edgewood Road. Several bus routes serve the area around the APG; no routes directly service APG or its gates.

Several commercial and passenger airports serve the region. Closest to APG is the Baltimore-Washington International Thurgood Marshall Airport, located approximately 40 miles southwest in Maryland outside of Baltimore. Philadelphia International Airport is located approximately 65 miles to the northeast in Pennsylvania, and Washington Dulles International Airport is located approximately 90 miles to the southwest in Virginia. APG maintains an airfield and heliport for military use only. Phillips Army Airfield is within the APG-AA and Weide Army Heliport is within APG-EA approximately 1,000 feet northeast of the Preferred Site.

3.12.2 Environmental Consequences

The threshold for significant impacts to transportation is a substantial disruption in traffic flow on adjacent roadways or other surrounding roads. Factors considered in determining whether a significant traffic-related impact could occur consisted of the extent to which the considered alternatives would result in (1) an increase in vehicle trips that would disrupt or alter local circulation patterns; (2) lane closures or other impediments to traffic; (3) increased conflict with pedestrian and bicycle routes or fixed-route transit; and (4) parking demand that exceeds the supply.

3.12.2.1 Preferred Alternative

The Preferred Alternative would not result in significant transportation impacts. Limited short-term direct impacts from construction of the Preferred Alternative would be likely because of increased construction vehicle traffic primarily along Interstate 95 and U.S. Route 40 because they provide access to APG-EA and along Wise and Austin roads within APG-EA. No lane or road closures are anticipated as construction activities would be confined to the construction site. These direct, short-term construction impacts would not be significant.

Potential long-term direct (not significant) impacts would occur as the result of operation of the Preferred Alternative along Wise and Austin roads in the APG-EA. These increases in vehicle traffic would be limited primarily to weekends when local traffic is less than normal weekday averages. The maximum expected use of the facility would be approximately 260 members per peak weekend.

The number of vehicle trips from the Preferred Alternative was estimated using methodologies from the Institute of Transportation Engineers (ITE) (ITE 2008). The facilities under the Preferred Alternative are similar to the Single Tenant Office Building classification because the facilities would be under a single tenant and workers would arrive in the morning, stay throughout the day, and leave after work in the evening. The average rate of trip generation per employee for a Single Tenant Office Building is 3.62. The proposed USARC would employ approximately 31 full-time employees, which would result in approximately 112 vehicle trips per day in and around APG-EA but these would not be new trips for the overall region (APG, Abingdon and surrounding municipalities in Harford County) as trips already occur on roads surrounding the two existing facilities at APG-AA and in Abingdon, MD. The addition of 112 vehicle trips per day on the roads serving APG-EA would not significantly affect traffic.

The average trip rate per day for the weekend training periods was assumed to be 2.25. Using this rate, approximately 585 additional vehicle trips per day would occur on peak training weekends. The average daily trip rate for weekday activities is greater than for weekend drill activities because daily staff are more likely to leave for lunch or errands than personnel attending drill weekend training (USACE Louisville District 2010). Large vehicle and truck traffic would be heaviest on peak drill weekends. The 585 trips would not be new trips for the overall region as trips already occur on roads surrounding the two existing facilities. The estimated 585 additional vehicle trips per peak training weekend day would have no significant long-term direct impacts to traffic because the increases in vehicle traffic would be limited primarily to weekends when traffic is less than normal weekday averages.

The Preferred Alternative would not result in increased conflicts with pedestrian and bicycle routes or fixed-route transit.

Sufficient parking would be provided at the Preferred Site to meet the proposed peak training weekend demand. On-street parking would not be required. The Army would promote ridesharing as a means to conserve petroleum, reduce congestion, improve air quality, and provide an economical way for Federal employees to commute to work in accordance with EO 12191 (Federal facility ridesharing program).

The maximum expected use of the facility would be approximately 260 members per peak weekend and most of those users are local. Therefore, the Proposed Action would not have a significant direct effect on mass transit or air travel.

3.12.2.2 No Action Alternative

The No Action Alternative would not impact transportation.

3.13 Utilities

3.13.1 Affected Environment

3.13.1.1 Potable Water Supply

Groundwater is not used as a drinking water source at APG-EA. There are two sources of potable water at APG-EA: Winters Run and Harford County. The primary source is surface water from Winters Run, which is treated and supplied to the APG-EA. Potable water from Harford County is delivered to the APG-EA with no additional treatment. Treated water from Winters Run is conveyed to the Hanson Reservoir, a 1.75-million gallon above ground storage

tank. It proceeds to APG-EA's water distribution system. The design capacity of the APG-EA water treatment plant is 4.0 million gallons per day (MGD). However, due to equipment constraints, the system actually provides only 1.7 MGD of capacity, which is adequate for the population of approximately 6,000 served at the APG-EA (Atkins 2011a). Later in the design process, once additional utility information is received, the capacity of the existing service line will be assessed (CH2M Hill 2012).

Potable water for the Preferred Site is available via a 10-inch water line under the center of the Preferred Site in an east/west orientation and a 6-inch pipe parallel to the south side of Austin Road. A pipe off of the 6-inch main currently serves the Preferred Site. It is anticipated that potable water service and fire protection would be provided to the Preferred Site via the 10-inch water line (CH2M Hill 2012).

3.13.1.2 Sanitary Sewer

The wastewater system for APG-EA is owned and operated by APG. The APG-EA waste water treatment plant services approximately 6,000 people and has a capacity of 3.2 MGD, with an average daily flow of 0.9 MGD (Atkins 2011a).

An existing 10-inch steel force main is located on the east side of the Preferred Site and a gravity sanitary sewer line to the southeast on an adjacent parcel. It is proposed that the Preferred Site be served by an 8-inch gravity sewer system. Information regarding current pumping capacity and authorization to connect to the lift station east of the Preferred Site would be requested by the design team. If the existing lift station does not have pumping capacity to support the USARC, a new lift station would be constructed. An oil/water separator (OWS) unit would be provided for the wash and work bays. The OWS unit would discharge to the proposed sanitary sewer gravity system.

3.13.1.3 Electricity, Natural Gas and Steam

Electricity, natural gas and steam are available at APG-EA. Electricity and natural gas are provided by Baltimore Gas and Electric (BG&E). With regard to electricity, BG&E owns the main substations entering APG, but APG owns and operates lines downstream of the substations. The electricity capacity for the APG-EA is 30 megavolt amperes with the system currently operating at 60 percent of its capacity; therefore available capacity exists to serve the Proposed Action. While natural gas is available to APG-EA, the closest line appears to be approximately 0.5 mile north of the Preferred Site. Natural gas capacity to APG-EA is limited. Coordination with BG&E would be necessary to determine if there would be enough natural gas capacity to serve the Proposed Action.

APG-EA is served by a central heating system that uses high-pressure steam generated by an existing on-base waste to energy facility and three boiler plants. The current system has many steam losses, sections that need replacement to stay operational, and old boilers, some of which do not operate (GP Strategies Corporation 2012). APG has proposed to upgrade, maintain and replace the existing steam supply and distribution system. The Preferred Alternative would have an air/vapor barrier installed. There is an existing steam pipe along the north side of Austin Road at the Preferred Site but it is undersized and in need of repair or replacement (CH2M Hill 2012). It is assumed that the proposed buildings would use propane due to the lack of availability of natural gas and steam in the vicinity of the Preferred Site. Propane would be stored in above ground storage tanks and boilers would be installed in the two buildings proposed to be heated.

3.12.1.4 Energy

The existing ball field uses electricity to power lights and gasoline is used to power lawn mowers that periodically cut grass at the Preferred Site.

3.13.2 Environmental Consequences

The threshold of significance for impacts to utilities would be an exceedance of the existing capacity of utilities.

3.13.2.1 Preferred Alternative

In the short-term, the construction of the Proposed Action would not have direct impacts on the regional potable water supply, wastewater treatment system, electric and gas utility, or energy usage. Construction crews would bring water and portable latrines on-site. Since the Preferred Site is greater than one acre, a Stormwater Discharge Permit for General Construction may be required prior to construction. This permit may require that a SWPPP in accordance with Maryland Stormwater Management Act permit regulations and NOI be prepared and filed with the USEPA through the MDE. The SWPPP would identify BMPs that may be required to control stormwater erosion and runoff from the site and sedimentation into downstream areas. Upon completion of construction, disturbed areas that are not landscaped and routinely maintained could be reseeded.

Long-term direct impacts to utility systems would not be significant. Water, sanitary sewer and electricity have available capacity and the steam system at APG-EA is proposed to be upgraded to better serve the future needs of APG-EA. If natural gas is to be used, coordination with BG&E would be necessary to determine if there is enough natural gas capacity to serve the Proposed Action given that BG&E has capacity constraints at APG-EA.

Demand for electricity, steam and/or natural gas at the Preferred Site would be minimized by the U.S. Army installing electrical fixtures and air conditioning systems in compliance with the Energy Policy Act of 2005, which has specified goals for increased use of energy efficient equipment and building systems. To reduce reliance on non-renewable energy sources and to achieve energy reduction goals, the U.S. Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies and energy saving features. The use of photovoltaic panels is being explored.

The buildings would be oriented to maximize solar efficiency to the extent possible. The primary heating and cooling source for the training building would be from a variable refrigerant flow electric heat pump system. High-efficiency, heating oil or propane-fired, sealed combustion water heaters that comply with the energy conservation requirements of ASHRAE 90.1.2004 would provide domestic hot water for each building (CH2M Hill 2012).

Potable water demand would be minimized by installing water-conserving devices consisting of low-flow shower heads, faucets, and toilets in new facilities. Waterless urinals would be considered in toilet rooms. Other plumbing equipment would use low-water-use plumbing fixtures and trim conforming to the requirements of the International Plumbing Code and would be specified.

Exterior lighting fixtures would use light-emitting diode (LED) technology and would comply with sustainable design requirements. Use of solar powered fixtures would be researched during

final design. Interior lighting would consist of fluorescent light fixtures with energy saving lamps and electronic ballasts coupled with occupancy sensors and dimming controls. LED fixtures and other energy efficient lighting solutions, including day lighting, would be explored during final design.

The Army would incorporate sustainability and green practices in daily operations of the Proposed Action through waste reduction, recycling of reusable materials and purchase of items produced using recovered materials, in compliance with EO 13148 (Greening the Government Through Leadership in Environmental Management). The design, construction, and operation of the APG-EA USARC would be consistent with and meet the intent of EO 13514, the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 and APG's Net Zero Water Strategy.

Measures that would be considered during site development to make the site a sustainable site and obtain LEED credits are:

- Erosion and Sediment Control Plan for construction activities to reduce pollution and site impact
- Minimize site impact and maximize green space
- Proposed landscape to utilize native species and eliminate irrigation needs
- Provision of preferred parking for fuel efficient vehicles and carpool/vanpool vehicles
- Bicycle transportation encouraged by providing bicycle racks

3.13.2.2 No Action Alternative

The No Action Alternative would not impact utilities.

3.14 Hazardous and Toxic Substances

3.14.1 Affected Environment

An Environmental Condition of Property (ECP) assessment was performed for the Preferred Site and no recognized environmental conditions (RECs) or historical RECs were identified (PARS 2013b). However, two potential environmental concerns were identified which warrant mention: the radon designation for Harford County and the adjacent East Canal Creek Area Plume.

Harford County is within USEPA radon zone 1. Zone 1 indicates that indoor average radon levels are greater than 4 picocuries per liter. Based on this information, existing buildings and future development of the Preferred Site would be expected to have elevated radon levels that would require action.

Since 1917, the APG-EA has been the site of laboratory research and manufacture of military-unique chemicals, field testing of these chemical materials and munitions, pilot-scale manufacturing and related test and disposal operations. The APG-EA has been a center for the storage of chemical warfare material and a major receiving center for waste handling operations, including low-level radiological waste. The APG-EA is associated with ten major areas of study. The Preferred Site is included in the Canal Creek Study Area in the north, and the Other Edgewood Study Area in the south. The Canal Creek Study Area (CCSA) was used for manufacturing and experimental work with chemical agents. Incidental disposal of

contaminated test material and excess chemicals occurred throughout the APG-EA. The exact quantities of chemicals used, manufactured, and disposed are not known.

Long-term monitoring (LTM) is being conducted at the East Canal Creek area plume, located in the northern portion of the Preferred Site and extending east to the Weide Army Airfield. The plume is mainly comprised of 1,1,2,2- tetrachloroethane (1,1,2,2-TeCa) and trichloroethylene (TCE), and their breakdown products. The plume extends under the Preferred Site within the East Canal Creek Aquifer. The East Canal Creek area plume is included in a 2000 Record of Decision (ROD). The ROD was implemented to provide containment and treatment of the contaminated media in the East Canal Creek area plume, in order to provide protection to public health, welfare and the environment under future scenarios. According to the ROD, the selected remedy for the East Canal Creek area plume is groundwater extraction/treatment with land use controls, institutional controls and natural processes in the down-gradient portion of the plume. In order to achieve the remedial action objectives, an extraction/treatment system for the East Canal Creek Area plume was constructed which consists of a number of extraction wells and the Canal Creek Groundwater Treatment Plant (at Building E5236). The plant has been operating since 2003, and the LTM component evaluates the capture zone.

The Preferred Site is within an area of ongoing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) studies. The CERCLA study areas that overlap the Preferred Site include the CCSA and the Other Edgewood Areas (OEA). The northern portion of the Preferred Site coincides with the Canal Creek Marsh and Landfill - East site. The former landfill was reported to be in operation as early as 1940 and was the disposal location of ash and other wastes from the nearby Noble Road Incinerator (HydroGeologic Inc. 2013).

A 2010 map from continued groundwater monitoring of the East Canal Creek Aquifer remediation site indicate volatile organic compounds in a deeper confined layer of the aquifer extends south and east of Wise Road beneath the northern portion of the Preferred Site. Neither drinking water nor irrigation wells are proposed in the construction plans. In addition, the layer is deep and confined and therefore not considered to be of concern.

In November 2012, 21 0-to-5-feet below ground surface and 17 5-to-10-feet below ground surface soil samples were collected and analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs). In addition, five 0-to-5-feet below ground surface and four 5-to-10-feet below ground surface samples were collected for target analyte list (TAL) metals analyses. No evidence of soil contamination was observed during sampling activities. Only arsenic was detected in soil at concentrations exceeding the USEPA Industrial regional screening levels (RSLs) and the range of reference background concentrations. No other chemicals exceeded USEPA Industrial RSLs (HydroGeologic Inc. 2013).

Arsenic was reported in soil samples at concentrations ranging from 0.55 milligrams per kilogram (mg/kg) to 5.33 mg/kg. The range of detections in the reference background dataset was 1.04 to 5.29 mg/kg. Only two composites were higher than the maximum reference background value, both 5.33 mg/kg. The upper end of the range of arsenic results in the reference background data set is 5.29 mg/kg. The two soil samples above this range are only 0.04 mg/kg (approximately 0.8 percent) above the reference background concentration. These sample concentrations are considered indistinguishable from the upper end of reference background because variability, inherent to the analytical method, exceeds this level. Therefore, arsenic in soil is not considered to be a concern. Other than for arsenic, none of the soil samples collected had detections above available USEPA Industrial RSLs or the range of

reference background levels. Other chemicals were reported above background levels but not above RSLs. These include a number of metals and a phthalate. All other detections were below available screening criteria (HydroGeologic Inc. 2013).

In December 2012, a limited groundwater investigation was conducted of the shallow groundwater on the Preferred Site and within the immediate area of the proposed construction. A January 2013 draft technical memo concludes that while some contaminants were detected above their screening level, the data indicate they do not provide a threat to human health. Protective measures for construction workers and ongoing site personnel were not recommended (PARS 2013b).

The *Draft Digital Geophysical Mapping Results* report dated 11 February 2013, was reviewed for the Preferred Site. The report presented the findings of a digital geophysical mapping investigation conducted at the Preferred Site in support of the proposed construction activities. The purpose was to delineate potential buried waste material (metallic and non-metallic) or uncontrolled fill as well as map geophysical anomalies that may be indicative of potential munitions and explosives concern (MEC) and material potentially presenting an explosive hazard (MPPEH) within the proposed construction footprint. Higher concentrations of anomalies were noted in the northern portion of the Preferred Site, mainly in the western, central, and northeastern sections. The anomalies could either be attributed to above-ground metal structures, underground utilities, or deeply buried metal. The report concluded that ground truthing would be needed within the footprint of these features in order to better characterize the source of the anomaly and determine whether the targets were MEC or MPPEH as well as to characterize their depth below ground surface (CH2M 2013).

3.14.2 Environmental Consequences

The threshold of significance for impacts resulting from hazardous materials would consist of a release of hazardous materials or a violation of local, state, or federal hazardous materials regulations.

3.14.2.1 Preferred Alternative

No hazardous and toxic substances appear to exist at the Preferred Site. Construction would pose minimal adverse impacts because of the potential for spills and leaks from construction equipment. Potential adverse impacts from construction would be mitigated by contractor spill management plans and response equipment.

During construction of the Proposed Action, it is possible for hazardous materials to be encountered. If soil suspected of containing hazardous material based on odor, color, consistency, or other indicators is encountered during construction, this soil would be kept separate from other soils onsite. Contaminated soil would not be re-used in construction, but would be kept separate from other soils and its characterization, regulation, and disposition coordinated with APG Department of Public Works Environmental Division. Based on further engineering and evaluation, the construction contractor may plan on setting aside an area to store contaminated soil when drafting Erosion and Sediment Control and Stormwater Management Plans. Available soil and groundwater data would be considered when determining the proper management of soils that may need to be moved from the Preferred Site, and groundwater from dewatering that would occur during construction activities. The Preferred Alternative would have an air/vapor barrier installed.

Long-term, the potential exists for storage of minor amounts of petroleum, oils and lubricants (POL) to maintain and fuel equipment and vehicles; these areas would have primary and secondary containment measures. Clean-up materials would be maintained at the site to allow immediate action in case an accidental spill occurs. Drip pans would be provided for stationary equipment to capture POL spilled during maintenance or leaks from the equipment. Small quantities of soldier-generated waste such as navigational and communicational equipment batteries may be generated. Hazardous materials and waste generated would be disposed through an approved contractor according to state and federal regulations.

The Proposed Action would not present a significant impact to the public or the environment resulting from the transport, use, or disposal of hazardous materials.

3.14.2.2 No Action Alternative

Without the construction and operation of the Proposed Action, there would be no additional potential for spills of hazardous materials during construction.

3.15 Cumulative Impacts

The CEQ defines cumulative impacts as the incremental impact of multiple past, present, and reasonably foreseeable future actions with individually minor but collectively significant impacts. Cumulative impacts can be concisely defined as the total impact of multiple land uses and developments, including their interrelationships, on the environment.

3.15.1 Preferred Alternative

The Preferred Site is approximately 15 acres located in the northeast quadrant of the intersection of Austin and Wise roads within APG-EA. The Preferred Site is an open field for recreational use and contains a ball field. The Preferred Alternative, when combined with other known proposed developments, would not have significant cumulative impacts.

The population of Harford County increased by almost 50 percent between 1940 and 1950 and again from 1950 to 1960. Consequently, the year 1960 was used as the time frame for consideration of past actions. The year 2025 was the limit of the future time frame for reasonably foreseeable future actions.

The study area used for the analysis of potential cumulative effects is the Canal Creek area watershed within APG-EA totaling approximately 1,500 acres.

According to historical aerial photographs, development on adjacent properties to the west south and southeast has occurred since 1959. Between 1959 and 1966, the dispensary building abutting the property to the southeast was constructed along with the recreation building to the west across Wise Road and several residential structures south of Austin Road. The residential structures south of Austin Road are in the process of being converted to administrative use. During the 1980s, the Weide Army Airfield was closed to fix-winged aircraft and converted to the Weide Army Heliport. Between 2010 and 2012 the Maryland National Guard renovated and expanded the Army Aviation Support Facility at Weide Army Heliport. Development in part associated with the Base Realignment and Closure Act of 2005 (BRAC) that has occurred at APG-EA from 2007 through the present has consisted of new facilities for the U.S. Army Medical Research Institute of Chemical Defense, Joint Program Executive Office for Chemical Biological Defense and U.S. Army Public Health Command. From the 1980s through the

present, selective building demolition and redevelopment has occurred within the Canal Creek area of APG-EA. APG previously determined that the WWI Barracks Historic District situated diagonally across the intersection of Wise and Austin roads from the Preferred Site were excess to Army requirements and has proposed demolition of all but one of the barracks. There is a proposal to upgrade the underground steam utility line along Austin Road.

Cumulative long-term beneficial impacts to aesthetics and visual resources would result from renovation and demolition of deteriorated and dilapidated structures in combination with implementation of the Preferred Alternative and other new developments at APG-EA. There would be short-term cumulative impacts to aesthetics and visual resources under the Preferred Alternative. Construction activities taking place for the Preferred Alternative as well as those conducted under other initiatives at APG-EA would result in a temporary impact.

Cumulative impacts on air quality from the Proposed Action, when combined with other past projects, would be insignificant and would remain below *de minimis* thresholds. The greenhouse effect is the result of heat absorption by certain gases in the atmosphere (called greenhouse gases [GHGs] because they effectively trap gases in the atmosphere) and re-radiation downward. Water vapor is the most abundant GHG, followed by carbon dioxide (CO₂) and other trace gases. Human activity has been increasing the concentration of GHGs in the atmosphere (mostly CO from combustion of coal, oil, and gas). The global concentration of CO in our atmosphere far exceeds the natural range over the last 650,000 years. Global surface temperatures have increased approximately 0.74° Celsius (C) (plus or minus 0.18°C) since the late 19th century, and the linear trend for the past 50 years of 0.13°C (plus or minus 0.03°C) per decade is nearly twice that for the past 100 years (NOAA 2007).

According to the CEQ, if a proposed activity is subject to greenhouse emissions accounting requirements, such as CAA reporting requirements that apply to stationary sources that directly emit 25,000 metric tons or more of CO₂ equivalent GHG on an annual basis, the agency should disclose this information for consideration by decision makers and the public. Based on a review of another similar action, the Proposed Action would emit less than 25,000 metric tons of CO₂-equivalent on an annual basis (CEQ 2010; USACE Mobile District 2008, 2009).

Under the Proposed Action, vehicle emissions would result in the release of GHGs into the earth's atmosphere. Cumulatively, the Proposed Action and other reasonably foreseeable future actions could result in an increase of CO₂ emissions because of a reduction in vegetation, additional energy generation from energy service to additional buildings, and additional vehicles. The expected increase from these vehicles would be minor and the net change GHG concentration in a regional or global context is virtually unaffected.

Construction activities taking place for the Preferred Alternative when combined with the demolition, construction and renovation activities being conducted under BRAC and other initiatives at APG-EA would result in cumulative short term temporary not significant noise impacts.

Housing and other development in the surrounding communities, when combined with the Preferred Alternative and other development at APG would result in long-term beneficial cumulative economic impacts. Beneficial cumulative impacts would be in the form of increased business volume, income, and employment associated with construction activities and increased operations at APG. Beneficial not significant cumulative economic impacts would be realized by the regional and local economy during both the construction and operations phases of the on-going development at APG-EA.

Employment generated by construction activities for the various ongoing development projects at APG-EA would result in additional indirect wages paid, an increase in indirect business sales volume, and indirect expenditures for local and regional services, materials and supplies. These cumulative impacts would not be significant but would be beneficial because the development would increase the tax base and tax revenues, improve housing and other support facilities within the surrounding communities. Other cumulative socioeconomic impacts include an increase in school enrollment and increased demand on public services.

Short-term adverse but not significant cumulative traffic impacts may occur. Short-term increases in traffic volumes associated with construction equipment entering and leaving various APG-EA construction sites when combined with the Preferred Alternative would temporarily affect traffic congestion levels. Long-term traffic congestion would likely result from increased military, civilian, and contractor personnel assigned to APG-EA as a part of BRAC and on-going development projects when combined with the Preferred Alternative.

3.15.2 No Action Alternative

The No Action Alternative would not result in a cumulative effect.

4.0 CONCLUSIONS

This EA contains a comprehensive evaluation of the existing conditions and environmental consequences of implementing the Preferred Alternative and the No Action Alternative, as required by NEPA. Three types of potential impacts were evaluated: direct, indirect, and cumulative.

Based on the findings of this EA, implementation of either the Preferred or No Action Alternative would not have significant adverse direct, indirect, or cumulative effects on the quality of the environment. Based upon the analysis of potential impacts, the Army has determined that implementing the Proposed Action does not constitute a major federal action that significantly affects the quality of the environment. This EA finds that no significant adverse impact on human health or the environment is anticipated from the Proposed Action. Because there would be no significant impact resulting from the Preferred Alternative, a FNSI has been prepared to accompany this EA and the U.S. Army concludes that an EIS, the next higher level of environmental impact investigation under NEPA, is not required for this action.

5.0 REFERENCES

Aberdeen Proving Ground (APG). 2006. Aberdeen Proving Ground Operational Noise Management Plan. July 2006.

Aberdeen Proving Ground (APG). 2009. Integrated Natural Resources Management Plan for Aberdeen Proving Ground, Maryland: 2009-2014. February 2009.

Aberdeen Proving Ground (APG) 2012. Draft Environmental Assessment for Implementation of Contractor Owned, Contractor Operated Fueling Operations Aberdeen Proving Ground, Maryland. September 2012

Aberdeen Proving Ground (APG) 2013. Traffic Count Data. Aberdeen Proving Ground, Maryland. March 2013

Atkins. 2011. Draft Final Real Property Master Plan Update Long Range Component, Aberdeen Proving Ground, Maryland. 2011a.

Atkins. 2011. Real Property Master Plan Update Short Range Component Aberdeen Proving Ground, Maryland. 2011b.

CH2M Hill. 2012. Corrected Charette Submittal: Aberdeen Proving Ground Army Reserve Center, Aberdeen, Maryland. 19 June 2012.

CH2M Hill. 2013. Draft Geophysical Mapping Results, Proposed Aberdeen Proving Ground Army Reserve Center. February 11, 2013.

Council on Environmental Quality (CEQ). 1978. Regulations for Implementing NEPA Parts 1500-1508. Online: http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm. Accessed 9 January 2013.

Council on Environmental Quality (CEQ). 2010. Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions. 2010.

Federal Emergency Management Agency (FEMA). 2013. Mapping Information Platform. Online: <https://hazards.fema.gov/wps/portal/mapviewer>. Accessed 9 January 2013.

Goodwin, R. Christopher and Associates (RCG&A) 2008. Aberdeen Proving Ground Integrated Cultural Resources Management Plan. April 2008

Environmental Concern, Inc. 2012. Wetland Delineation Technical Memorandum Proposed U.S. Army Reserve Center Aberdeen Proving Ground, Maryland. December 2012.

GP Strategies Corporation. 2012. Draft Environmental Assessment for the Edgewood Area Thermal Energy Strategy, Aberdeen Proving Ground, Maryland. October 2012

HydroGeologic Inc. 2013. Final Sampling Technical Memorandum. Limited Investigations at Edgewood, Maryland, in Support of FY13 Military Construction, U.S. Army Reserve Project, February 2013.

Huppertz, Claire E., Kim M. Bloomquist, and Jacinda M. Barbehenn. 1994. EIFS 5.0 Economic Impact Forecast System, User's Reference Manual; USACERL Technical Report TA-94/03. July 1994.

Institute of Transportation Engineers (ITE). 2008. Trip Generation, 8th Edition, Volume 3 of 3. Washington, D.C. 2008.

Maryland Department of the Environment (MDE). National Ambient Air Quality Standards. Online: <http://www.mde.state.md.us/programs/Air/AirQualityPlanning/Pages/NAAQS.aspx>. Accessed 8 January 2013.

Maryland Department of the Environment (MDE). 1974. Environmental Noise Act of 1974. Online: <http://www.nonoise.org/lawlib/states/maryland/maryland.htm>. Accessed 10 January 2013.

National Oceanic and Atmospheric Administration (NOAA). 2007. Global Warming FAQ. Online: <http://lwf.ncdc.noaa.gov/oa/climate/globalwarming.html>. Accessed 10 January 2013.

Natural Resource Conservation Service (NRCS). 2013. Web Soil Survey. Online: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed 8 January 2013.

Occupational Safety and Health Administration (OSHA). 1983. Occupational Noise Exposure Standard. Guidelines for Noise Enforcement. Code of Federal Regulations Title 29, Part 1910, Sec. 1910.95 (29 CFR 1910.95).

Office of the Deputy Assistant Secretary of the Army. 2002. 32 CFR Parts 641 Environmental Analysis of Army Actions. Online: http://www.access.gpo.gov/nara/cfr/waisidx_02/32cfr651_02.html. Accessed 28 January 2013.

PARS Environmental Inc. (PARS). 2012. Biological Evaluation Report: Approximate 15-Acre Parcel Wise Road and Austin Road, Aberdeen Proving Ground, Edgewood Area, Gunpowder, Harford County, MD. October 2012.

PARS Environmental Inc. (PARS). 2013a Phase I Archaeological Survey: Approximately 15-Acre Parcel Wise and Austin Road, Aberdeen Proving Ground, Edgewood Area, Harford County, Maryland. January 2013.

PARS Environmental Inc. (PARS). 2013b. Environmental Condition of Property Report: Approximately 15-Acre Parcel Wise and Austin Road, Aberdeen Proving Ground, Edgewood Area, Harford County, MD. June 2013.

U.S. Army. 2004. Final Environmental Impact Statement. Transformation of the 2nd Brigade, 25th Infantry Division (L) to a Stryker Brigade Combat Team in Hawaii.

U.S. Army Corps of Engineers (USACE). 1987. Wetlands Delineation Manual. Technical Report Y-87-1. Waterways Experiment Station. Vicksburg, Mississippi.

U.S. Army Corps of Engineers (USACE) Louisville District. 2010. Environmental Assessment for U.S. Army Reserve Proposed Military Construction Project in Houston, Texas. June 2010.

U.S. Army Corps of Engineers (USACE) Mobile District. 2008. Environmental Assessment for the Establishment of an Armed Forces Army Reserve Center (AFRC) San Marcos, Texas. December 2008.

U.S. Army Corps of Engineers (USACE) Mobile District. 2009. Environmental Assessment for the Implementation of Base Realignment and Closure 2005. Bentonville, Arkansas. June 2009.

U.S. Army Corps of Engineers (USACE). 2009a. Environmental Assessment for the Construction of an Armed Forces Reserve Center and Implementation of 2005 Base Realignment and Closure Actions at Lewisville, Texas. May 2009.

U.S. Census Bureau. 2010. Interactive Population Map. Online: <http://www.census.gov/2010census/popmap/>. Accessed 16 January 2013.

U.S. Census Bureau. 2011. 2011 American Community Survey 5-year estimates. Online: http://factfinder.census.gov/home/saff/main.html?_lang=en. Accessed 28 January 2013.

U.S. Department of Housing and Urban Development (HUD). 2011. The Noise Guidebook. Online: <http://www.hud.gov/offices/cpd/environment/training/guidebooks/noise/>. Accessed 6 January 2013.

U.S. Department of Transportation (USDOT). 2006. Construction Noise Handbook. August 2006.

U.S. Environmental Protection Agency (USEPA). 1974. Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety. EPA Report 550/9-74-004. 1974.

U.S. Environmental Protection Agency (USEPA). 2013a. National Ambient Air Quality Standards (NAAQS). Online: <http://www.epa.gov/air/criteria.html>. Accessed 8 January 2013.

U.S. Environmental Protection Agency (USEPA). 2013b. The Green Book Nonattainment Areas for Criteria Pollutants. Online: <http://epa.gov/oar/oaqps/greenbk/>. Accessed 8 January 2013.

U.S. Fish and Wildlife Service (USFWS). 2013. National Wetlands Inventory Mapper. Online: <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed 8 January 2013.

Webster, Ron. 2009. Programmatic Socioeconomic Impact Analysis for the Construction and Operations of U.S. Army Reserve Center, under contract to EEI, Virginia Beach, VA, Contract Number: W91236-04-D-0081, Task Order: 0110. 23 September 2009.

6.0 LIST OF PREPARERS

PARS Environmental, Inc.

David Brewster

Qualifications: 19 years experience in environmental science

Responsibilities: Project Manager

Gannett Fleming, Inc.

Arul Ayyaswami

Qualifications: 27 years experience in environmental science

Responsibilities: Project Management

Scott W. Duncanson, AICP

Qualifications: 29 years experience in environmental impact assessment, land use and socioeconomics, transportation planning, and NEPA compliance

Responsibilities: Overall EA preparation and management

Ahmed El-Aassar, Ph.D., P.E.

Qualifications: 14 years experience in noise and air quality analysis

Responsibilities: Noise analysis

Kristen Maines

Qualifications: 14 years experience in environmental impact assessment, socioeconomics, and NEPA compliance

Responsibilities: Social environment analysis and document preparation

John W. Martin, R.P.A.

Qualifications: 33 years experience in cultural resource services

Responsibilities: Cultural Resources

William M. Plumpton, CEP

Qualifications: 29 years experience in environmental impact assessment and NEPA compliance

Responsibilities: Quality Assurance/Quality Control

Robert W. Scrafford, P.E.

Qualifications: 16 years experience in natural science, wetlands, and hazardous materials

Responsibilities: Natural environment and biological studies

Danielle Stemrich

Qualifications: 4 years experience in NEPA compliance

Responsibilities: Natural environment analysis and document preparation

Chen-Yu Yen, Ph.D., P.E., C.H.M.M.

Qualifications: 37 years experience in engineering and environmental science

Responsibilities: Project Management

7.0 ACRONYMS AND ABBREVIATIONS

APG	Aberdeen Proving Ground
APG-AA	Aberdeen Proving Ground-Aberdeen Area
APG-EA	Aberdeen Proving Ground-Edgewood Area
ARIMD, DAAR-IM	Army Reserve Installation Management Directorate, Department of the Army, Army Reserve - Installation Management
ASHRAE	American Society of Heating, Refrigerating, and Air-conditioning Engineers
AT/FP	Anti-Terrorism/Force Protection
BE	biological evaluation
BGEPA	Bald and Golden Eagle Protection Act
BG&E	Baltimore Gas and Electric
BMP	best management practice
C	Celsius
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Plan
dB	decibel
dBA	A-weighted decibel
DOD	U.S. Department of Defense
EA	Environmental Assessment
ECP	Environmental Condition of Property
EIFS	Economic Impact Forecast System
EIS	Environmental Impact Statement
ENMP	Environmental Noise Management Plan
EO	Executive Order
ESA	Endangered Species Act
ESD	Environmental Site Design
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FNSI	Finding of No Significant Impact
GHG	greenhouse gas
HUD	U.S. Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning systems

ICRMP	Integrated Cultural Resource Management Plan
INRMP	Integrated Natural Resource Management Plan
ITE	Institute of Transportation Engineers
Ldn	day-night average sound level
LED	light-emitting diode
LEED	Leadership in Energy and Environmental Design
LEP	Limited English Proficiency
Leq	average sound level
LID	low impact design
Lmax	maximum noise level
LTM	long-term monitoring
MARC	Maryland Area Rapid Commuter
MBTA	Migratory Bird Treaty Act
MDE	Maryland Department of the Environment
MDNR	Maryland Department of Natural Resources
MDP	Maryland Department of Planning
MEC	munitions and explosives concern
MGD	million gallons per day
mg/kg	milligrams per kilogram
MHT	Maryland Historical Trust
MPPEH	material potentially presenting an explosive hazard
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOA	Notice of Availability
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
NZ	noise zone
OMS	organizational maintenance shop
O ₃	ozone
ONMP	Operational Noise Management Plan
OSHA	Occupational Safety and Health Administration
OWS	oil/water separator
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyls

PCA	tetrachloroethane
PCI	per capita income
PM ₁₀	particulate matter less than 10 microns
PM _{2.5}	particulate matter less than 2.5 microns
POL	petroleum, oils, and lubricants
POV	privately owned vehicles
RCNM	Roadway Construction Noise Model
RCG&A	R. Christopher Goodwin & Associates, Inc.
REC	recognized environmental condition
ROD	Record of Decision
ROI	Region of Influence
RSC	Regional Support Command
RSL	regional screening levels
RTV	rational threshold value
SO ₂	sulfur dioxide
STP	shovel test pit
SVOC	Semi volatile compounds
SWPPP	Stormwater Pollution Prevention Plan
TAL	target analyte list
TCE	trichloroethylene
U.S.	United States
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UXO	Unexploded Ordinance
VOC	volatile organic compound
WWI	World War I

8.0 DISTRIBUTION LIST

8.1 Federal Agencies

Ms. Janet Norman
Military Base Natural Resource Management
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Environmental Protection Agency, Region 3
1650 Arch Street (3PM52)
Philadelphia, PA 19103-2029

U.S. Department of Transportation
Federal Highway Administration, DelMar Division
City Crescent Building
10 South Howard Street
Suite 2450
Baltimore, MD 21201

Director, Office of Environmental Policy and Compliance
U.S. Department of the Interior
1849 C Street, NW (MS 2462)
Washington, DC 20240

8.2 State Agencies

Maryland State Clearinghouse for Intergovernmental Review
Maryland Department of Planning
301 West Preston Street, Suite 1104
Baltimore, Maryland 21201-2305

8.3 Persons of Interest

Dr. Deidre DeRoia
INRMP POC
U.S. Army Garrison APG
IMAP-PWE 4304, Susquehanna Ave.
Aberdeen Proving Ground, MD 21005

Ms. Judith Weintraub
U.S. Army Garrison APG
Directorate of Public Works, Environmental Division
Building 4304 Susquehanna Ave.
Aberdeen Proving Ground, MD 21005

Arnold O'Sullivan
Environmental Planning and & Sustainability Branch
Directorate of Public Works
Environmental Division
Aberdeen Proving Ground

Allison O'Brien
Installation Restoration Project Officer
Directorate of Public Works
Environmental Division
Aberdeen Proving Ground

Mark Gallihue
Cultural Resources
Directorate of Public Works
Environmental Division
Aberdeen Proving Ground

APPENDIX A

AGENCY COORDINATION



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

JUN 04 2012

Ms. Janet Norman
Military Base Natural Resource Management
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Ms. Norman,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide interested parties with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment. The purpose of this letter is to request your early comments on this proposed project and environmental impacts.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG Edgewood Area (APG- EA). USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area to the southwest. The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514 and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

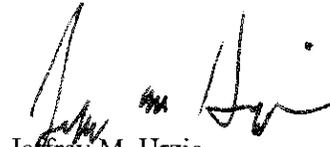
The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA.

The Army respectfully requests your comments relative to the following three topics, based on your expertise or regulatory jurisdiction:

- Specific environmental, social, and/or economic issues or geographic areas of concern.
- Available technical information regarding the proposed site.
- Mitigation or permitting requirements that may be necessary for project implementation.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzie
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Teresa Bartley, APG Natural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
Maryland Department of Planning

100 Community Place
Crownsville, MD 21032-2023

Mr. Little,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

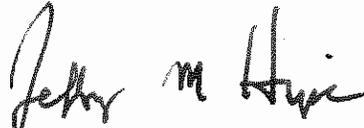
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Clint Halftown
Federal Representative
Cayuga Nation of New York
P.O. Box 803
Seneca Falls, NY 13148

Mr. Halftown,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

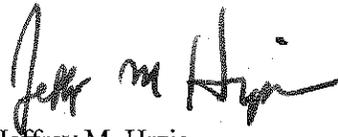
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Ms. Tamara Francis
Cultural Preservation Officer
Delaware Nation, Oklahoma
P.O. Box 825
Anadarko, OK 73005

Ms. Francis,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

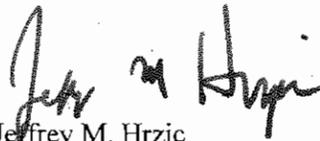
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. Raymond Halbritter
Nation Representative
Oneida Indian Nation of New York
2037 Dreamcatcher Plaza
Oneida, NY 13421

Mr. Halbritter,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. Ed Delgado
Chairman
Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida, WI 54155

Mr. Delgado,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Ms. Lana Watt
Tribal Historic Preservation Officer
Seneca Nation of Indians
12837 Rte. 438
Irving, NY 14081

Ms. Watt,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

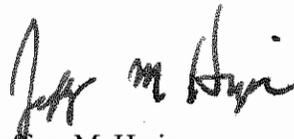
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. Paul Barton
Cultural and Historic Preservation Officer
Seneca-Cayuga Tribe of Oklahoma
23701 S. 655 Rd.
Grove, OK 74344

Mr. Barton,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

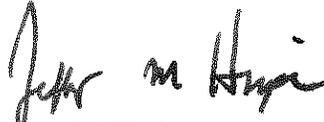
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. Anthony Gonyea
c/o Tribal Historic Office
Onondaga Nation of New York
RR 1, Box 319-B
Nedrow, NY 13120

Mr. Gonyea,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Chief Roger Hill
Tonawanda Seneca Nation of New York
7027 Meadville Rd.
Basom, NY 14013

Chief Hill,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

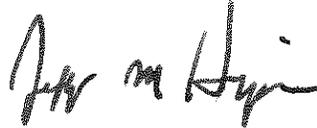
The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Chief Leo R. Henry
Tuscarora Nation of New York
2006 Mt. Hope Rd.
Lewiston, NY 14092

Chief Henry,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be

coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey M. Hrzc". The signature is written in a cursive style with a large initial "J" and "M".

Jeffrey M. Hrzc
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

June 4, 2012

Mr. Arnold Printup
Tribal Historian
St. Regis Band of Mohawk Indians of New York
412 State Route 37
Akwesasne, NY 13655

Mr. Printup,

The Department of the Army (the Army) is preparing an Environmental Assessment (EA) for the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The purpose of the proposed action is to construct a 500-member training facility for eleven existing U.S. Army Reserve (USAR) units within the APG-EA. The proposed action is needed because the existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The existing facilities do not meet the current training and mission requirements for the units and the units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 27-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road. Location and topographic maps are enclosed. The Preferred Site is an open recreational field that includes a baseball field. The Army proposes to construct on approximately 15 acres within the 27-acre Preferred Site; the configuration of the site would allow for the construction of the USARC without any major modification of the surface of the Preferred Site. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements. The proposed USARC would consist of an approximate 69,000 square-foot training building, a 6,300 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility. Vehicle parking and stormwater retention facilities would also be constructed.

The proposed USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards, or better, with a view toward enhanced sustainability and energy efficiency. The design, construction, and operation of the proposed USARC would be consistent with and meet the intent of Presidential Executive Orders 13423 and 13514, and the Energy Policy Act of 2005. In an effort to reduce reliance on non-renewable energy sources, and to achieve future energy reduction goals, the Army is committed to investigating and implementing, where feasible and practicable, alternative energy strategies. Potential alternative energy strategies that may be considered include solar, wind, and geothermal energy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. Specifically, we are in the early planning stages for a Phase I Archeological Survey.

As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA or Phase I Survey. Please provide comments relative to specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the site of our project, we request you notify our representative listed below.

Comments on the proposed action and its alternatives will be accepted for 30 calendar days from the date on this letter. Comments received during this time will be used in preparation of the EA and/or Phase I Survey. Written comments should be submitted to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640 or by email at amanda.w.murphy.ctr@us.army.mil. If you have any questions, please contact Ms. Murphy at 609-562-7666.

Sincerely,



Jeffrey M. Hrzic
Chief, Environmental Division

cc: Judy Weintraub, APG, DPW Environmental Division
Mark Gallihue, APG Cultural Resources

Enclosures

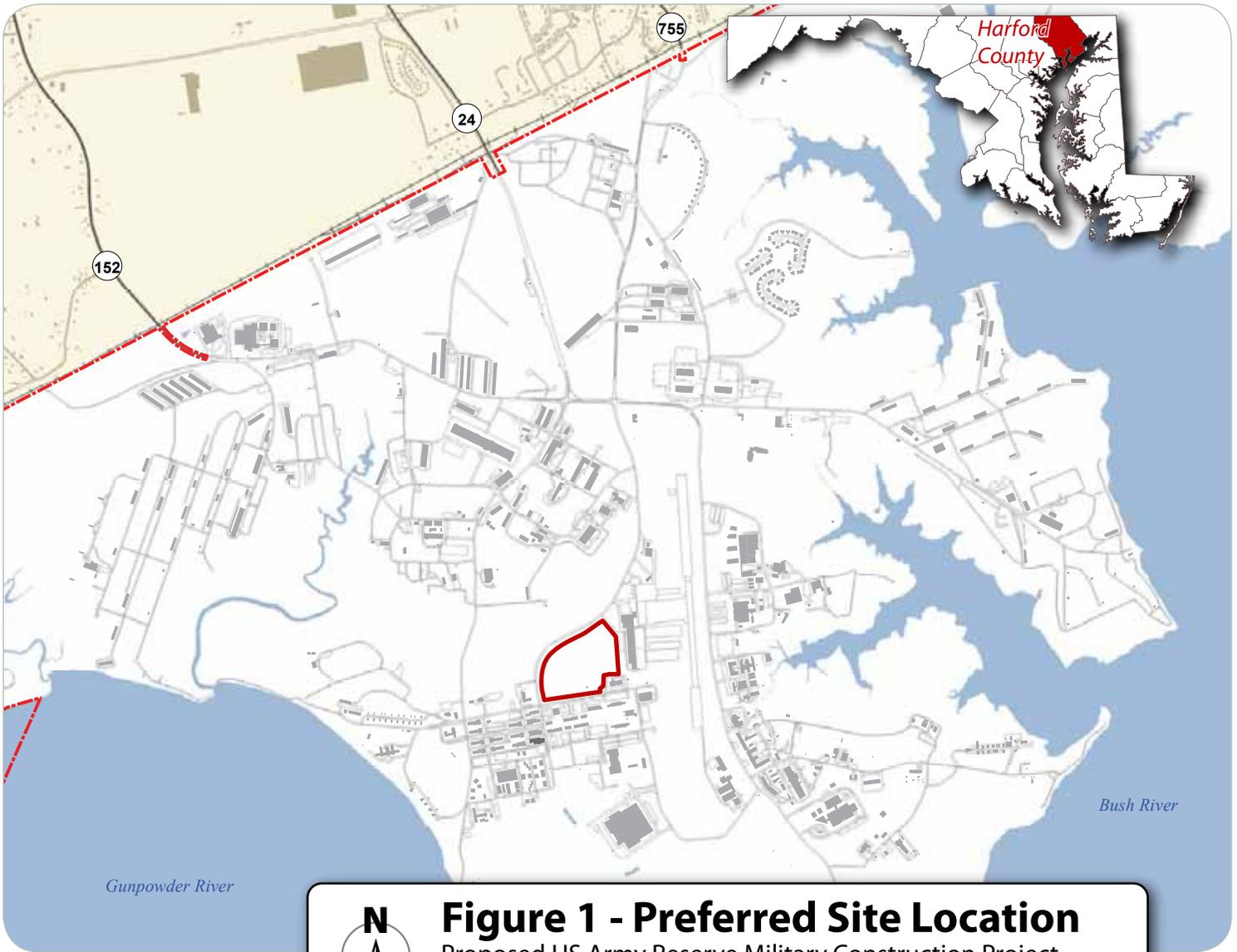


Figure 1 - Preferred Site Location
 Proposed US Army Reserve Military Construction Project
 Aberdeen, Harford County, Maryland

Legend

- Approximate Site Boundary
- - - Installation Boundary

2000 1000 0 2000 Feet
 Graphic Scale

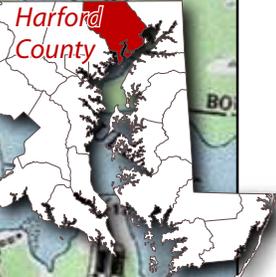
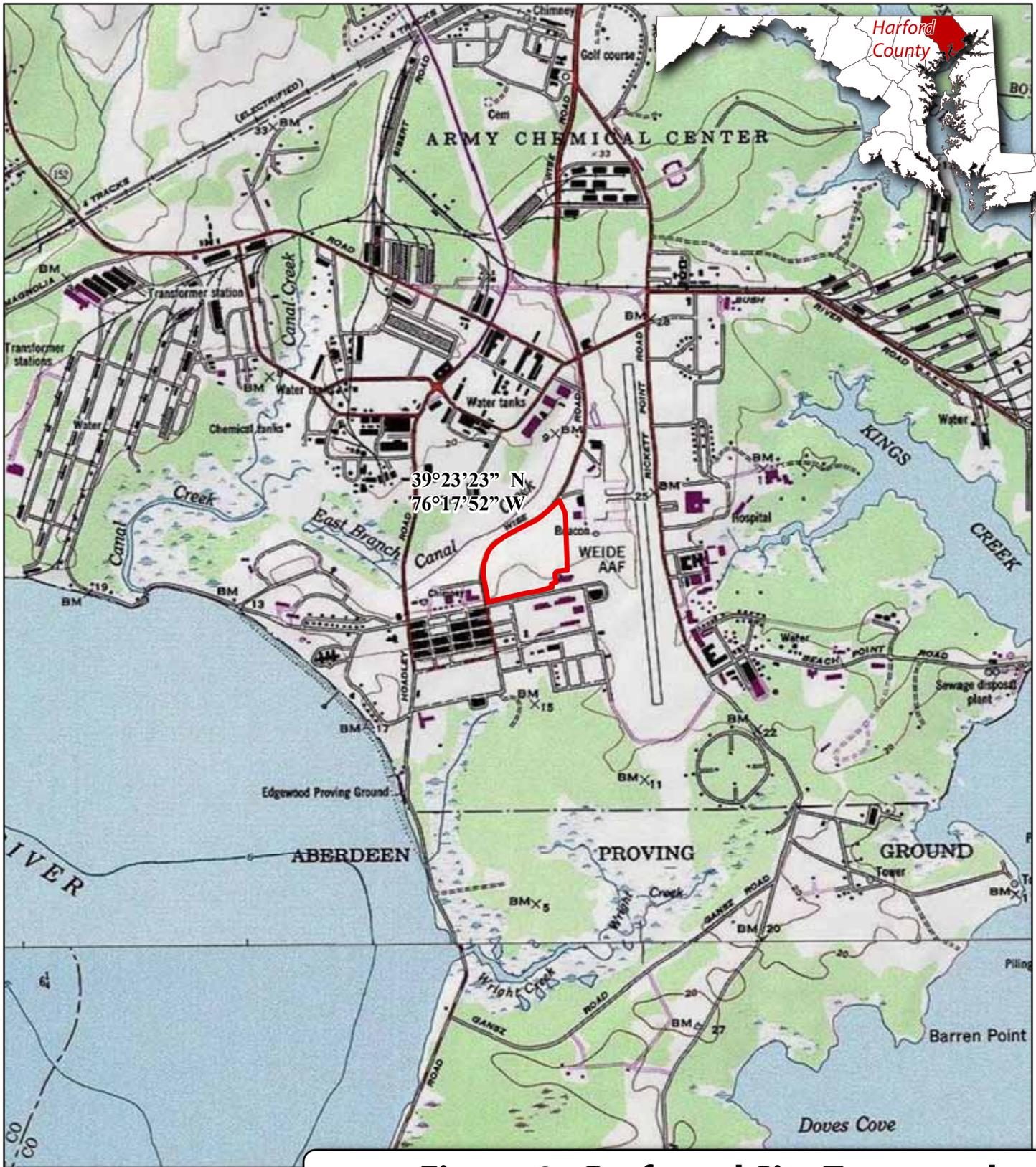


Figure 2 - Preferred Site Topography
 Proposed US Army Reserve Military Construction Project
 Aberdeen, Harford County, Maryland

Legend
— Approximate Site Boundary

2000 1000 0 2000 Feet
Scale 1 : 24000

David Brewster

From: Murphy, Amanda W Ms CTR 99TH RSC ARIM <amanda.w.murphy@usar.army.mil>
Sent: Tuesday, June 19, 2012 12:33 PM
To: David Brewster
Cc: Mitchell, Cristie L LRL
Subject: FW: new U.S. Army Reserve Center (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Scoping comment from Delaware Nation. They would like a copy of the archeology report when it is prepared

Amanda Murphy
Program Coordinator
NEPA and Cultural Resources
USAR 99th RSC DPW
609-562-7666 (desk)
202-236-8192 (cell)

-----Original Message-----

From: Jason Ross [<mailto:JRoss@delawarenation.com>]
Sent: Tuesday, June 19, 2012 12:32 PM
To: amanda.w.murphy.ctr@us.army.mil
Subject: re: new U.S. Army Reserve Center (USARC) @ Aberdeen Proving Ground

Delaware Nation

Jason Ross

Section 106/Museum Manager

To: Amanda Murphy

cc:

Date: June 19, 2012

Re: New U.S. Army Reserve Center (USARC) @ Aberdeen
Proving Ground

Hi Amanda,

The Delaware Nation received and information packet from Mr. Jeffrey Hrzic regarding the construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County,

Maryland. The Cultural Preservation Director, Mrs. Tamara Francis-Fourkiller has reviewed the info provided and the Delaware Nation is requesting that an Arch Survey be sent in to us when it is complete.

Thank you again for taking the time and effort to properly consult with the Delaware Nation.

Best Regards,

Jason Ross

Section 106/Museum Manager

Cultural Preservation Department

The Delaware Nation

P.O. Box 825

Anadarko, OK 73005

PH# 405) 247-2448

FAX# 405) 247-8905

www.delawarenation.com <blockedhttp://www.delawarenation.com>

Classification: UNCLASSIFIED

Caveats: NONE

David Brewster

From: Murphy, Amanda W Ms CTR 99TH RSC ARIM <amanda.w.murphy@usar.army.mil>
Sent: Monday, July 09, 2012 11:12 AM
To: David Brewster
Cc: Mitchell, Cristie L LRL
Subject: FW: New US Army Reserve Center Aberdeen Proving Ground

Below is the scoping response from MHT.

From: Amanda Apple [aapple@mdp.state.md.us]
Sent: Thursday, July 05, 2012 3:10 PM
To: amanda.w.murphy.ctr@us.army.mil
Subject: New US Army Reserve Center Aberdeen Proving Ground

Ms. Murphy,

Thank you for contacting the MarylaBend Historical Trust (MHT), the State Historic Preservation Office, regarding the EA for the new US Army Reserve Center at Aberdeen Proving Ground. We appreciate your proactive efforts to consult with MHT and to take historic properties into account during your planning process. We have recorded your submittal and will reference it as needed as the project proceeds. At this time MHT awaits coordination of the Phase I Archeological Survey and Section 106 consultation. Please note that the archeological investigation should be performed by a qualified professional archeologist, and conducted in accordance with the Standards and Guidelines for Archeological Investigations in Maryland (Shaffer and Cole 1994).

http://mht.maryland.gov/documents/PDF/Archeology_standards_investigations.pdf<thismessage:/>

Sincerely,

Amanda R. Apple

Preservation Officer

Maryland Historical Trust

100 Community Place

Crownsville, MD 21032

www.mht.maryland.gov<thismessage:/www.marylandhistoricaltrust.net>

410-514-7630 (phone)

410-987-4071 (fax)

Please consider the environment before printing this email

David Brewster

From: Koppie, Craig <craig_koppie@fws.gov>
Sent: Monday, January 28, 2013 4:24 PM
To: amanda.w.murphy@usar.army.mil
Cc: David Brewster; Bob Zepp
Subject: Aberdeen Proving Ground; US Army Reserve Project

Ms. Amanda Murphy
U.S. Army Headquarters
99th RSC DPW
Environmental Division
Fort Dix, NJ 08640-5000

Re: APG, Army Reserve Center

Dear Ms. Murphy,

This is in response to your Biological Evaluation Report for the proposed Army Reserve Center at the U.S. Army Aberdeen Proving Ground Edgewood Area in Harford County Maryland. We have reviewed the information you e-mailed to us and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Except for occasional transient individuals, no other federally proposed or listed endangered or threatened species are known to exist within the project impact area.

Also, APG manages several thousand acres of forested shoreline and riparian habitats for one of the largest local populations of nesting bald eagles in Chesapeake Bay. The bald eagle (*Haliaeetus leucocephalus*) is a federally protected species under the Bald and Golden Eagle Protection Act (BGEPA). According to APG environmental staff, the proposed project is approximately one mile from the 500-meter protection buffer of a nesting eagle pair at Canal Creek. The distance between the nest and project area however, is adequate and would not pose a risk of disturbance within the context of the BGEPA.

In summary, the project is in compliance with both the ESA and BGEPA and therefore, the Fish and Wildlife Service concurs with the no-effect determination to species under these Regulatory Acts. We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. We apologize for the delay of this response which was due to recent changes in roles and responsibilities between several project review biologists.

--

Craig Koppie
Eagle/Raptor Biologist
U.S. Fish and Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

Craig_Koppie@fws.gov

410/573-4534



201301068

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

RECEIVED
Mar 11 2013

F Army

BY: DLH/ARCA

March 8, 2013

201202997

Mr. J. Rodney Little
State Historic Preservation Officer
Maryland Historical Trust
Maryland Department of Planning
100 Community Place
Crownsville, MD 21032-2023

Mr. Little,

The U.S. Army Reserve, 99th Regional Support Command (RSC) is proposing construction of an **Army Reserve Center** at the **Edgewood Area** of the **Aberdeen Proving Ground (APG)** (undertaking). In accordance with Section 106 of the National Historic Preservation Act and the procedures set forth in 36 CFR Part 800, the 99th RSC seeks concurrence that the proposed undertaking would have no adverse effect on historic properties. A Phase I Archaeology Survey and maps are enclosed to aid in your review.

The approximately 15-acre preferred site is currently used for recreational purposes and contains no buildings. The preferred site is located near the intersection of Wise and Austin Roads in the Edgewood Area. This property is zoned for military use. Most, if not all, of the preferred site would be disturbed during construction. Undeveloped areas would be landscaped for lawn, storm drainage, and physical security requirements.

Edgewood

The enclosed Phase I Archaeological Survey documents the findings of an investigation completed in 2012. The survey was performed in accordance with the *Secretary of the Interior's Standards for Archaeology and Historic Preservation* and the *Standards and Guidelines for Archeological Investigations in Maryland*. No archeological resources eligible for the National Register of Historic Places (NRHP) were identified within the archaeological area of potential effect (15-acre preferred site).

The preferred site is located approximately 500 feet northeast of World War I Barracks (E4400 block) that were determined eligible for NRHP by APG in 1993. APG has previously determined that the E4400 block barracks are excess to Army requirements, and proposed demolition of all but one of the barracks. The surrounding land is a built-up area. A large complex of circa-1990s buildings constructed 50 feet east of the barracks (and south of the preferred site) compromised the barrack's integrity of setting. Therefore, the 99th RSC has determined our undertaking will not have an adverse effect on the E4400 block barracks. The buildings constructed for the 99th RSC will be of similar massing and scale to surrounding construction over the past 30 years.

44-1655

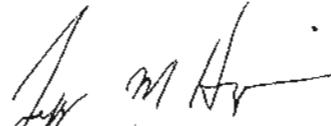
The 99th RSC has determined that the proposed undertaking would have no adverse effect on historic properties. The 99th RSC requests concurrence on our determination within 30 days from the date of this letter.

Archeo
DLH
4/29/13
(1a)

4/30/13
ZNU
ARCA

Please send your written response to: Amanda Murphy, Cultural Resources Program Coordinator, 99th RSC DPW-ENV, 5231 South Scott Plaza, Fort Dix, NJ 08640 or by email at amanda.w.murphy.ctr@mail.mil. If you have any questions, please contact Ms. Murphy at (609) 562-7666 or by email. We look forward to working cooperatively with you to make this important project successful for all parties involved.

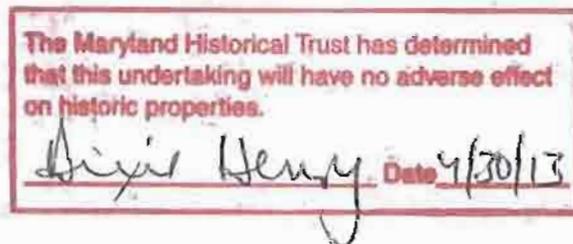
Sincerely,

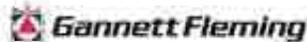


Jeffrey M. Hrzie
Chief, Environmental Division

Enclosures

cc: Mr. Mark Gallihue, APG Cultural Resources





Duncan, Scott <sduncanson@gfnet.com>

Proposed U.S. Army Reserve Center at APG, Harford County, MD - Federal Coastal Zone Management Consistency Determination Review

Duncan, Scott <sduncanson@gfnet.com>

Thu, May 2, 2013 at 9:58 PM

To: jabe@dnr.state.md.us

Cc: David Brewster <dbrewster@perseus.com>, Danielle Sternich <dsternich@gfnet.com>, amanda.w.murphy.cbr@mail.mil

Mr. Abe,

It was a pleasure speaking to you recently regarding the above referenced project as related to Federal Coastal Zone Consistency Determination and Review. On behalf of the U.S. Department of the Army (the Army) we would like to thank you for taking time out of your busy schedule to review the following information and providing valued input and direction.

The Army is currently preparing an Environmental Assessment (EA) to identify, document, and discuss the possible natural, cultural, and socioeconomic impacts from the proposed construction and operation of a new U.S. Army Reserve Center (USARC) at the Aberdeen Proving Ground (APG) in Harford County, Maryland (Proposed Action). APG is located at the northern end of the Chesapeake Bay, and occupies approximately 72,500 acres of land and water. APG is divided by the Bush River into two non-contiguous land areas: the Aberdeen Area (APG-AA) to the northeast and the Edgewood Area (APG-EA) to the southwest.

The proposed USARC would entail a 500-member training facility for ten existing U.S. Army Reserve (USAR) units within the APG-EA. The existing USAR units are currently housed in two overcrowded facilities; one within the APG-AA, and the other in nearby Abingdon, Maryland. The Proposed Action is needed because the existing facilities do not meet the current training and mission requirements for the units and the ten units will not be able to properly conduct fundamental training to meet readiness and mobilization objectives.

The Preferred Site for the Proposed Action is an approximately 15-acre site located within the APG-EA in the northeast quadrant of the intersection of Austin Road and Wise Road (Exhibit 2.1). The Preferred Site is an open recreational field that contains a ball field. The Preferred Site is comprised of a maintained recreation field consisting of mowed grass. The fields are comprised mostly of common grasses but have vegetation consistent with wetlands surrounding a few isolated depressions. Single rows of native and ornamental trees line Austin and Wise roads bordering the Preferred Site to the south and west. Grasses on the Preferred Site are kept short with frequent mowing to provide recreational space for base personnel.

APG is within Maryland's Coastal Zone. The Preferred Site is approximately 2,500 feet from the nearest shoreline (Gunpowder River) and outside of the 100-year floodplain. The Preferred Site is not located within the Critical Area.

A wetland delineation was completed for the Preferred Site in December 2012. Three areas that lie either entirely or partially within the Preferred Site were determined to meet the USACE's criteria for wetlands (Exhibit 2.2). Wetland A, in the western portion of the Preferred Site is 0.003 acre. Wetland B, in the northwestern portion of the Preferred Site is 0.17 acre. Wetland C, to the southeast of the Preferred Site is 0.15 acre. The three wetlands have been classified as Flats (subclass Mineral), using the Hydrogeomorphic Classification System. Flats are associated with slow surface drainage, often combined with slow permeability, which causes water to remain at or near the surface. These characteristics are consistent with the dominant soil unit, Mattapex. Wetland hydrology in Flat wetlands is precipitation driven, and water loss is primarily through evapotranspiration (Environmental Concern Inc. 2012). The Preferred Alternative would not impact these wetlands.

To date, the only protected, rare, threatened or endangered species that has been identified at APG is the bald

eagle. Bald eagles are found in both APG-AA and APG-EA. APG's Bald Eagle Management Plan implements 500-meter protective buffer zones around nests and roosts. These buffers are adaptively managed to address allowable activities, taking into consideration routine and customary activities. There are year-round restrictions on habitat alteration (land clearing, timber harvesting, and construction) within the 500-meter buffers. Other protective measures addressed in the APG Bald Eagle Management Plan include the burial of overhead power lines in select areas and the installation of protective equipment (bird diverters and conductor insulators) on electrical infrastructure. The closest known bald eagle nesting site is approximately 1 mile west of the Preferred Site.

The U.S. Army would construct a USARC having approximately 78,000 square feet of space, consisting of a 69,000 square-foot training building, a 6,250 square-foot organizational maintenance shop (OMS), and a 2,750 square-foot unheated storage facility (UHS) (Exhibit 2.2). Vehicle parking, including a 208-space parking lot for privately owned vehicles and a 4,520 square-yard fenced military equipment parking (MEP) lot, and stormwater retention facilities would be constructed.

The USARC training building would provide administrative offices, classrooms, library, learning center, assembly hall, arms vault, weapons simulator, kitchen, unit storage, locker and shower rooms and physical readiness areas for the units. Activities at the USARC would be training-related with no live weapons firing. Activities at the OMS would entail vehicle maintenance and repairs (e.g., oil change, tire rotation, etc.), as well as parts storage and maintenance administrative support.

Buildings would be of permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; plumbing; heating, ventilation, and air conditioning systems; and mechanical, security, and electrical systems. The new APG-EA USARC would be designed to meet Leadership in Energy and Environmental Design (LEED) Silver standards and have an energy reduction of 40 percent from a building meeting the minimum requirements of American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) 90.1-2007. The design, construction, and operation of the USARC would be consistent with and meet the intent of Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance), the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 and APG's Net Zero Water Strategy.

The EA is being prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA). NEPA requires a Federal agency to provide the public with the opportunity to participate in the process of analyzing Federal actions that have the potential to impact the human environment.

The EA will identify the potential social, economic, and environmental impacts related to proposed development of the Preferred Site, and a No Action Alternative. The preparation of the EA will also be coordinated with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. As part of the early coordination and scoping process, we would like to provide you with the opportunity to help identify key issues that will need to be addressed as part of the EA.

The Army respectfully requests your comments relative to the following topics, based on your expertise or regulatory jurisdiction:

- Guidance related to Project Review and Federal Coastal Zone Consistency Determination.
- Specific environmental, social, and/or economic issues or geographic areas of concern.
- Available technical information regarding the proposed site.
- Mitigation or permitting requirements that may be necessary for project implementation.

Please contact me with any questions. I would like to thank you in advance for your assistance on this important matter.

Sincerely,

Scott W. Duncanson, AICP, LEED Green Associate | [Senior Environmental Planner](#)
Gannett Fleming, Inc. | 207 Senate Avenue, Camp Hill, PA 17011
t 717.763.7212 x2172 | sduncanson@gfnet.com
Excellence Delivered **As Promised**
Gannett Fleming is ISO 9001:2008 Certified.
www.gannettfleming.com | Stay connected: [Twitter](#) | [Facebook](#) | [LinkedIn](#) | [YouTube](#)

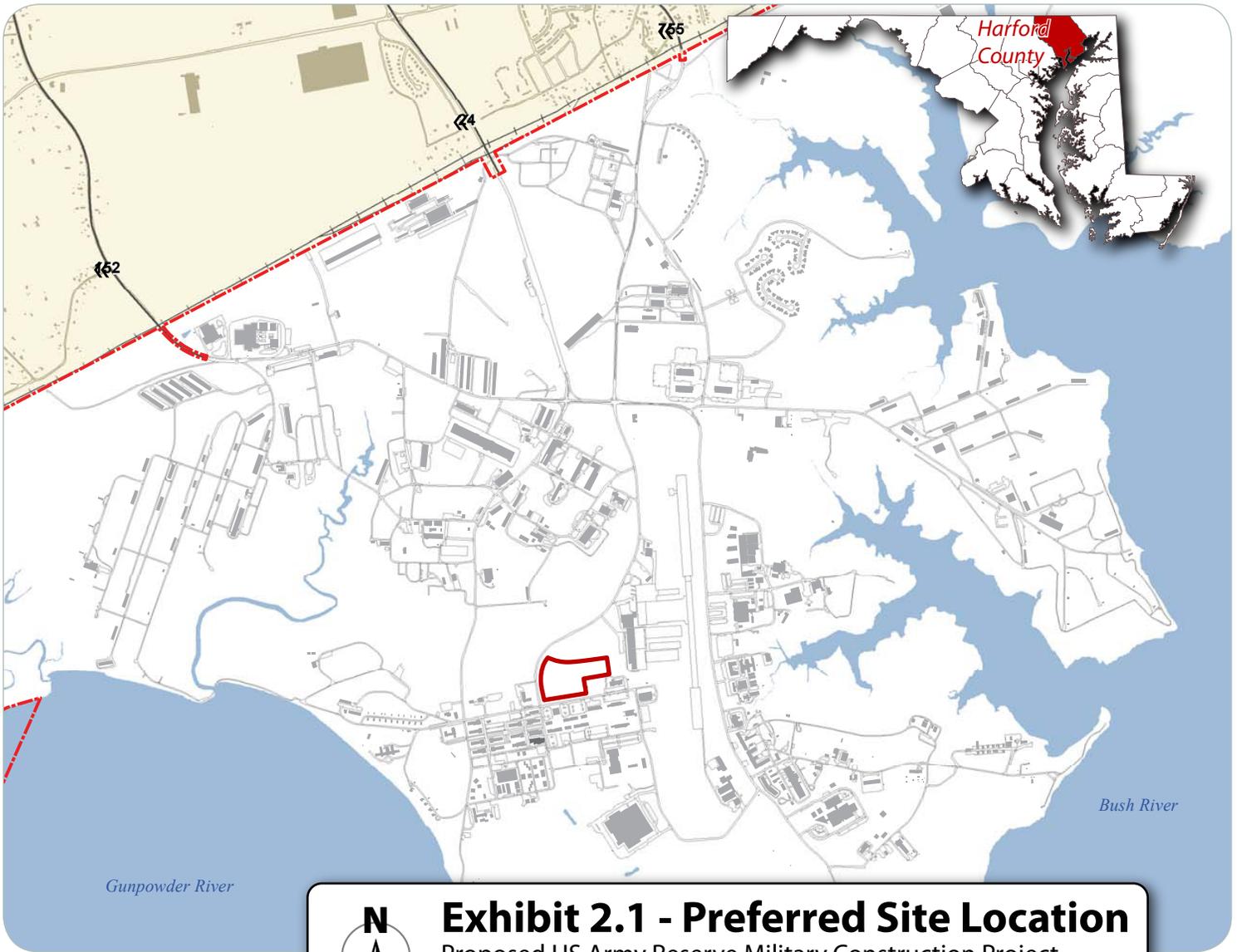
PRINTING SUSTAINABILITY STATEMENT: Gannett Fleming is committed to conserving natural resources and minimizing adverse environmental impacts in projects. Accordingly, project documentation will be provided in electronic format only unless clients specifically request hard copies. Visit our website to read more about our sustainability commitment.

CONFIDENTIALITY NOTICE: This email and any attachments may contain confidential information for the use of the named addressee. If you are not the intended recipient, you are hereby notified that you have received this communication in error and that any review, disclosure, dissemination, distribution or copying of it or its contents is prohibited.

2 attachments

 **Exhibit 2.2.pdf**
406K

 **Exhibit 2.1.pdf**
1859K



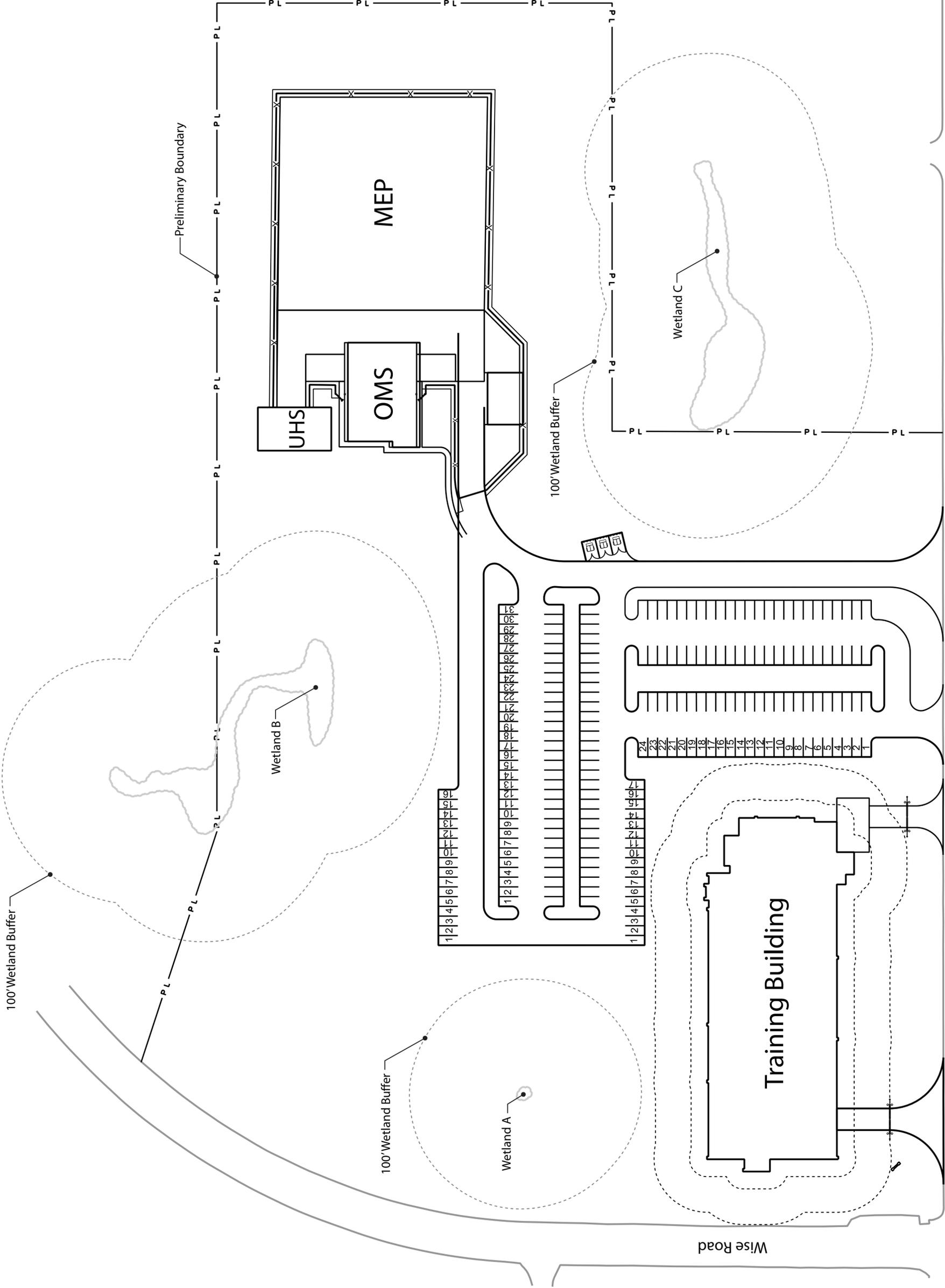
N

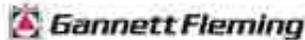
Exhibit 2.1 - Preferred Site Location

Proposed US Army Reserve Military Construction Project
APG, Harford County, Maryland

Legend

- Approximate Site Boundary
- - - Installation Boundary





Duncanson, Scott <sduncanson@gfnet.com>

Proposed U.S. Army Reserve Center at APG, Harford County, MD - Federal Coastal Zone Management Consistency Determination Review

Abe, Joseph <JAbe@dnr.state.md.us>
To: "Duncanson, Scott" <sduncanson@gfnet.com>

Tue, May 28, 2013 at 2:05 PM

Hey Scott:

Here's an example of a federal consistency determination for a HUD development project. Please note the drawings and maps were also provided with this letter.

I'll also be sending you another one for a Coast Guard project that matches the DoD-approved outline presented Attachment 4 to the MD-DoD MOU.

Please call me again if you have any questions.

Joe Abe

Coastal Policy Coordination Section Chief
Chesapeake and Coastal Service
Maryland Department of Natural Resources
580 Taylor Avenue, E-2
Annapolis, MD 21401
jabe@dnr.state.md.us 410-260-8740

[Click here](#) to subscribe to *In the Zone*, our FREE email newsletter

 Consider the environment. Please don't print this e-mail unless you really need to.

From: Duncanson, Scott [mailto:sduncanson@gfnet.com]
Sent: Thursday, May 02, 2013 9:58 PM
To: Abe, Joseph

Cc: David Brewster; Danielle Sternrich; amanda.w.murphy.ctr@mail.mil

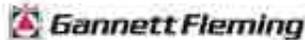
Subject: Proposed U.S. Army Reserve Center at APG, Harford County, MD - Federal Coastal Zone Management Consistency Determination Review

[Quoted text hidden]



20130130174404991.pdf

1606K



Duncanson, Scott <sduncanson@gfnet.com>

Proposed U.S. Army Reserve Center at APG, Harford County, MD - Federal Coastal Zone Management Consistency Determination Review

Abe, Joseph <JAbe@dnr.state.md.us>
To: "Duncanson, Scott" <sduncanson@gfnet.com>

Tue, May 28, 2013 at 2:08 PM

Coast Guard FC example.

Joe Abe

Coastal Policy Coordination Section Chief

Chesapeake and Coastal Service

Maryland Department of Natural Resources

580 Taylor Avenue, E-2

Annapolis, MD 21401

jabe@dnr.state.md.us 410-260-8740

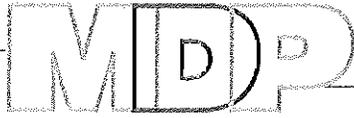
[Click here](#) to subscribe to *In the Zone*, our FREE email newsletter

 Consider the environment. Please don't print this e-mail unless you really need to.

From: Abe, Joseph
Sent: Tuesday, May 28, 2013 2:06 PM
To: 'Duncanson, Scott'
Subject: RE: Proposed U.S. Army Reserve Center at APG, Harford County, MD - Federal Coastal Zone Management Consistency Determination Review

[Quoted text hidden]

 **USCG Ltr to MD DE Brewerton Channel RF LT Cable 1-21-2011.pdf**
3006K



Maryland Department of Planning

Sustainable _____ Attainable _____

July 16, 2013

Ms. Amanda Murphy
Environmental Division
U.S. Army Reserve 99th Regional Support Command DPW
5231 S. Scott Plaza
Fort Dix, NJ 08640-5000

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20130627-0476
Applicant: U.S. Army Reserve 99th Regional Support Command DPW
Project Description: Environmental Assessment and Draft FNSI: U.S. Army Reserve Proposes to Construct and Operate a New U.S. Army Reserve Center (USARC) at Aberdeen Proving Ground (APG), Harford County, Maryland
Project Location: Harford County
Approving Authority: U.S. Department of Defense DOD/ARMY
Recommendation: Consistent with Qualifying Comment(s)

Dear Ms. Murphy:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-.06, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation based upon comments received to date. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the Maryland Department(s) of Natural Resources, Transportation, the Environment; Maryland Military Department; Harford County and the Maryland Department of Planning, including the Maryland Historical Trust. As of this date, the Maryland Military Department has not submitted comments.

The Maryland Department(s) of Natural Resources, and Transportation; Harford County; and the Maryland Department of Planning, including the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

The Maryland Department of Natural Resources noted, please consider ground-water heat pump systems combined with solar thermal as part of LEED-design for buildings. Also please consider green roofs, cisterns and rain gardens as part of low impact development Best Management Practices (BMPs).

The Department of Transportation stated that "as far as can be determined at this time, the subject has no unacceptable impacts on plans or programs."

The Maryland Historical Trust noted, there is a prior review for this undertaking sent directly to the Army in April which found this undertaking will have no adverse effect on historic properties.

The Maryland Department of the Environment found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

If the applicant suspects that asbestos is present in any portion of the structure that will be renovated/demolished, then the applicant should contact the Community Environmental Services Program, Air and Radiation Management Administration at (410) 537-3215 to learn about the State's requirements for asbestos handling.

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor

Richard Eberhart Hall, AICP, Secretary
Amanda Stakem Conn, Esq., Deputy Secretary

Ms. Amanda Murphy

July 16, 2013

Page 2

State Application Identifier: **MD20130627-0476**

2. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.
3. If boilers or other equipment capable of producing emissions are installed as a result of this project, the applicant is requested to obtain a permit to construct from MDE's Air and Radiation Management Administration for this equipment, unless the applicant determines that a permit for this equipment is not required under State regulations pertaining to "Permits, Approvals, and Registration" (COMAR 26.11.02.). A review for toxic air pollutants should be performed. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements and the permitting processes for such devices.
4. If soil contamination is present, a permit for soil remediation is required from MDE's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.
5. If any project can be considered regionally significant, such as a shopping mall, a sports arena, industrial complex, or an office complex, the project may need to be identified to the regional Metropolitan Planning Organization (MPO). Project managers who need a permit to connect their projects to a State or federal highway should contact the Planning Division of the Planning and Monitoring Program, Air and Radiation Management Administration, at (410) 537-3240 for further guidance.
6. If a project receives federal funding, approvals and/or permits, and will be located in a nonattainment area or maintenance area for ozone or carbon monoxide, the applicant should determine whether emissions from the project will exceed the thresholds identified in the federal rule on general conformity. If the project emissions will be greater than 25 tons per year, contact Brian Hug, Air and Radiation Management Administration, at (410) 537-4125 for further information regarding threshold limits.
7. Fossil fuel fired power plants emit large quantities of sulfur oxide and nitrogen oxides, which cause acid rain. In addition, nitrogen oxide emissions contribute to the problem of global warming and also combine with volatile organic compounds to form smog. The MDE supports energy conservation, which reduces the demand for electricity and therefore, reduces overall emissions of harmful air pollutants. For these reasons, MDE recommends that the builders use energy efficient lighting, computers, insulation and any other energy efficient equipment. Contact the U.S. EPA at (202) 233-9120 to learn more about the voluntary Green Lights Program which encourages businesses to install energy-efficient lighting systems.
8. The applicant should be advised that no cutback asphalt should be used during the months of June, July and August.
9. Development should be concentrated in suitable areas such as existing or planned population centers as identified in a county's comprehensive plan.
10. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
11. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.
12. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and

Ms. Amanda Murphy

July 16, 2013

Page 3

State Application Identifier: **MD20130627-0476**

federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

13. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer.

For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.

14. In addition, information from MDE's Science Services Administration is enclosed.

Any statement of consideration given to the comments(s) should be submitted to the approving authority, with a copy to the State Clearinghouse. The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at srichardson@mdp.state.md.us. **Also please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known. Any substitutions of this form must include the State Application Identifier Number.** This will ensure that our files are complete.

Thank you for your cooperation with the MIRC process.

Sincerely,



Linda C. Janey, J.D., Assistant Secretary

LCJ:SR

Enclosure(s)

cc: Scott Duncanson

Greg Golden - DNR

Melinda Gretsinger -

MDOT

Amanda Degen - MDE

Lawrence Leone - MILT

Denise Lynch - HRFD

Mayor - ABERDE

Peter Conrad - MDPL

Beth Cole - MHT

13-0476_CRR.CLS.doc



Maryland Department of Planning

Sustainable _____ Attainable _____

PROJECT STATUS FORM

Please complete this form and return it to the State Clearinghouse upon receipt of notification that the project has been approved or not approved by the approving authority.

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

DATE: _____
(Please fill in the date form completed)

FROM: _____
(Name of person completing this form.)

PHONE: _____ - _____ - _____
(Area Code & Phone number)

RE: State Application Identifier: MD20130627-0476
Project Description: Environmental Assessment and Draft FNSI: U.S. Army Reserve Proposes to Construct and Operate a New U.S. Army Reserve Center (USARC) at Aberdeen Proving Ground (APG), Harford County, Maryland

PROJECT APPROVAL			
This project/plan was:	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved with Modification	<input type="checkbox"/> Disapproved
Name of Approving Authority:	_____		Date Approved:

FUNDING APPROVAL			
<i>The funding (if applicable) has been approved for the period of:</i>			
_____, 201__ to _____, 201__ as follows:			
Federal \$:	Local \$:	State \$:	Other \$:
_____	_____	_____	_____

OTHER
<input type="checkbox"/> Further comment or explanation is attached

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor

Richard Eberhart Hall, AICP, Secretary
Amanda Stakem Conn, Esq., Deputy Secretary

EA and Draft FNSI: New U.S. Army Reserve Center (APG)
Maryland Department of the Environment - Science Services Administration

REVIEW FINDING: R1 Consistent with Qualifying Comments
(MD2013 0627-0476)

The following additional comments are intended to alert interested parties to issues regarding water quality standards. The comments address:

A. Water Quality Impairments: Section 303(d) of the federal Clean Water Act requires the State to identify impaired waters and establish Total Maximum Daily Loads (TMDLs) for the substances causing the impairments. A TMDL is the maximum amount of a substance that can be assimilated by a waterbody such that it still meets water quality standards.

Planners should be aware of existing water quality impairments identified on Maryland's 303(d) list. The Project is situated in Gunpowder River watershed, identified by the MD 8-digit code 02130801 which is currently impaired by several substances and subject to regulations regarding the Clean Water Act.

Planners may find a list of nearby impaired waters by entering the 8-digit basin code into an on-line database linked to the following URL:
<http://www.mde.state.md.us/programs/Water/TMDL/Integrated303dReports/Pages/303d.aspx>.

This list is updated every even calendar year. Planners should review this list periodically to help ensure that local decisions consider water quality protection and restoration needs. **Briefly, the current impairments that are relevant to the Project include the following:**

Gunpowder River (02130801):

Nutrients: Tidal. A TMDL has been written and approved by the EPA. (Bay TMDL)

Toxics: Tidal. A TMDL for PCBs is pending development.

Nutrients: Tidal. A TMDL has been written and approved by the EPA. (Bay TMDL)

B. TMDLs: Development and implementation of the any Plan should take into account consistency with TMDLs developed for the impaired waterbodies referenced above. Decisions made prior to the development of a TMDL should strive to ensure no net increase of impairing substances. TMDLs are made available on an updated basis at the following web site:

<http://www.mde.state.md.us/programs/Water/TMDL/CurrentStatus/Pages/Programs/WaterPrograms/TMDL/Summittals/index.aspx>

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland's anti-degradation policy;

C. Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called "anti-degradation policies." This policy states that "proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts." These permitted annual discharges are not just traditional Point Sources, it can include all discharges such as Stormwater.

Currently, Tier II waters are not present in the area surrounding the project.

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at: <http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm> and policy implementation procedures are located at <http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm>

Planners should also note that since the Code of Maryland Regulations is subject to periodic updates. A list of Tier II waters pending Departmental listing in COMAR can be found, with a discussion and maps for each county, at the following website:

<http://www.mde.state.md.us/programs/researchcenter/EnvironmentalData/Pages/researchcenter/data/waterqualitystandards/antidegradation/index.aspx>

ADDITIONAL COMMENTS

Chesapeake Bay TMDL

With the completion of the Chesapeake Bay TMDL, the Chesapeake Bay Program Office (CBPO) will be able to provide loading data at a more refined scale than in the past. MDE will be able to use the CBPO data to estimate pollution allocations at the jurisdictional level (which will include Federal Facilities) to provide allocations to the Facilities. These allocations, both Wasteload (WLA) and Load Allocation (LA) could call for a reduction in both Point Sources and Nonpoint Sources. **Facilities should be aware of reductions and associated implementation required by WIPs or FIPs.**

Stormwater

The project should consider all Maryland Stormwater Management Controls. Site Designs should consider all Environmental Site Design to the Maximum Extent Practicable and “Green Building” Alternatives. Designs that reduce impervious surface and BMPs that increase runoff infiltration are highly encouraged.

Further Information:

<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/Pages/Programs/WaterPrograms/SedimentandStormwater/swm2007.aspx>

Environmental Site Design (Chapter 5):

<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/MarylandStormwaterDesignManual/Documents/www.mde.state.md.us/assets/document/chapter5.pdf>

Redevelopment Regulations:

<http://www.dsd.state.md.us/comar/comarhtml/26/26.17.02.05.htm>

EA and Draft FNSI: New U.S. Army Reserve Center APG
 Harford County, MD
 MD2013 0627-0476



Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

Legend

- Streams
- MD High Quality Waters
- MD High Quality Waters
- County Line
- MD 8-digit Watershed
- APG



Map Date: 7/1/2013 Drawn By: MDE SSA

Data Sources:

- Streams - State Highway Administration
- Major Roads - State Highway Administration
- Watersheds: 8-digit - MD Dept. of the Environment



Internal Comment Response Matrix
 Draft Environmental Assessment for the U.S. Army Reserve Proposed Military Construction Project
 APG, MD

June - July 2013

Reviewer Name	Organization	Telephone	E-Mail
Kimberley Fillinger	ATC	278-7422	Kimberley.f.fillinger.civ@mail.mil
Wayne Trulli	20 th SUPCOM	410/436-1215	Wayne.r.trulli.civ@mail.mil
Judith Weintraub	DPW-ED	410 417-2289	Judith.w.weintraub.civ@mail.mil

Comment #	Page No.	Line No.	Name	Comment	Comment Response
1.	i	ES.3, 1	K. Fillinger	Delete "...and surrounds APG".	Agreed; change made as suggested.
2.	9	3.2.1.1, 3	K. Fillinger	Needs to be revised. Both Graces Quarters and Carroll Island are located in Baltimore County.	Agreed; change made as suggested.
3.	21	33-34	K. Fillinger	"During operation of the facility, the USAR is considering installing signs to deter the parking of vehicles in the wetland areas. " This sentence should be addressed by DPW wetland POC.	Comment acknowledged; this action would be coordinated with the APG DPW Wetland POC.
4.	iii	ES.8 Mitigation		Why is a NPDES Permit necessary since the installation already operates under one for the APG-EA POTW.	An NPDES permit is necessary for construction.
5.	22	1 & 2	3.8.1.1	Comprised of is used incorrectly, should be "comprises" or "composed of".	Agreed; changed to "composed of".
6.	43	1	Last Paragraph before 3.15.2	Sentence doesn't make sense.	Agreed; sentence revised.

Comment #	Page No.	Line No.	Name	Comment	Comment Response
7.	Section 3.14.2		J. Weintraub	Please add to Section 3.14.2. “Operation of the 99 th USARC is not expected to result in the generation of hazardous waste.”	Disagree; per Section 3.14.2.1 the proposed OMS may use and or generate minor amounts of POLs (e.g. oil, off-spec fuel, anti-freeze). In addition this section has been revised to include the following: “Small quantities of soldier-generated waste such as navigational and communicational equipment batteries may be generated.” Handling and disposal details will be worked out later between APG and the USARC in an Intra Service Support Agreement (ISSA) as per Arnold O’Sullivan, APG DPW.

End of Comments

APPENDIX B

**NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT**

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Proposed Construction of a U.S. Army Reserve Center

The U.S. Army proposes to construct and operate a U.S. Army Reserve Center at the Aberdeen Proving Ground (APG), Harford County, Maryland. The U.S. Army Reserve Center would provide properly equipped and secured training facilities for approximately 500 U.S. Army Reserve soldiers.

In accordance with the National Environmental Policy Act, the U.S. Army has prepared an Environmental Assessment (EA) and a draft Finding of No Significant Impacts (FNSI) for the proposed action. The EA and draft FNSI evaluate and document potential environmental and human health effects associated with the construction and operation of a new U.S. Army Reserve Center at the proposed location.

The EA and draft FNSI have been submitted to Federal, state and local agencies for review and are available for public review at the Harford County Library, Edgewood Branch, 629 Edgewood Road, Edgewood, MD 21040 (410-612-1600), and on-line at the following URL Address: <http://www.parsenviro.com/FTP/comments/EdgewoodEA.pdf>.

Written comments are to be submitted within 30 days of the publishing date of the Notice of Availability to Ms. Amanda Murphy at U.S. Army Reserve, 99th Regional Support Command, DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, New Jersey 08640-5000, or by email at amanda.w.murphy.ctr@mail.mil.



Friday June 21 2013

WE HEREBY CERTIFY, that the annexed advertisement of Order No 921025

Gannett Fleming
207 Senate Ave
Camp Hill, PA 17011

was published in "THE BALTIMORE SUN" a daily newspaper printed and published in the City of Baltimore on Friday June 21 2013

The Baltimore Sun Company,

By 

Subscribed and sworn to before me this _____ day of _____ 20____,

By _____

Notary Public

My commission expires _____

7123

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Proposed Construction of a U.S. Army Reserve Center

The U.S. Army proposes to construct and operate a U.S. Army Reserve Center at the Aberdeen Proving Ground (APG), Harford County, Maryland. The U.S. Army Reserve Center would provide property equipped and secured training facilities for approximately 600 U.S. Army Reserve soldiers.

In accordance with the National Environmental Policy Act, the U.S. Army has prepared an Environmental Assessment (EA) and a Draft Finding of No Significant Impacts (FN-SI) for the proposed action. The EA and draft FN-SI evaluate and document potential environmental and human health effects associated with the construction and operation of a new U.S. Army Reserve Center at the proposed location.

The EA and draft FN-SI have been submitted to Federal, state and local agencies for review and are available for public review at the Harford County Library, Edgewood Branch, 629 Edgewood Road, Edgewood, MD 21040 (410-612-1600), and on-line at the following URL Address: <http://www.parservfo.com/FTR/commnts/EdgewoodEA.pdf>.

Written comments are to be submitted within 30 days of the publishing date of this Notice of Availability to U.S. Amanda Murray at U.S. Army Reserve, 99th Regional Support Command, OPW, Environmental Division, 5721 South Scott Plaza, Fort Dix, New Jersey 08440-5000, or by email at armainfo.w.murray@armil.mil.

APPENDIX C
EMISSIONS CALCULATIONS

APG USARC EA
Air Quality Emission Estimates

Operational Sources	Criteria Pollutant Emissions (tpy)						
	SO ₂	NOx	CO	PM ₁₀	PM _{2.5}	VOC	HAPS
Stationary Sources							
Heating Units	0.006	0.97	0.71	0.075	0.075	0.054	0.019
Mobile Sources							
On-road Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.006	0.97	0.71	0.075	0.075	0.054	0.019
PSD Thresholds	250	NA	250	250	250	NA	NA
Non-attainment NSR Thresholds	NA	25	NA	NA	NA	25	NA
General Conformity <i>de minimis</i> Thresholds	NA	25	NA	NA	NA	25	NA

Construction Sources	Criteria Pollutant Emissions (tpy)						
	SO ₂	NOx	CO	PM ₁₀	PM _{2.5}	VOC	HAPS
Construction Worker Commute	0.003	0.39	8.92	0.008	0.004	0.31	0.019
Paving (Asphalt)	-	-	-	-	-	0.01	-
Clearing	-	-	-	0.018	0.004	-	-
Equipment	0.064	1.78	0.97	0.15	0.15	0.18	0.043
Material Hauling	0.001	0.52	0.08	0.014	0.012	0.017	1.26E-06
Site Grading Fugitive Dust Emissions	-	-	-	1.76	-	-	-
Demolition Emissions	-	-	-	0	0	-	-
Construction Totals	0.068	2.69	9.97	1.95	0.17	0.52	0.062
General Conformity <i>de minimis</i> Thresholds	NA	25	NA	NA	NA	25	NA

Notes:

- 1-Lead is not a significant pollutant generated from this type of actions. Any lead emissions generated from the proposed action have been included as part of the HAP emissions.
- 2-PSD thresholds apply only to stationary sources.
- 3-For General Conformity applicability determination, project emissions should be compared based on the worst-case year, which for nonattainment pollutants is at full operational build-out.
- 4-In lieu of site-specific information, the emission calculations have been based on scope of similar proposed air sources at other USARCs.

APG USARC EA
Air Quality Emission Estimates-Heating Units

NG Fired Units (MMBtu/hr) ¹	1.75
NG Fired Units (MMBtu/hr) ²	0.60
Fuel Type	Natural Gas
Maximum Operation Limit (hrs/yr)	8,760
Heat Value of Fuel (Btu/scf) ¹	1,050

¹- Heat input assumes 1- 1 MMBtu/hr boiler (USARC Bldg) and 1-750,000 Btu/hr boiler (OMS).

²- Heat input assumes 2-300,000 Btu/hr water heaters (one heater each in the USARC Bldg and OMS)

Criteria Pollutant ²	Uncontrolled Potential to Emit				Water Heaters				Total Criteria Pollutant Emissions (ton/yr)
	Emission Factor (lb/10 ⁶ scf)	Emission Rate (lb/hr)	Emission Rate (lb/yr)	Emission Rate (ton/yr)	Emission Factor (lb/10 ⁶ scf)	Emission Rate (lb/hr)	Emission Rate (lb/yr)	Emission Rate (ton/yr)	
Total Particulate Matter (PM) ³	7.6	0.013	111	0.055	7.6	0.004	38.0	0.019	0.075
Nitrogen Oxides (NOx)	100.0	0.167	1,460	0.73	94.0	0.054	471	0.24	0.97
Sulfur Oxides (SOx)	0.6	0.001	8.76	0.004	0.6	3.43E-04	3.0	0.002	0.006
Carbon Monoxide (CO)	84.0	0.140	1,226	0.61	40.0	0.023	200	0.10	0.71
VOC	5.5	0.009	80.3	0.040	5.5	0.003	27.5	0.014	0.054

Toxic Air Pollutants ⁴ (Organic HAPs) ⁶	CAS No.	Uncontrolled Potential to Emit			
		Emission Factor (lb/10 ⁶ scf)	Emission Rate (lb/hr)	Emission Rate (lb/yr)	Emission Rate (ton/yr)
3-Methylchloranthrene	56-49-5	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Benzene	71-43-2	2.10E-03	4.70E-06	0.041	2.06E-05
Benzo(a)pyrene	50-32-8	1.20E-06	2.69E-09	2.35E-05	1.18E-08
Formaldehyde	50-00-0	7.50E-02	1.68E-04	1.47	7.35E-04
Hexane	110-54-3	1.80E+00	0.004	35.3	0.018
Naphthalene	91-20-3	6.10E-04	1.37E-06	0.012	5.98E-06
Toluene	108-88-3	3.40E-03	7.61E-06	0.067	3.33E-05
2-Methylnaphthalene	91-57-6	2.40E-05	5.37E-08	4.71E-04	2.35E-07
7,12-Dimethylbenz(a)anthracene		1.60E-05	3.58E-08	3.14E-04	1.57E-07
Acenaphthene	83-32-9	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Acenaphthylene	203-96-8	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Anthracene	120-12-7	2.40E-06	5.37E-09	4.71E-05	2.35E-08
Benzo(a)anthracene	56-55-3	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Benzo(b)fluoranthene	205-82-3	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Benzo(g,h,i)perylene	191-24-2	1.20E-06	2.69E-09	2.35E-05	1.18E-08
Benzo(k)fluoranthene	205-82-3	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Chrysene	218-01-9	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Dibenzo(a,h)anthracene	53-70-3	1.20E-06	2.69E-09	2.35E-05	1.18E-08
Dichlorobenzene	25321-22-6	1.20E-03	2.69E-06	0.024	1.18E-05
Fluoranthene	206-44-0	3.00E-06	6.71E-09	5.88E-05	2.94E-08
Flourene	86-73-7	2.80E-06	6.27E-09	5.49E-05	2.74E-08
Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	4.03E-09	3.53E-05	1.76E-08
Phenanathrene	85-01-8	1.70E-05	3.80E-08	3.33E-04	1.67E-07
Pyrene	129-00-0	5.00E-06	1.12E-08	9.80E-05	4.90E-08
Organic HAPs Total				36.9	0.018

Toxic Air Pollutants-Metals ⁵ (Inorganic HAPs) ⁶	CAS Number	Uncontrolled Potential to Emit			
		Emission Factor (lb/10 ⁶ scf)	Emission Rate (lb/hr)	Emission Rate (lb/yr)	Emission Rate (ton/yr)
Arsenic	7440-38-2	2.00E-04	4.48E-07	0.004	1.96E-06
Barium	7440-39-3	4.40E-03	9.85E-06	0.086	4.31E-05
Beryllium	7440-41-7	1.20E-05	2.69E-08	2.35E-04	1.18E-07
Cadmium	7440-43-9	1.10E-03	2.46E-06	0.022	1.08E-05
Chromium	7440-47-3	1.40E-03	3.13E-06	0.027	1.37E-05
Cobalt	7440-48-4	8.40E-05	1.88E-07	0.002	8.23E-07
Copper	7440-50-8	8.50E-04	1.90E-06	0.017	8.33E-06
Lead		5.00E-04	1.12E-06	0.010	4.90E-06
Manganese	7439-96-5	3.80E-04	8.50E-07	0.007	3.73E-06
Mercury	7439-97-6	2.60E-04	5.82E-07	0.005	2.55E-06
Molybdenum	7439-98-7	1.10E-03	2.46E-06	0.022	1.08E-05
Nickel	7440-02-0	2.10E-03	4.70E-06	0.041	2.06E-05
Selenium	7782-49-2	2.40E-05	5.37E-08	4.71E-04	2.35E-07
Vanadium	1314-62-1	2.30E-03	5.15E-06	0.045	2.25E-05
Zinc	7440-66-6	2.90E-02	6.49E-05	0.57	2.84E-04
Inorganic HAPs Total				0.86	4.28E-04
HAPs Total				37.8	0.019

Notes:

¹ Natural Gas heating value (EPA AP-42, Appendix A, Miscellaneous Data & Conversion Factors)

² Criteria Pollutants, small uncontrolled boilers (EPA AP-42, Section 1.4 Natural Gas Combustion, Tables 1.4-1 and 1.4-2).

³ PM emission factor is assumed to equal PM₁₀.

⁴ Toxic Air Pollutants (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-3).

⁵ Metals from Natural Gas Combustion (EPA AP-42, Section 1.4 Natural Gas Combustion, Table 1.4-4; Lead from Table 1.4-2).

⁶ Hazardous Air Pollutant (HAP) as defined by Section 112(b) of the Clean Air Act.

Estimated Emissions Summary - Construction Equipment

Construction Equipment	Operating Assumptions				Emission Factor (grams/hp-hr) ¹					
	Days per Year	Hours per Day	Horsepower	Fuel Type	VOC	PM ₁₀	PM _{2.5}	CO	NO _x	SO ₂
Dump Truck	30	12	340	Diesel	0.18875	0.26046	0.25265	1.47993	3.588297	0.75064
Excavator	30	12	463	Diesel	0.22073	0.27842	0.27007	1.72067	4.175838	0.7505
Bulldozer	30	12	324	Diesel	0.24254	0.29477	0.28593	1.85653	4.448779	0.7504
Front End Loader	30	12	215	Diesel	1.00749	0.69772	0.67679	3.85093	6.305264	0.87267
Crane	180	12	275	Diesel	0.30413	0.24964	0.24215	0.9069	4.376704	0.74203
Backhoe	180	12	92	Gasoline	2.71045	0.06965	0.06408	85.5817	3.513341	0.15295

¹Emission Factor from NONROAD Emissions Model
Source: USACE 2009a

Construction Equipment	Estimated Emissions (tons per year)					
	VOC	PM ₁₀	PM _{2.5}	CO	NO _x	SO ₂
Dump Truck	0.025	0.035	0.034	0.2	0.483	0.101
Excavator	0.041	0.051	0.05	0.316	0.767	0.138
Bulldozer	0.031	0.038	0.037	0.239	0.572	0.096
Front End Loader	0.086	0.06	0.058	0.329	0.538	0.074
Crane	0.199	0.163	0.159	0.594	2.866	0.486
Backhoe	0.594	0.015	0.014	18.747	0.77	0.034
Total Emissions	0.98	0.36	0.35	20.42	6	0.93

Construction Equipment	Estimated Emissions (18 Month Construction Duration)					
	VOC	PM ₁₀	PM _{2.5}	CO	NO _x	SO ₂
Dump Truck	0.038	0.053	0.051	0.3	0.725	0.152
Excavator	0.061	0.077	0.074	0.474	1.151	0.207
Bulldozer	0.047	0.057	0.055	0.358	0.858	0.145
Front End Loader	0.129	0.089	0.087	0.493	0.807	0.112
Crane	0.299	0.245	0.238	0.891	4.299	0.729
Backhoe	0.891	0.023	0.021	28.12	1.154	0.05
Total Emissions	1.46	0.54	0.53	30.64	8.99	1.39

APPENDIX D

RECORD OF NON-APPLICABILITY

RECORD OF NON-APPLICABILITY

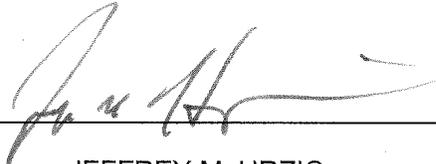
**In Accordance with the Clean Air Act General Conformity Rule
For the Construction and Operation of a U.S. Army Reserve Center
At Aberdeen Proving Ground, Maryland**

The 99th Regional Support Command of the U.S. Army Reserve (USAR), serving as the lead agency, proposes to construct a new USAR Center (USARC) on the U.S. Army Garrison Aberdeen Proving Ground – Edgewood Area in Harford County, Maryland to support the training and mobilization of ten existing USAR units. The ten existing USAR units currently occupy approximately 8,175 square feet of space located in a facility on the Aberdeen Proving Ground – Aberdeen Area, approximately 13 miles north; and approximately 18,296 square feet of space at a facility in Abingdon, Maryland, approximately five miles north. Existing facilities do not meet the current training and mission requirements for the units. The Proposed Action would accommodate up to 500 military and civilian personnel at the new USARC during training activities. To accommodate the proposed USARC, construction of a new approximately 69,000 square-foot training building, a 6,250 square-foot vehicle maintenance shop and a 2,750 square-foot unheated storage facility are proposed. Vehicle parking and stormwater retention facilities would also be constructed. The Proposed Action would permanently convert approximately 15 acres of active recreation land (ball field) within the Aberdeen Proving Ground – Edgewood Area to a USARC training facility.

Conformity under Clean Air Action Section 176 has been evaluated for the above described project per 40 CFR 51. The requirements of this rule are not applicable to this Proposed Action because the highest total direct and indirect emissions from the Proposed Action have been estimated at 0.98 tons VOCs, 0.35 tons PM_{2.5}, 6 tons NO_x, and 0.93 tons SO₂, and are below the de minimus threshold established at 40 CFR 51.853 (b) of 50 tons for VOCs and 100 tons for PM_{2.5}, NO_x, and SO₂ and the Proposed Action is not considered to be regionally significant.

Supporting documentation and emissions estimates:

- () are attached,
- (x) appear in the NEPA documentation,
- () other (not necessary).



JEFFREY M. HRZIC

30 September 2017

Date