

Final
**Programmatic Environmental Assessment for the
U.S. Army Materiel Command
Building Demolition Program**



Prepared for

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PROGRAMMATIC ENVIRONMENTAL ASSESSMENT ORGANIZATION

This programmatic environmental assessment (PEA) addresses the Proposed Action to implement the U.S. Army Materiel Command's (AMC's) program to remove unneeded or unused facilities at AMC installations across the continental United States. AMC developed this PEA in accordance with Title 32 of the *Code of Federal Regulations* (CFR) Part 651, Environmental Analysis of Army Actions; NEPA (Title 42 of the *United States Code* [U.S.C.] §§ 4321 *et seq.*); and applicable Council on Environmental Quality (CEQ) requirements at 40 CFR 1500–1508. Its purpose is to inform decision makers and the public of the likely environmental and socioeconomic consequences of the Proposed Action and other alternatives.

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SECTION 1.0: PURPOSE OF AND NEED FOR THE PROPOSED ACTION AND THE DECISION TO BE MADE summarizes the purpose of and need for the Proposed Action and describes the scope of the environmental impact analysis process.

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SECTION 3.0: AFFECTED ENVIRONMENT AND CONSEQUENCES describes the existing environmental and socioeconomic setting for the AMC installations and identifies potential effects of implementing the Proposed Action and No Action Alternative.

SECTION 4.0: FINDINGS AND CONCLUSIONS summarizes the environmental and socioeconomic effects of implementing the Proposed Action.

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ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
AMC	Army Materiel Command
ANAD	Anniston Army Depot
AQCR	air quality control region
BGAD	Blue Grass Army Depot
BMP	best management practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	<i>Code of Federal Regulations</i>
CO	carbon monoxide
CO ₂	carbon dioxide
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DoD	Department of Defense
EA	environmental assessment
EIS	environmental impact statement
EO	Executive Order
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FY	fiscal year
FNSI	Finding of No Significant Impact
FRP	Facilities Reduction Program
gsf	gross square feet
HSAAP	Holston Army Ammunition Plant
HWAD	Hawthorne Army Depot
IAAAP	Iowa Army Ammunition Plant
ICRMP	Integrated Cultural Resources Management Plan
LBP	lead-based paint
LCAAP	Lake City Army Ammunition Plant
LEAD	Letterkenny Army Depot
LIF	Layaway of Industrial Facilities
Lima	Lima Army Tank Plant
LOS	level of service
MCAAP	McAlester Army Ammunition Plant
MEC	munitions and explosives of concern
MLAAP	Milan Army Ammunition Plant
MOT	Military Ocean Terminal
MOTCO	Military Ocean Terminal Concord
MOTSU	Military Ocean Terminal Sunny Point
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO _x	oxides of nitrogen
NRHP	National Register of Historic Places
O ₃	ozone

PA	Programmatic Agreement
PBA	Pine Bluff Arsenal
PCB	polychlorinated biphenyl
PEA	Programmatic Environmental Assessment
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
RCRA	Resource Conservation and Recovery Act
RCW	red cockaded woodpecker
RFAAP	Radford Army Ammunition Plant
RRAD	Red River Army Depot
SCAAP	Scranton Army Ammunition Plant
SHPO	State Historic Preservation Office
SIAD	Sierra Army Depot
SO ₂	sulfur dioxide
TEAD	Tooele Army Depot
tpy	tons per year
TSCA	Toxic Substances Control Act
TYAD	Tobyhanna Army Depot
UPH	unaccompanied personnel housing
USACE	U.S. Army Corps of Engineers
U.S.C.	<i>United States Code</i>
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compounds
WVA	Watervliet Arsenal

SECTION 1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION AND DECISION TO BE MADE

1.1 INTRODUCTION

This Programmatic Environmental Assessment (PEA) pertains to a program of the U.S. Army Materiel Command (AMC) to remove unused and unneeded facilities from the Real Property Inventories of AMC installations. The facilities would be demolished under the Facilities Reduction Program (FRP), managed by the U.S. Army Corps of Engineers (USACE), Engineering and Support Center, Huntsville, Alabama, and the Layaway of Industrial Facilities (LIF) program. The FRP and LIF programs eliminate excess facilities and structures to reduce fixed installation costs and achieve energy savings through preserving, storing, and disposing of industrial facilities and equipment that are not required to support current production. AMC estimates that 6,700 buildings (approximately 3,240 FRP and 3,460 LIF buildings) are potential candidates for demolition.

AMC is the Army's premier provider of materiel readiness—technology, acquisition support, materiel development, logistics power projection, and sustainment. AMC's missions range from research and development of weapon systems to maintenance and distribution of spare parts. The installations the building demolition program would affect include Army depots, ammunition plants, arsenals, and Military Ocean Terminals (MOTs). AMC installations fabricate, manufacture, repair, test, store, demilitarize, and recycle a wide range of items, from specialty parts to unique prototype weapon systems and vehicles. Depending on the installation, the focus might be on overhauling, repairing, and modifying vehicles, helicopters, artillery, small arms, missile systems, or power-generating equipment; restoring, enhancing, and upgrading weapon systems; demilitarizing and storing conventional ammunition and ammunition-related components; manufacturing propellants and explosives; producing, repairing, and managing and storing chemical and biological defense weapons; or welding, heat-treating, machining, painting, and engineering metals. MOTs are for transporting military munitions by ship.

AMC installations are generally in rural, low-population-density areas where the small surrounding communities are economically supported by the installation's presence and activity. They typically have large areas dedicated to the industrial processes that occur at the installations, as well as areas dedicated to equipment and ammunition storage. Building types at the installations include manufacturing and maintenance buildings, administrative buildings, igloos, warehouses, sheds, and magazines. Most of the buildings that would be removed from AMC installations under this building demolition program are in industrial areas.

Many of the buildings that would be removed under the building demolition program have been used in the industrial processes that occur at the installations, as well as for storage of the materials and equipment used in the processes. Chemicals and hazardous materials used in weapons manufacturing, refurbishment, and the demilitarization of ammunition and weapons; and explosive and propellant residuals from the manufacturing, loading, assembly, and packing of explosives and propellants are expected to be present in many of the buildings to be demolished, including common hazardous materials used in older buildings, such as lead-based paint (LBP), asbestos-containing materials (ACM), and polychlorinated biphenyls (PCBs).

MOTs have both an administrative complex and a waterfront area with staging and transfer facilities where shipments of military munitions are loaded and unloaded. Holding areas near the waterfront store cargo to be shipped and received. Roads and rail lines connect the areas and permit containerized and break-bulk ammunition to be transported directly between ships, trains, and trucks. The waterfront areas have wharves and piers for ship dockage. Cranes and other container-handling equipment are used at MOTs to handle cargo.

Facility demolition and removal would occur over several years, and neither the specific facilities nor the number of facilities that would be demolished at each installation has been determined. The facilities covered under this PEA would be demolished from fiscal year (FY) 2014 through FY 2021 and beyond. This PEA does not prescribe the buildings for demolition or evaluate the environmental impacts of demolishing individual buildings. It assesses the potential environmental effects of demolishing a typical facility or facilities at an AMC installation during any given year covered by the PEA.

This PEA is a starting point for the National Environmental Policy Act (NEPA) process for every facility selected for demolition. If the potential environmental effects of a facility's demolition are adequately described by this PEA, a Record of Environmental Consideration could be tiered from this PEA to complete the NEPA documentation. If a facility has special circumstances not covered by this PEA, such as contamination that would need to be cleaned up before demolition could occur, the presence of a protected species, or potential eligibility for the National Register of Historic Places, the special circumstance would be handled in accordance with applicable regulations and policy before the facility would be demolished.

Figure 1-1 shows the locations of the AMC installations identified to date that will participate in the building demolition program.

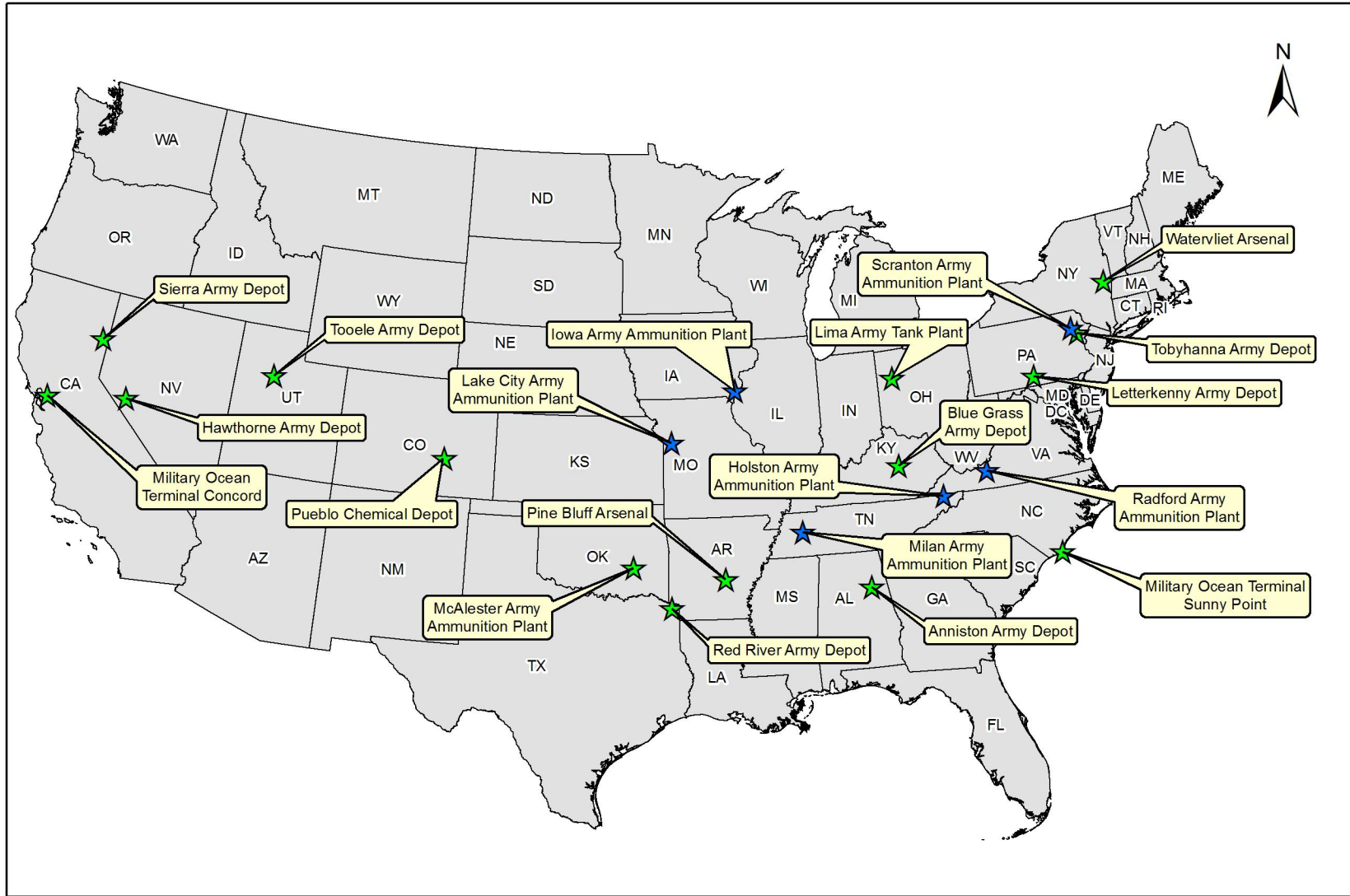
1.2 PURPOSE AND NEED OF THE PROPOSED ACTION

The purpose of the Proposed Action is to reduce excess facilities and structures on AMC installations. Implementing the Proposed Action would reduce fixed facility costs (i.e., utilities), save energy, reduce risks from structural deterioration, and make otherwise idle areas of an installation available for productive reuse.

1.3 SCOPE OF ENVIRONMENTAL ANALYSIS AND DECISION TO BE MADE

The PEA is used to inform decision makers and the public of the likely environmental consequences of the Proposed Action and alternatives. As the PEA describes, its geographic scope includes the installations affected by the building demolition program, and specifically the individual buildings selected for demolition and their immediate surroundings.

The Proposed Action is evaluated with respect to each resource area to determine whether any adverse effect on that resource area would likely result from implementing the Proposed Action. Resource areas on which the Proposed Action would not foreseeably result in adverse effects are dismissed from further evaluation. Resource areas on which the Proposed Action would reasonably have only minor adverse effects are discussed briefly. Resource areas of greatest relevance to the Proposed Action are evaluated fully.



LEGEND

- ★ FRP OMA Installation
- ★ LIF Installation

**Locations of AMC Installations
Participating in the Building Demolition Program**

Figure 1-1

The PEA provides a checklist that AMC installations can use to complete the NEPA documentation for each facility to be demolished (Appendix A). Every demolition project will require additional NEPA assessment tiered from this PEA—either a Record of Environmental Consideration (if the PEA adequately analyzes the potential environmental effects of demolishing the facility) or a supplemental EA that focuses on resource areas with potential impacts not addressed in this PEA. The checklist will identify building-specific actions that will need to be completed before demolition may occur.

If the PEA analysis indicates that implementing the Proposed Action would not result in significant environmental impacts, a Finding of No Significant Impact (FNSI) would be prepared. If significant environmental impacts that cannot be mitigated would result, an Environmental Impact Statement (EIS) would be prepared or the Proposed Action would be abandoned and no action would be taken.

AMC developed this PEA in accordance with Title 32 of the *Code of Federal Regulations* (CFR), Part 651, Environmental Analysis of Army Actions; NEPA (Title 42 of the *United States Code* [U.S.C.] §§ 4321 *et seq.*); and applicable Council on Environmental Quality (CEQ) requirements at 40 CFR 1500–1508, to determine the potential environmental impacts of the Proposed Action.

1.4 PUBLIC INVOLVEMENT

The Army invites public participation in the NEPA process. Consideration of the views and information of all interested persons and entities promotes open communication and enables better decision making. All agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision-making process.

Public participation opportunities with respect to this PEA and decision making on the Proposed Action are guided by 32 CFR Part 651. Upon completion, the PEA, along with a draft FNSI, will be available to the public for 30 days. A notice of availability of the PEA will be published in newspapers local to the affected installations. At the end of the 30-day public review period, the Army will consider any comments that individuals, agencies, or organizations submit on the Proposed Action, the PEA, or the draft FNSI. As appropriate, the Army might then execute the FNSI and proceed with implementing the Proposed Action. If it is determined before a final FNSI is issued that implementing the Proposed Action would result in significant impacts, the Army will publish a Notice of Intent in the *Federal Register* to prepare an EIS, commit to mitigation actions to reduce impacts to below significant levels, or not take the action.

The document can be downloaded at <http://www.amc.army.mil/amc/environmental.html>. Instructions for commenting on the PEA and the Finding of No Significant Impact are provided at the same web page. Comments must be received by 30 days from the publication of the Notice of Availability in the local paper.

Preparation of this PEA has included subject matter experts' consideration of all comments received from agencies, organizations, and individuals.

1.5 IMPACT ANALYSIS PERFORMED

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians has analyzed the Proposed Action and alternatives in light of existing conditions and has identified relevant beneficial and adverse effects associated with the action. Section 2.0 describes the Proposed Action and alternatives to the Proposed Action, including the No Action Alternative. Section 3.0 describes existing conditions and the expected effects of the Proposed Action, with consequences presented immediately following the description of baseline conditions for each environmental resource addressed. Mitigation actions are identified for each aspect of the Proposed Action, as appropriate. Section 4.0 discusses cumulative effects. Sections 5.0 through 8.0 include the List of Preparers, Distribution List, References, and Acronyms and Abbreviations. Appendices follow.

1.6 RELEVANT STATUTES AND EXECUTIVE ORDERS

In addressing environmental considerations, the Army is guided by relevant statutes (and their implementing regulations) and Executive Orders (EOs) that establish standards and provide guidance on environmental and natural resources management and planning. These include the Clean Air Act (CAA); Clean Water Act (CWA); Noise Control Act; Endangered Species Act; National Historic Preservation Act (NHPA); Archaeological Resources Protection Act; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); Resource Conservation and Recovery Act (RCRA); and Toxic Substances Control Act (TSCA). EOs bearing on the Proposed Action include EO 11593 (Protection and Enhancement of the Cultural Environment), EO 11988 (Floodplain Management), EO 11990 (Protection of Wetlands), and EO 12088 (Federal Compliance with Pollution Control Standards). This EA addresses such authorities when relevant to environmental resources and conditions.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The Proposed Action encompasses a multiyear project to remove unused and unneeded facilities from AMC installations. The number and identification of facilities to be removed at each installation will be determined annually and depend on mission priorities and funding.

This PEA analyzes two alternatives—the Proposed Action and the No Action Alternative—for potential impacts.

2.1 PROPOSED ACTION

The Proposed Action is to remove unused and unneeded facilities from the Real Property Inventories of AMC installations. AMC has a tentative goal to demolish 1,050 facilities within the first 7 years of the building demolition program, which would assist AMC in meeting the Army policies set forth in the Department of the Army's Facility Investment Strategy and the Army 2020 Plan.

The types of facilities that would be demolished vary from installation to installation, but in general they can be categorized as maintenance, administrative/operational, training, and other facilities. Table 2-1 provides a partial listing of the types of buildings in these categories that would be demolished.

Ancillary structures such as boiler room equipment, storage tanks, oil/water separators, grit chambers, foundations, and the piping and infrastructure serving buildings would also be removed as part of the Proposed Action.

The facilities to be demolished would be surveyed for the presence of contamination (e.g., explosives residue, PCBs, LBP, and ACM), for eligibility for the National Register of Historic Properties (unless previously determined to be ineligible), and for the presence of endangered and threatened species. If any of these conditions were found to apply to a facility, the demolition would be postponed until the condition was handled in accordance with regulations. After the special condition was handled appropriately, the demolition of the building could proceed.

2.2 NO ACTION ALTERNATIVE

Under the No Action Alternative, the action this PEA proposes would not be taken. No remediation and demolition of the identified facilities would occur. Potentially hazardous conditions in these buildings would remain, and the land occupied by the facilities would be unavailable for future use. Structural and explosives hazards would remain in place.

Although the No Action Alternative does not satisfy the purpose and need for long-range expansion, it is included in the environmental analysis to provide a baseline for comparison with the Proposed Action and is analyzed in the PEA in accordance with CEQ regulations for implementing NEPA.

Table 2-1. Example Types of Buildings to be Demolished

Building category	Facility description	
Maintenance facilities	Ammunition Demilitarization Facility Ammunition Demolition Facility Ammunition Demolition Shop Ammunition Production Facility Ammunition QA/Calibration Facility Ammunition Renovation Shop Ammunition Storage Facility Ammunition Surveillance Shop Battery Shop Component Cleaning Shop Component Rebuild Shop Dunnage Building Electronics Maintenance Shop	Electronics QA/Calibration Facility Building Explosive Receiving/Service Building Guided Missile Maintenance Building Heavy Gun Shop Major End Item Rebuild Shop Railroad Equipment/Engine Maintenance Shop Rocket Overhaul Shop Small Arms Repair Shop Vehicle Maintenance Shop Weapon QA/Calibration Facility
Operational/ Administrative facilities	Access Control Building Airfield Operations Building Aviation Unit Operations Building Banding and Blocking Facility Battalion Headquarters Building Box and Crate Shop Cargo Handling Office Building Centralized Wash Building Communications Center Company Headquarters Building Decontamination Building Dispatch Building Emergency Operations Center	Employee Changing Building Fueling/POL/Wash Support Building Industrial Laundry Information Processing Center Overhead Protection Production Plant Support Building Ready Building Safety Building Scale House Ship Operations Building Shipping and Receiving Building Transmitter Building
Training facilities	Covered Training Area Gas Chamber General Instruction Building Limited Use Instructional Building National Guard Armory	Range Operations and Storage Building Range or Target House Range Support Building
Other facilities	Aircraft Fuel Truck Loading Facility	

Although this alternative would eliminate unavoidable adverse, short- and long-term impacts associated with the Proposed Action, the No Action Alternative would not satisfy the selection criteria established under the purpose and need for this project, resulting in the following:

- Ongoing maintenance costs for outdated and unsafe facilities;
- Failure to meet the goals of the Department of the Army's Facility Investment Strategy and the Army 2020 Plan; and
- Failure to prepare the participating installations and their facilities for the future.

2.3 ALTERNATIVES ELIMINATED FROM FURTHER STUDY

As part of the NEPA process, potential alternatives to the Proposed Action must be evaluated. For alternatives to be considered reasonable and warrant further detailed

analysis, they must be affordable and implementable and must meet the purpose of and need for the Proposed Action.

One alternative would be renovating the facilities for reuse rather than demolishing them. This alternative was eliminated from further consideration because it is not economically feasible. The estimated cost of maintaining the facilities for an undetermined period and renovating them (to appropriate construction and equipment standards) for a specific use in the future would be cost-prohibitive given the poor condition that many of the facilities are in and that their sizes and configurations are not appropriate for current needs. Therefore, this PEA does not evaluate the alternative in detail.

SECTION 3.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

3.1 RESOURCE AREAS ELIMINATED FROM FURTHER CONSIDERATION

For the reasons discussed below, the resource areas discussed below are eliminated from further consideration in the PEA.

3.1.1 Land Use

Land use would not be adversely affected by implementing the Proposed Action. Many of the facilities would be removed from industrial, administrative, and storage areas, and removing unused and unneeded structures from these areas would not create land use incompatibilities. The Proposed Action would result in an increase of open, vegetated space, and the land would be made available for future use. (Future use of the parcels affected by the Proposed Action is not considered in the PEA; it will be considered under separate NEPA analyses as installations determine a need for them.)

3.1.2 Aesthetics and Visual Resources

Implementing the Proposed Action would not adversely affect the aesthetics and visual appeal of the AMC installations. The Proposed Action would be implemented on military installations located primarily in industrial-use areas, which are not areas with inherent aesthetic appeal. Although a site might be aesthetically unpleasing during demolition activities, the beneficial long-term effect of implementing the Proposed Action would be an aesthetic and visual improvement due to removing old and deteriorating structures and revegetating the land.

3.1.3 Airspace

Only a few AMC installations have heliport or airfield facilities: Anniston, Blue Grass, Letterkenny, and Tobyhanna Army Depots; Military Ocean Terminal Concord; and Radford Army Ammunition Plant. The Proposed Action would not involve using, interfering with, or altering air traffic or airspace.

3.1.4 Socioeconomics

Implementing the Proposed Action would not adversely affect socioeconomics (including population, economic activity, environmental justice, and the protection of children). It would not cause changes in population, local employment levels, personal income, or regional industrial or commercial growth. The only potential socioeconomic effect of implementing the Proposed Action would be a short-term increase in local economic activity resulting from the demolition work, which would be a minor beneficial effect.

3.2 AIR QUALITY

3.2.1 Affected Environment

Each AMC installation has been issued an air operating permit (Title V permit) by the appropriate state regulatory agency. Air permits are normally active for 5 years from the

date they are issued. The permits require an annual inventory of all significant stationary sources of air emissions for each criteria pollutant (see below), as well as monitoring and recordkeeping. The primary stationary sources of air emissions at AMC installations are boilers, generators, and fuel storage areas, some of which are associated with facilities that would be removed.

The U.S. Environmental Protection Agency (USEPA) established primary and secondary National Ambient Air Quality Standards (NAAQS; 40 CFR Part 50) under the CAA (42 U.S.C. 7401–7671q). The NAAQS specify acceptable concentrations of six criteria pollutants: particulate matter (measured as both particulate matter less than 10 microns in diameter [PM₁₀] and particulate matter less than 2.5 microns in diameter [PM_{2.5}]), sulfur dioxide (SO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), ozone (O₃), and lead. Short-term NAAQS (1-, 8-, and 24-hour periods) have been established for pollutants that contribute to acute health effects, while long-term NAAQS (annual averages) have been established for pollutants that contribute to chronic health effects. Most states accept the federal standard, but some states (e.g., California and New York) have adopted standards stricter than the federal standards for some pollutants (CEPA 2013; NYSDEC 2013).

The country is divided into Air Quality Control Regions (AQCRs) for the purpose of monitoring and controlling air pollutants. AQCRs with levels of all criteria pollutants below the NAAQS are *attainment areas*, those with a concentration of one or more criteria pollutants in excess of the NAAQS are *nonattainment areas*, and those which were classified as nonattainment but have improved air quality are *maintenance areas*. Most installations are in attainment areas for all criteria pollutants. The installations in nonattainment and maintenance areas are listed in Table 3-1.

3.2.2 Environmental Consequences

3.2.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant adverse impact on air quality if it led to a violation of an air operating permit. Short-term minor adverse and long-term minor beneficial effects on air quality would be expected if the building demolition program was implemented. The short-term minor adverse effects would result from generating airborne dust and other pollutants during demolition activities. The long-term beneficial effects would come from reduced emissions when pollutant-generating equipment and operations were curtailed at the removed facilities.

General Conformity. Under the General Conformity Rule, federal agencies must work with states in a nonattainment or maintenance area to ensure that federal actions conform to the states' air quality plans. The General Conformity Rule does not apply to activities at AMC installations in attainment areas. To assess general conformity for installations in nonattainment and maintenance areas, the total annual direct and indirect emissions of all criteria pollutants were estimated for a large (1,000,000-gross-square-foot [gsf]) demolition project compressed into one 12-month period (Table 3-2). This is considered a reasonable upper bound of effects. The General Conformity Rule does not apply to projects of this size (or smaller) because the total direct and indirect emissions resulting from such a demolition project would be below the applicability threshold of 100 tons per year of each pollutant, regardless of the location of the installation, pollutants of interest, or severity of nonattainment. Moderate changes in the quantity and types of equipment used would not

substantially change these emission estimates and would not change the determination under the General Conformity Rule or level of effects under NEPA.

Table 3-1. Attainment Status of AMC Installations

Installation	County	State	Attainment status
LEAD	Franklin	Pennsylvania	Maintenance area for the 8-hour O ₃ NAAQS
Lima	Allen	Ohio	
SCAAP	Lackawanna	Pennsylvania	
TYAD	Monroe	Pennsylvania	
MOTCO	Contra Costa	California	Marginal nonattainment area for the 8-hour O ₃ NAAQS Nonattainment area for the PM _{2.5} NAAQS Maintenance area for the CO NAAQS
TEAD	Tooele	Utah	Nonattainment area for the SO ₂ NAAQS
WVA	Albany	New York	Marginal nonattainment area for the 8-hour O ₃ NAAQS

Source: USEPA 2013c.

Table 3-2. Estimated Emissions from a Large Demolition Project

Demolition	CO	NO _x	PM ₁₀	PM _{2.5}	SO _x	VOC	De minimis threshold [tpy]	Exceeds de minimis threshold? [Yes/No]
Large demolition project (1,000,000 gsf/yr)	33.0	63.2	7.8	0.1	27.9	4.9	100	No

Note: CO = carbon monoxide, de minimis = of minimal importance, NO_x = oxides of nitrogen, PM_{2.5} = particulate matter less than 2.5 microns in diameter, PM₁₀ = particulate matter less than 10 microns in diameter, SO_x = oxides of sulfur, tpy = tons per year, VOC = volatile organic compound.

Any activities other than demolition or projects that demolish more than 1,000,000 gsf in a single year in nonattainment regions might require additional analysis under the General Conformity Rule and additional review under NEPA to ensure that the total direct and indirect emissions from the action would not exceed the applicability thresholds and that the General Conformity Rule still would not apply. Detailed emission calculations and a Record of Non-Applicability of the General Conformity Rule are provided in Appendix B.

Each state outlines requirements with which a demolition contractor must comply, such as controlling fugitive dust and open burning. All persons responsible for any operation, process, handling, or transportation of materials that could result in fugitive dust would take

reasonable precautions to prevent such dust from becoming airborne. Reasonable precautions might include using water to control the dust from building demolition or road grading. In addition, demolition would proceed in full compliance with applicable state requirements, using compliant practices and products. These regulations commonly limit visible emissions, open burning activities, fugitive dust, and the use of volatile organic compound (VOC)-based products. A list of state air regulations that might apply to demolition activities is provided in Appendix B. The list is not all-inclusive; AMC and any contractors would comply with all applicable air pollution control regulations.

No additional evaluation under NEPA would be required for air quality unless the project would violate the installation's air operating permit or involve more than 1,000,000 gsf/yr of building demolition in a nonattainment area.

3.2.2.2 No Action Alternative

No changes in air pollutant emissions would be expected if the No Action Alternative was implemented. Under the No Action Alternative, no demolition activities would be undertaken and no changes in operations would take place. A general conformity analysis and the permitting of stationary sources would not be required. Under the No Action Alternative, unused facilities would be minimally maintained and would be expected to deteriorate over time. Deterioration of building materials that contain friable asbestos (e.g., piping and boiler insulation) and substances that volatilize over time would be expected to create hazardous air quality conditions inside some buildings.

3.3 NOISE

3.3.1 Affected Environment

The AMC installations are mostly in rural areas where existing sources of noise include local traffic, high-altitude overflights, bird and animal vocalizations, and wind-generated noise. Although most AMC installations are in rural areas, they conduct industrial activities, which are louder than background noise in the area. Background noise levels were estimated for the areas surrounding AMC installations based on population density using the techniques specified in the *American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound, Part 3: Short-term measurements with an observer present* (ANSI 2003). Background sound levels at the installations range from 35 to 50 A-weighted decibels (dBA) in the daytime. A detailed list of background sounds is provided in Appendix C. For comparison, sounds encountered in daily life and their levels are provided in Table 3-3.

The Noise Control Act of 1972 (Public Law 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations to the fullest extent consistent with agency missions. The act requires compliance with state or local noise control regulations in off-post areas only; however, the Army often uses the time restrictions outlined in local ordinances as general guidelines for on-post activities.

A municipal noise ordinance might limit the time of day during which heavy equipment may be operated, the equipment's distance from noise-sensitive receptors (e.g., schools, hospitals, churches, and residences), and the duration of its operation. Some ordinances set specific not-to-exceed noise levels, and others are simple nuisance noise ordinances.

Typically, a local noise ordinance restricts demolition-related noise to daytime hours. Although noise is typically regulated at the local level, both Arkansas and California have statewide nuisance noise regulations without specific not-to-exceed sound level or time-of-day restrictions (ACA 2013, CAC 2013). A list of noise regulations applicable to areas surrounding the AMC installations is provided in Appendix C.

Table 3-3. Common Sound Levels

Outdoor	Sound level (dBA)^a	Indoor
Snowmobile	100	Subway train
Tractor	90	Garbage disposal
Downtown (large city)	80	Ringling telephone
Freeway traffic	70	TV audio
Normal conversation	60	Sewing machine
Rainfall	50	Refrigerator
Quiet residential area	40	Library

Source: Harris 1998.

^a Decibels (dB) are used to quantify sound intensity. A-weighted decibels (dBA) are used to approximate the perception of sound by humans.

3.3.2 Environmental Consequences

3.3.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant adverse impact on the noise environment if the project would substantially increase the ambient noise levels for adjoining areas. A noise increase of 10 decibels is perceived as a doubling of noise, and is generally considered substantial. Short-term minor adverse and long-term minor beneficial effects on the noise environment would be expected from implementing the Proposed Action. Demolition activities would cause short-term increases in noise. No long-term changes in the overall noise environment would be expected with the Proposed Action.

Multiple pieces of equipment operating concurrently can generate relatively high noise levels during daytime hours within 400 to 800 feet of active demolition sites. All noise-sensitive areas within 800 feet of demolition activities would experience appreciable amounts of noise. However, demolition activities would be confined to on-post areas and conducted primarily during daytime hours. Noise effects would be minor because the projects would be temporary and nearby sensitive areas would have limited exposure to the noise. Although demolition-related noise impacts would be minor, the following best management practices (BMPs) would be used to reduce the already-limited noise effects:

- Demolition would occur primarily during daytime hours.
- Mufflers on equipment used during demolition activities would be properly maintained and in good working order.

Most demolition projects would not involve blasting. If blasting were required, it would occur during the day in the early phases of demolition. Blasting noise would be clearly audible and intrusive at areas adjacent to the project. There would be airborne and ground-borne

vibrations during demolition projects that require blasting. Although the exact amount and type of blasting are unknown at this time, steps would be taken to ensure the effects from these activities would remain less than significant. A blasting plan would be prepared to ensure safety and to minimize adverse effects due to noise and vibration at the proposed sites. Baseline vibration levels would be established, vibrations would be monitored, and thresholds for structural damage would be strictly adhered to during blasting activities. Notably, any nearby historic structures would be of particular interest during these activities. These effects would be minor.

No additional evaluation under NEPA would be required for noise unless the project would have demolition activities within 800 feet of the installation boundary for more than 1 year or would have blasting activities for which a blast management plan that addresses noise and vibration has not been prepared.

3.3.2.2 No Action Alternative

No effect on the noise environment would be expected under the No Action Alternative. No changes to the noise environment would result from the No Action Alternative. No demolition activities would be undertaken, and no changes in operations would take place.

3.4 SOILS

3.4.1 Affected Environment

The AMC installations that would participate in the Proposed Action are in 18 states across the continental United States. Soil types and conditions vary from state to state, from installation to installation, and within an installation, and generalizations about the soil types where the Proposed Action would be implemented cannot be made. However, because the Proposed Action would involve removing structures primarily from industrial and administrative areas of AMC installations, most of the soils on the affected land would have been previously disturbed.

The National Pollutant Discharge Elimination System stormwater program requires that stormwater runoff from construction sites be permitted. (Note: In the context of stormwater permit requirements, *construction* refers to ground-disturbing activities, including facility demolition.) Pursuant to that requirement, state and county regulations require construction or ground-disturbing projects that involve 1 acre of land disturbance or more (including smaller sites that are part of a larger common plan of development that collectively disturbs 1 acre or more) to obtain a construction general permit for stormwater. One permit requirement is to prepare, submit, and obtain approval of an erosion and sediment control plan before initiating the construction activity. The objective of the plan is to reduce construction-related erosion and sedimentation. The construction general permit requires the construction operator to implement a site-specific stormwater pollution prevention plan, which outlines the steps that must be taken to comply with the permit. The stormwater pollution prevention plan typically includes requirements for maintaining the quality and quantity of water leaving the construction site and for reducing pollutants in the stormwater runoff from the site. It also specifies all potential pollutant sources that could enter construction site stormwater and the methods that will be used to reduce pollutants in stormwater runoff during and after construction.

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant adverse impact on soils if:

- It could cause substantial soil loss or compaction to the extent that establishing native vegetation within two growing seasons is precluded on a land area larger than 1,000 acres; or
- It could cause a loss of soil productivity (from construction activities) through converting pervious ground to impervious ground on more than 5 percent of installation land.

A short-term minor adverse effect on soils would be expected from implementing the Proposed Action. Ground disturbance and soil compaction would be expected from using equipment during facility removal on each affected parcel. The extent of the disturbance would depend on the size and configuration of the facility being removed, any associated structure that would be removed along with it (e.g., parking lot), and the manner in which the facility is demolished (e.g., conventional demolition, implosion).

Each AMC installation would obtain all necessary state and local permits to perform each facility removal (or, if allowed, a permit to cover multiple facility removal actions at an installation). AMC installations would abide by state and local construction site permit requirements. Construction site plans would include measures to minimize the total area of land disturbed, prevent soil erosion and sediment runoff on the site, and re-stabilize the site with vegetation following facility removal.

Implementing the Proposed Action would be expected to increase the amount of pervious ground on AMC installations. Impervious surfaces (such as facilities and paved areas) would be removed, and the affected area would be returned to a vegetated state. The Proposed Action would not be expected to cause substantial soil loss or compaction or decrease soil productivity. Implementing the Proposed Action, therefore, would not be expected to have an adverse effect on soils at any AMC installation.

3.4.2.2 No Action Alternative

No effect on soils would be expected under the No Action Alternative. Under the No Action Alternative, no facilities would be removed and no ground disturbance would occur, and therefore no soils would be disturbed or changed.

3.5 WATER RESOURCES

3.5.1 Affected Environment

AMC installations are in desert, coastal, coastal plain, temperate forest, and other environments. Given the variety of installation environments, no generalizations can be made about the water resources on the installations.

Protecting surface water and groundwater quality during any ground-disturbing activity is a concern. Each AMC installation would obtain coverage under a construction general permit for stormwater before initiating any facility removal action (refer to section 3.4, Soils).

Coverage under a construction general permit for stormwater is required for activities that disturb 1 acre of land or more, or less than 1 acre if the activity is part of a larger common construction activity that ultimately will disturb 1 acre or more. In some states where AMC installations are located, coverage under a stormwater permit for large construction activities is required if the construction activity will disturb 5 acres of land or more. Stormwater runoff from facility demolition sites would be controlled by using BMPs recommended or required by the state, by maintaining construction vehicles and other equipment used during the demolition process to prevent leakage of fluids that could pose a threat to groundwater quality, and by re-stabilizing the site as soon as practicable after completing demolition activities.

3.5.2 Environmental Consequences

3.5.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant impact on water resources (surface water or groundwater) if:

- It could cause an exceedance of a Total Maximum Daily Load;
- It could cause a change in the impairment status of a surface water; or
- It could cause an unpermitted direct impact on a water of the United States.

Provided that a construction general permit for stormwater has been approved and implemented, runoff of stormwater and pollutants from a construction site is considered to be in compliance with regulatory requirements and to not cause an impairment of surface waters or groundwater. Facility removals under the Proposed Action, therefore, would not be expected to cause a Total Maximum Daily Load exceedance, a change in the impairment status of a surface water, or an unpermitted direct impact on a water of the United States. The Proposed Action would therefore not be expected to have an adverse effect on a water resource.

The Proposed Action would result in long-term beneficial effects on groundwater and surface water, in most instances from removing impervious surface area (buildings and their foundations and other structures). Removing impervious surface area would increase soil infiltration, thus reducing the quantity of stormwater runoff. Where the action consists of removing an underground storage tank or some other type of small structure, the effect on groundwater and surface water would be negligible. Contaminants present in stormwater runoff from remediation and demolition operations would be contained at the worksite by using BMPs recommended or required by the state.

Additional evaluation under NEPA for water resources would be required if the project was within the buffer zone or riparian area of a surface water.

3.5.2.2 No Action Alternative

No effect on water resources would be expected under the No Action Alternative. No facilities would be removed, so no ground and soil disturbance that could lead to sediment deposition in surface waters would occur and no facility-removal equipment that could leak pollutants would be used. The amount of impervious area on each installation would not change under the No Action Alternative.

3.6 WETLANDS

3.6.1 Affected Environment

The AMC installations with wetlands that could be affected the most by the Proposed Action are the MOTs. Wetlands are present on other AMC installations, but they are generally not in the areas that would be affected by the Proposed Action.

EO 11990 (*Protection of Wetlands*) directs federal agencies to minimize the destruction, loss, and degradation of wetlands and to preserve and enhance the natural and beneficial values of wetland communities. In accordance with the CWA (33 U.S.C. § 1251 *et seq.*), projects under the Proposed Action that involve dredging or filling wetlands would require a section 404 permit from the USACE. A state permit could also be required. All AMC installations participating in the Proposed Action would meet federal and state requirements for wetland avoidance, minimization, and mitigation under the CWA (sections 401 and 404) and would obtain any required state water-protection permits for unavoidable impacts on wetlands.

3.6.2 Environmental Consequences

3.6.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant impact on wetlands if it could cause the unpermitted loss or destruction of more than 1 acre of jurisdictional wetlands.

If a wetland could be affected by a facility removal action, a section 404 permit from the USACE would be required. The permit would specify how the affected wetlands are to be protected and any required mitigation, which could include compensatory action to protect or create wetlands elsewhere. Provided that the Proposed Action proponent meets the permit requirements, the action would be considered to have no net effect on wetlands.

Because any potential impact on wetlands would be permitted and wetlands are of concern mostly on MOTs, no adverse impacts on wetlands would be expected under the Proposed Action.

3.6.2.2 No Action Alternative

No effect on wetlands would be expected under the No Action Alternative. Under the No Action Alternative, no facilities would be removed, so no disturbances to wetlands near the facilities would result.

3.7 BIOLOGICAL RESOURCES

3.7.1 Affected Environment

The biological environments of AMC installations where the Proposed Action would be implemented range from the California coast bay shore to the mountains of Virginia. The natural local vegetation and wildlife vary greatly from installation to installation, and generalizations about them cannot be made. Most sites that would be affected by the

Proposed Action, however, are within the developed cantonment areas of the installations, which have been converted from any natural environment to maintained lawns with scattered trees. The fauna associated with such areas generally consists of common species and species that readily tolerate the presence of humans and human activities.

3.7.1.1 Threatened and Endangered Species

Numerous laws protect species whose populations are in peril of extermination. The Endangered Species Act of 1973 (7 U.S.C. § 136, 16 U.S.C. § 1531 *et seq.*), Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. § 668–668d), Migratory Bird Treaty Act of 1918 (16 U.S.C. §§ 703–712), Anadromous Fish Conservation Act (16 U.S.C. § 757a–757g), and state wildlife laws are some of the laws that protect imperiled species. Actions that could potentially harm a species protected under one of these laws must first be coordinated with the appropriate agency (the U.S. Fish and Wildlife Service or National Marine Fisheries Service for federal protected species and the state wildlife agency for state-listed species) to determine what actions the proponent of the Proposed Action must take to avoid or minimize impacts on the affected species.

Threatened and endangered species of concern in the context of the Proposed Action are primarily those that might reside in buildings. For instance, the southeastern myotis (*Myotis austroriparius*), a small bat, is known to use buildings, and Rafinesque's big-eared bat (*Plecotus rafinesquii*) is usually found in abandoned buildings (ANAD 2012). The Proposed Action would occur in the natural habitats of such species. Aquatic species found in waters adjacent to MOTs could be of concern. Lists of protected species that could potentially occur on AMC installations are presented in Appendix D.

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant impact on the biological environment if:

- It could result in a permanent net loss of habitat at a landscape scale;
- It could cause a long-term loss or impairment of a substantial portion of local habitat on which native species depend; or
- It could result in the unpermitted “take” of a threatened or endangered species.

The Proposed Action would be implemented primarily in built environments on Army installations, and therefore no habitat disturbance or loss of habitat would be expected under the Proposed Action.

Long-term minor beneficial effects on flora and fauna would be expected if the Proposed Action was implemented. Each parcel would be revegetated with native vegetation, which could be of some benefit to the local flora and fauna.

No adverse effects on threatened or endangered species would be expected if the Proposed Action was implemented. An unpermitted “take” of a threatened or endangered species would not occur under the Proposed Action. If a federal or state protected species was found in a facility to be demolished, the installation would consult with the U.S. Fish and

Wildlife Service, the National Marine Fisheries Service, or the responsible state agency (as appropriate) and appropriate steps would be taken to ensure the species was not harmed. Such steps could include scheduling the demolition outside the breeding and nesting seasons or relocating the animal. It is highly unlikely that the Proposed Action would affect endangered or threatened plant species because they have very specific habitat requirements that do not normally occur on the built environments of AMC installations. No adverse impacts on protected species, therefore, would be expected under the Proposed Action.

Additional evaluation under NEPA for biological resources would be required if the project would result in the harming or taking (as defined in the ESA) of a federal protected species.

3.7.2.2 No Action Alternative

No effect on biological resources would be expected under the No Action Alternative. Under the No Action Alternative, no facilities would be removed, so no disturbances to protected species on or near the lands occupied by the facilities or occupying the facilities would occur.

3.8 CULTURAL RESOURCES

3.8.1 Affected Environment

AMC installations are largely industrial in character, including production and ammunition storage facilities with buildings and structures such as manufacturing buildings, warehouses, ammunition storage igloos, and administrative buildings. Some installations have buildings and structures that have been found to be historically significant, either as part of a larger historic district or on an individual basis. Such buildings and structures are called historic properties, as defined by the NHPA.

Cultural resources such as buildings, structures, and archaeological resources at Army installations are managed through installation-specific Integrated Cultural Resources Management Plans (ICRMPs). Prepared in compliance with Section 110 of the NHPA and Army Regulation 200-1, an ICRMP is a 5-year plan for managing cultural resources at an installation. It provides guidelines and procedures to enable an installation to meet its legal responsibilities pertaining to cultural resources. Cultural resources vary from installation to installation depending on the cultural history of the installation. Each installation, therefore, must refer to its most up-to-date ICRMP to ascertain the status of its cultural resources.

The NHPA, enacted in 1966, is the cornerstone of federal preservation law and the most important piece of legislation for managing the Army's cultural resources. The act directs the Secretary of the Interior to maintain a list of historic properties, called the National Register of Historic Places (NRHP), which is composed of districts, buildings, sites, structures, and objects deemed significant in American history, architecture, archaeology, engineering, or culture. Section 106 of the NHPA (36 CFR Part 800) forms the basis for most of the cultural resources work conducted at AMC installations. This section ensures that federal agencies consider historic properties in their proposed programs, projects, and actions before initiation. Under the Section 106 process, a federal agency evaluates the NRHP eligibility of resources within the proposed undertaking's area of potential effect and assesses the possible effects of the undertaking on historic resources in consultation with the State Historic Preservation Office (SHPO) and other parties. The area of potential effect is defined

in Section 106 as the geographic area(s) “within which an undertaking may directly or indirectly cause alterations in the character of use of historic properties, if any such properties exist.”

For a building or structure to be considered eligible for NRHP listing, it must be evaluated within its historic context and shown to be significant for one or more of the four Criteria of Evaluation (36 CFR Part 60), as outlined in the National Park Service publication Guidelines for Completing National Register of Historic Places Forms (NPS 1997). Structures potentially affected by the Proposed Action would be evaluated with reference to the four criteria:

- Criterion A: (Event) Properties that are associated with events that have made a significant contribution to the broad patterns of our history.
- Criterion B: (Person) Properties that are associated with the lives of persons significant in our past.
- Criterion C: (Design/Construction) Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D: (Information Potential) Properties that have yielded, or might be likely to yield, information important in prehistory or history.

A property is not eligible if it cannot be related to a particular time period or cultural group and thereby lacks any historic context in which to evaluate its importance (NPS 1997). The cultural property (e.g., historic building or landscape) must also retain the historic integrity of those features necessary to convey its significance. The seven aspects or qualities of integrity recognized by the National Register are location, design, setting, materials, workmanship, feeling, and association.

3.8.1.1 Programmatic Agreements and Program Comments

The Programmatic Agreement and Program Comments described below might apply to the potential candidates for the AMC demolitions. Copies of the Programmatic Agreement and Program Comments are provided in Appendix E.

World War II Temporary Buildings Demolition Programmatic Agreement. In 1986, DoD, ACHP, and the National Conference of State Historic Preservation Officers entered into a programmatic agreement (PA) for the DoD-wide demolition of World War II (1939–1946) temporary buildings. DoD agreed to carry out several tasks to mitigate the demolition of all World War II temporary buildings, which might be eligible for listing on the NRHP. Under the auspices of this PA, installations may proceed with the demolition of World War II temporary buildings without further action to comply with Section 106 of the NHPA.

Program Comments. The ACHP’s Section 106 regulations provide for alternative methods that federal agencies can use to meet their responsibilities under Section 106. One of these alternative methods is ACHP’s program comments. ACHP issues program comments at the request of the federal agency or on its own initiative. The comments are designed to provide the ACHP flexibility to issue comments on a federal program or a class of undertakings instead of issuing comments case by case. Program comments provide DoD and its military

departments the ability to better manage their vast inventory of potentially historic resources.

Certain buildings and structures at the AMC installations have already undergone Section 106 compliance as part of program comments the Army and ACHP developed for certain Army buildings and structures. If these buildings and structures were included on the proposed list of demolitions for the Proposed Action, the installations would have no further obligations to fulfill to comply with Section 106. DoD published a Notice of Adoption of the Program Comments in May 2007, and installations may proceed with actions affecting these properties without meeting further Section 106 compliance responsibilities. The program comments are for the following categories of buildings and structures:

Cold War Era (1946–1974) Unaccompanied Personnel Housing. ACHP issued the Program Comment for Cold War Era Unaccompanied Personnel Housing (UPH) in 2006. The program comment applies to all buildings and structures listed on or eligible for listing on the NRHP that were designed and built as UPH in the years 1946–1974, regardless of use. DoD's military departments and DoD itself provided mitigation for the treatment of these properties, precluding the need for project-by-project review for the following activities involving these properties: ongoing operations, maintenance, and repair; rehabilitation; renovation; mothballing; cessation of maintenance; new construction; demolition; deconstruction and salvage; remediation activities; and transfer, sale, lease, and closure.

The buildings and structures include those with the DoD Category Group Code of 72, which includes UPH and associated buildings and structures, such as dining halls and laundry facilities, constructed to support military housing needs.

World War II and Cold War (1939–1974) Ammunition Storage Facilities. ACHP issued the Program Comment for World War II and Cold War Era (1939–1974) Ammunition Storage Facilities in 2006. The program comment applies to all buildings and structures listed on or eligible for listing on the NRHP that were designed and built as ammunition storage facilities within the years 1939–1974, regardless of current use. DoD's military departments and DoD itself provided mitigation for the treatment of these properties, precluding the need for project-by-project review for the following activities involving these properties: ongoing operations, maintenance, and repair; rehabilitation; renovation; mothballing; cessation of maintenance; new construction; demolition; deconstruction and salvage; remediation activities; and transfer, sale, lease, and closure.

The buildings and structures include those with the DoD Category Group Code of 42, Ammunition Storage.

World War II and Cold War (1939–1974) Army Ammunition Production Facilities and Plants. ACHP issued the Program Comment for World War II and Cold War Era (1939–1974) Army Ammunition Production Facilities and Plants in 2006. The program comment applies to World War II and Cold War Era Army ammunition production facilities and plants that might be eligible for listing on the NRHP. DoD's military departments and DoD itself provided mitigation for the treatment of these properties, precluding the need for project-by-project review for the following activities involving these facilities and plants: ongoing operations, maintenance, and repair; rehabilitation; renovation; mothballing; cessation of maintenance; new construction; demolition; deconstruction and salvage; remediation activities; and transfer, sale, lease, and closure.

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action Alternative

Impacts on cultural resources would be considered significant if the Proposed Action resulted in altering any of the characteristics of an historic property (including prehistoric and historic-era resources) that qualify it for inclusion on the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Adverse effects on historic properties include the following:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous substance remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within its setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

No adverse effects on cultural resources would be expected from implementing the Proposed Action. For the categories of buildings for which Program Comments have been issued, such as UPH, or for World War II temporary buildings that fall under the nationwide PA, the adverse effects of demolition have already been mitigated and no further action is required to comply with Section 106. Installations would coordinate with the SHPO for buildings eligible or potentially eligible for inclusion on the NRHP, and all required mitigation would be completed before demolition would occur.

Demolition has the potential to damage known and unknown archeological sites that may be near or underneath the building. In the event that such a site was discovered during a demolition action, Standard Operating Procedures in the installation ICRMP would be followed to comply with the NHPA.

Additional evaluation under NEPA for cultural resources would be required if the project disturbed an archaeological resource.

3.8.2.2 No Action Alternative

No adverse effects on cultural resources would result from implementing the No Action Alternative. Under the No Action Alternative, no demolition of AMC facilities would occur and no cultural resources would be affected.

3.9 TRAFFIC AND TRANSPORTATION SYSTEMS

3.9.1 Affected Environment

3.9.1.1 Existing Roadway Network and Roadway Effectiveness

Most of the roadways providing access to facilities on AMC installations are secondary paved arterials connecting to nearby state highways. Most of the AMC installations are outside the city limits of the closest population center and in rural or remote areas where traffic is free flowing. The approximate distance of each installation from its closest population center and the type of surrounding transportation network is tabulated in Appendix F.

The level of service (LOS) is used here to facilitate a general discussion of traffic conditions near AMC installations in or near urban, suburban, rural, and remote areas. The LOS is a qualitative measure of the operating conditions of an intersection or other element of a transportation network. There are six defined LOSs (A through F): LOS A represents the best operating conditions with no congestion, and LOS F is the worst with heavy congestion. Roadways and intersections with LOS E or F are those with traffic conditions at or above capacity and where traffic patterns are congested, unstable, and normally unacceptable to people attempting to access and use the roadways and intersections (TRB 2010).

3.9.1.2 Rural and Remote Transportation Networks

Traffic at most of the AMC installations is mainly affected by roadway conditions. Heavy traffic volumes are rare and normally occur only because of road closure and roadway construction. Rural highways in the United States rarely operate at volumes approaching capacity. Seasonal weather conditions—when snow, flooding, and mudflows can make roads impassable—are the primary cause of inefficient access on rural and remote roadways. The LOS at intersections and along roadways near installations in rural and remote areas would typically be A or B at all times, characterized by free-flowing traffic patterns.

3.9.1.3 Urban and Suburban Transportation Networks

Some of the AMC installations are in or near urban or suburban areas. Delays and heavy traffic can be prevalent in these areas and are most frequent during rush-hour periods, 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m., Monday through Friday. The ability of streets to function well is generally limited by the capacity of signalized intersections; traffic is normally uninterrupted on the roadway segments between intersections. During peak periods, the LOS at intersections near installations in urban and suburban areas would typically be E or F, characterized by unstable or forced traffic flow.

3.9.2 Environmental Consequences

3.9.2.1 Proposed Action

The Proposed Action would be considered to have a significant adverse impact on traffic and transportation if:

- It could cause the LOS on a roadway or at an intersection to decrease by more than two levels;
- It could cause recurring traffic delays on roadways or discernible degradation of existing roads or rail facilities; or
- Its implementation required changes to existing rail schedules.

Short-term minor adverse effects on transportation would be expected if the Proposed Action was implemented. Construction vehicle and day-labor traffic during facility removal could cause short-term traffic delays. No long-term adverse effects would be expected if the Proposed Action was implemented.

Table 3-4 and Appendix F provide an estimate of the number of additional truck trips for different amounts of demolition activity. Even with large amounts of demolition in a single location, the overall number of trucks would be small. For example, demolition of 3,000,000 square feet of buildings at a single installation in a single year would generate 23 truck trips per day, or a few truck trips per hour. This level of traffic generation would be extremely small when compared to other traffic regardless of the location.

Table 3-4. Estimated Trip Generation from Demolition Activities

Building area [square feet]	Truck trips per year	Truck trips per day
500,000	897	4
1,000,000	1,794	8
1,500,000	2,691	12
2,000,000	3,588	16
2,500,000	4,485	19
3,000,000	5,382	23

Source: TRB 2010.

These effects would be temporary and would end with the demolition phase at any one site. Common transportation infrastructure would be adequate to support the increase in vehicle traffic. The LOS would remain unchanged at all roadways. There could be some queuing at nearby intersections during peak traffic periods because of commuting workers and truck trips.

Although the effects would be minor, contractors would route and schedule demolition vehicles to minimize conflicts with other traffic and would strategically locate staging and stockpiling areas to minimize traffic impacts. All demolition vehicles would be equipped with backing alarms, two-way radios, and "Slow Moving Vehicle" signs when appropriate.

Additional evaluation under NEPA for transportation and traffic would be required if the project could create long-term road closures or delays to traffic.

3.9.2.2 No Action Alternative

No effects on traffic and transportation would be expected if the No Action Alternative was implemented. No demolition would occur and no long-term changes in transportation would take place. Traffic and transportation conditions would remain unchanged.

3.10 UTILITIES

3.10.1 Affected Environment

Utilities serving individual facilities at AMC installations include water conveyance systems (potable water, sanitary sewer, stormwater drainage), energy systems (steam, electricity, natural gas, fuel oil, propane), telecommunications (cellular and analog telephone, cable and satellite television, and Internet networking), and solid waste disposal (trash removal and landfills).

Construction and demolition debris generated at military installations is disposed of in suitable landfills on an installation or in regional landfills permitted to receive construction and demolition debris. The size and remaining capacity of installation and regional construction and demolition debris landfills vary from installation to installation and regionally. Construction and demolition contractors are required to comply with applicable Army, federal, state, and local regulations regarding the content of debris that may be disposed of at construction and demolition debris landfills. Military contracts for construction and demolition contain the mandatory requirement to divert at least 50 percent of the construction and demolition waste generated during a project through reuse or recycling of the materials (ACSIM 2006).

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action Alternative

The Proposed Action would be considered to have a significant adverse effect on infrastructure and utilities if its implementation resulted in exceeding the capacity of an infrastructure system (i.e., creating an energy, water, or sewer demand in excess of existing supply) at an installation or violating regulatory limits (e.g., a wastewater discharge greater than that allowed by an existing permit). Implementing the Proposed Action would not be expected to result in the need for any upgrades to installation utility systems. The Proposed Action would not increase the long-term demand for public utility services and would not affect regional or local energy supplies. Where facilities to be removed are consuming utilities such as energy and water, facility removal would reduce an installation's long-term demand for such utilities, which would be considered a beneficial effect.

Implementing the Proposed Action would be expected to have a negligible short-term effect on an installation's energy demands. Short-term use of utilities would be expected while preparing a structure for demolition and during both the demolition effort and the post-demolition work to re-vegetate the parcel.

All underground utility lines within the work perimeter would be located before the start of a demolition. They would then be disconnected and properly terminated. All utilities would be identified and clearly marked throughout the demolition.

The Proposed Action would be considered to have a significant adverse impact on solid waste disposal if military and regional landfills had insufficient capacity for disposal of the debris resulting from the Proposed Action. Long-term minor adverse effects on solid waste and landfill capacity would be expected if the Proposed Action was implemented. Demolition debris generated under the Proposed Action would be hauled off-site by contract to landfills that accept such debris or disposed of at an installation landfill, or both. The amount of solid waste generated under the Proposed Action could be substantial and would vary by installation and by year depending on the number, types, and sizes of facilities removed. A reasonable upper bound of effects for the purpose of analyzing air quality emissions under the Proposed Action was arrived at based on a large (1,000,000-gsf) demolition project compressed into a single year at any given installation. The same upper bound is used here to estimate the amount of demolition debris generated annually at an installation under the Proposed Action (Table 3-5).

Table 3-5. Estimate of Demolition Debris Generated at an Installation under the Proposed Action

Activity	Total area (ft ²)	Factor (lb/ft ²)	Estimated waste (lb)	Estimated waste (tons)
Demolition	1,000,000	115	115,000,000	57,500
Amount recycled (50%)	500,000	N/A	57,500,000	28,750
Net debris generated	500,000	N/A	57,500,000	28,750
Annual total (assuming 20 installations)	N/A	N/A	1,150,000,000	575,000

Note: ft² = square feet, lb = pounds.

At least 50 percent of the estimated 57,500 tons of demolition debris would be diverted from landfill sites, in accordance with Department of Defense (DoD) requirements, leaving a maximum of approximately 28,750 tons of demolition debris that would be disposed of in landfill sites on or near an installation. That would result in a maximum annual total of 575,000 tons of demolition debris across all AMC installations.

Estimates of the total amount of construction and demolition debris sent to landfills in the United States annually vary from 170 million tons to 250 million tons, and the amount could be as much as 650 million tons (CDRA 2013, USEPA 2013). The high estimate of 575,000 tons of debris annually from the AMC building demolition program across all installations is less than 0.5 percent of either estimate of the total amount of construction and demolition debris landfilled annually in the United States (170 million tons and 250 million tons; Table 3-6).

Disposal of the solid waste from the demolition of AMC facilities would reduce the lifespan of installation and regional landfills, and the amount of the reduction would depend on the size and remaining capacity of individual landfills. It is likely that demolition contractors would use more than one landfill near any AMC installation.

Additional evaluation under NEPA for utility systems and solid waste disposal would be required if a project could generate a regionally significant quantity of debris.

Table 3-6. Estimated Percentage of Annual U.S. Total Construction and Demolition Waste

Annual estimate (tons/year)	Estimated AMC installation waste (tons/year)	Number of participating AMC installations	Total AMC demolition waste annually (tons)	AMC installation waste as percentage of annual U.S. total
170,000,000	28,750	20	575,000	0.34%
250,000,000	28,750	20	575,000	0.12%

3.10.2.2 No Action Alternative

No effects on utility systems would be expected if the No Action Alternative was implemented. No facilities would be removed, and utility usage by the facilities would remain unchanged.

3.11 HAZARDOUS SUBSTANCES AND HAZARDOUS WASTE

3.11.1 Affected Environment

As noted earlier, many of the buildings that would be removed under the Proposed Action were constructed with materials containing hazardous substances because of when the facilities were built and many of the buildings have been used in the industrial processes that occur at the installations, as well as for storage of the materials and equipment used in the processes. Many hazardous substances or wastes associated with building construction or operational uses could be encountered at the buildings. Hazardous substances are defined under CERCLA and hazardous wastes are defined under RCRA. Such materials or wastes might present substantial danger to public health or welfare or the environment when released or improperly managed. Types of hazardous and toxic substances that could be encountered during implementation of the Proposed Action are described below.

Many installations might have facilities that are included in environmental restoration programs, which include environmentally impacted sites that are being investigated and remediated in accordance with CERCLA and RCRA. Such facilities that are near or part of such restoration sites would be included in pre-demolition evaluations before being demolished under the Proposed Action.

3.11.1.1 Pesticides

For decades, pesticides have been used at US Army installations to manage pests. Some of these chemicals that were historically used were banned under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in the 1970s and 1980s because of their negative effects on human and environmental health. Despite being banned under FIFRA, many pesticides continue to persist in the environment. Some of the most common compounds that are now banned are organochlorinated pesticides such as DDT, heptachlor, endosulfan, chlordane, aldrin, dieldrin, and endrin. Because many of the structures proposed for demolition were constructed before such pesticides were banned, the chemicals could have been applied at or stored inside some of the facilities.

3.11.1.2 Polychlorinated Biphenyls (PCBs)

PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. PCBs can be found in pad- and pole-mounted electrical transformers, fluorescent light ballasts, and other electrical equipment. PCB materials were used in paints and caulking to increase pliability and chemical resistance. PCB-containing paints were widely used on facilities associated with the production, storage, and packaging of explosives and propellants (e.g., ammunition storage igloos, explosive production plants, testing laboratories) (USACE 2012).

3.11.1.3 Lead-Based Paint (LBP)

LBP has been banned since 1978, but facilities constructed before that year could have LBP on woodwork, siding, windows, and doors. Army policy requires each installation to develop and implement a facility management plan for identifying, evaluating, managing, and abating LBP hazards.

3.11.1.4 Asbestos-Containing Material (ACM)

ACM was widely used in construction for fire resistance and insulation until it was banned in the 1970s. ACM is most commonly found in window caulking, exterior grout, vinyl floor tiles/mastic, drywall systems, fire doors, ceiling tiles, pipe insulation, roofing materials, and window glazing. It can also be found on ancillary infrastructure such as streamlines, boiler room equipment, and piping.

3.11.1.5 Munitions and Explosives of Concern (MEC) and Chemical Warfare Materiel (CWM)

MEC includes military munitions that might pose unique explosive safety risks. It includes unexploded ordnance, discarded military munitions, and explosive constituents contained within munitions that are present in concentrations high enough to pose an explosive hazard. Because many of the facilities proposed for demolition were used in producing munitions, MEC could be encountered.

CWM and chemical agents are or at some time were stored, produced, or destroyed at Anniston Army Depot, Alabama; Tooele Army Depot, Utah; Pine Bluff Arsenal, Arkansas; Blue Grass Army Depot, Kentucky; and Pueblo Chemical Depot, Colorado. Therefore, they could be encountered at facilities at those installations.

Material potentially presenting an explosive hazard, such as explosive and propellant residues, could be encountered in facilities that were once used to produce, package, store, and test such materials.

3.11.1.6 Radioactive Materials

X-ray machines and other equipment containing radioactive components may have been used at or stored in facilities being proposed for demolition.

3.11.2 Environmental Consequences

3.11.2.1 Proposed Action

The Proposed Action would be considered to have a significant adverse impact on hazardous and toxic substances if:

- It resulted in noncompliance with applicable local, state, and federal regulations;
- It increased the amount of hazardous waste generated or procured beyond the waste management capacity of an installation;
- It disturbed contaminated sites, causing adverse effects on ecological and human health by creating exposure pathways; or
- The established management policies, procedures, and handling capacities for fuel management could not accommodate the activities associated with the Proposed Action.

No adverse effects related to hazardous and toxic substances would be expected if the Proposed Action was implemented. Every structure proposed for demolition would be assessed for the presence of hazardous substances or wastes, including explosive constituents and residues, before demolition would occur. The assessment could include reviews of records related to the structure's historical use and historical pesticide application, surveys for ACM and LBP, and targeted sampling of parts of the structure. Structures with environmental hazards would not be demolished until regulated hazardous substances or wastes were safely and environmentally abated in accordance with the environmental statutes and regulations that govern hazardous substance and hazardous waste management activities at DoD installations. The environmental checklist for AMC building demolition under FRP and LIF provided in Appendix A would assist installation personnel in determining relevant and appropriate mitigations measures and BMPs required for FRP and LIF facilities to qualify for inclusion under this PEA. All abatement activities would be conducted in accordance with Army policies and procedures. They would occur under established DoD programs that are funded and occur outside the AMC building demolition program. If remediation of a hazardous substance under a separate DoD program necessitated the demolition of the facility for regulatory compliance, then the demolition of the facility would require NEPA documentation separate from this PEA.

Minor petroleum, oil, and lubricant spills from engines and equipment operation could occur during demolition operations. Appropriate BMPs, including preparing and adhering to a Spill Prevention, Control, and Countermeasure Plan, would be implemented during all demolitions to ensure that any leaks or spills would have only negligible environmental effects. Contractors would be responsible for handling all regulated materials in accordance with federal and state regulations.

3.11.2.2 No Action Alternative

Long-term minor adverse effects related to the use, disposal, and storage of hazardous or toxic substances would be expected from implementing the No Action Alternative. Unused and unneeded buildings with hazardous substances would continue to deteriorate over time, and an increase in the release of hazardous substances such as LBP and ACM into the environment would be likely. The continued presence of hazardous substances in the

buildings would put personnel conducting caretaking activities at the buildings at risk of exposure to the materials.

3.12 CUMULATIVE EFFECTS

CEQ regulations implementing NEPA define a *cumulative impact* as follows:

Cumulative impact is the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7).

EPA guidance to reviewers of cumulative impact analyses further adds:

...the concept of cumulative impacts takes into account all disturbances since cumulative impacts result in the compounding of the effects of all actions over time. Thus, the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal or private) is taking the action (EPA 1999).

For the purposes of this PEA, significant cumulative impacts would occur if incremental impacts of the Proposed Action, added to the environmental impacts of past, present, and reasonably foreseeable actions, would exceed significance thresholds for resources at an installation and the surrounding region. The analysis in the PEA indicates that the Proposed Action would be expected to have a short- or long-term adverse effect on the following resource areas: aesthetics and visual resources, air quality, noise, soils, traffic and transportation systems, and utilities (solid waste disposal). Because the Proposed Action would have primarily a localized effect on some of these resource areas, no cumulative effects would be expected for the following resource areas: aesthetics and visual resources, noise, soils, and traffic and transportation systems. The resource areas with the potential for regional cumulative effects are air quality and utilities (solid waste disposal only). These resource areas are addressed below.

Air Quality. Each state takes into account the effects of all past, present, and reasonably foreseeable emissions during the development of the State Implementation Plan. In developing the plan, the state accounts for all significant stationary, area, and mobile emission sources. Estimated emissions generated by the Proposed Action would be *de minimis*, and it is understood that activities of this limited size and nature would not contribute significantly to adverse cumulative effects on air quality.

Solid Waste Disposal. The AMC building demolition program would result in a substantial quantity of demolition debris disposed of at installation and regional landfills. Construction and demolition not related to the AMC building demolition program would continue and would also contribute to the quantity of debris disposed of at regional landfills. The combined quantities of debris would reduce installation and regional landfill capacities. The amount by which the capacities would be reduced cannot be predicted and depends on which AMC facilities are demolished and where the debris is disposed of. Overall, however, the quantity of construction debris that would be produced from the Proposed Action is small compared to the quantity landfilled annually in the United States, and the cumulative effect on landfill capacity would not be significant.

SECTION 4.0 FINDINGS AND CONCLUSIONS

This PEA considers the proposed implementation of AMC's program to remove unused or unneeded facilities from the real estate inventories at its installations in the continental United States. The facilities would be demolished at the installations (Army depots, ammunition plants, arsenals, and MOTs) under the FRP and the LIF program, which eliminate excess facilities and structures to reduce fixed installation costs and achieve energy savings through preserving, storing, and disposing industrial facilities and equipment that are not required to support current production. AMC estimates that 6,700 buildings are potential candidates for demolition.

4.1 FINDINGS

The PEA identifies, evaluates, and documents the effects of implementing the building demolition program. The Proposed Action to implement the building demolition program and a No Action Alternative are evaluated. Implementing the Proposed Action would not be expected to result in significant environmental impacts. Preparation of an EIS, therefore, is not required, and a FNSI will be published in accordance with 32 CFR Part 651, *Environmental Effects of Army Actions*, and NEPA (42 U.S.C. §§ 4321–4347).

AMC installations proceeding with facility removal under this PEA would assess the potential adverse effects of each proposed demolition action on all potentially affected human and natural resources. Every demolition project would require additional NEPA assessment tiered from this PEA—either a Record of Environmental Consideration (if the PEA adequately analyzes the potential environmental effects of demolishing the facility) or a supplemental EA that focuses on resource areas with potential impacts not addressed in this PEA.

Table 4-1 summarizes and compares the consequences of the Proposed Action and the No Action Alternative.

4.2 MITIGATION MEASURES

The PEA does not identify mitigation measures associated with implementing the Proposed Action. BMPs would be implemented before, during, and after demolition actions as required under regulation and Army policy, or as prudent considering the circumstances of individual demolitions. BMPs are discussed in the PEA for many resource areas, including air quality, noise, soils, water resources, and hazardous materials and waste. Each demolition action would be individually evaluated for compliance with the PEA, and at that time the need for any mitigation measures and site-specific BMPs would be determined. Note that any mitigation or BMPs required for abatement actions (such as LPB and ACM removal and soil or groundwater contamination that could affect whether a facility could be demolished under the AMC building demolition program) would be implemented within the context of such abatement, not within the context of the Proposed Action of this PEA.

4.3 CONCLUSION

On the basis of the analysis, the Proposed Action would have no significant adverse effects on the natural or human environment. Preparation of an EIS is not required; issuance of a FNSI is appropriate.

Table 4-1. Summary of Potential Environmental and Socioeconomic Consequences

Resource area	Environmental and socioeconomic effects	
	Proposed Action	No Action Alternative
<i>Resource Areas Eliminated from Full Consideration</i>		
Land use	No effect	Long-term minor adverse
Aesthetics and visual resources	Short-term minor adverse Long-term minor beneficial	Long-term minor adverse
Airspace	No effect	No effect
Socioeconomics	Short-term minor beneficial	No effect
<i>Resource Areas Fully Evaluated</i>		
Air quality	Short-term minor adverse Long-term minor beneficial	No effect
Noise	Short-term minor adverse Long-term minor beneficial	No effect
Soils	Short-term minor adverse	No effect
Water resources	Long-term minor beneficial	No effect
Wetlands	No effect	No effect
Biological resources	Long-term minor beneficial	No effect
Cultural resources	No effect	No effect
Traffic and transportation systems	Short-term minor adverse	No effect
Utilities	Short-term minor adverse Long-term minor beneficial	No effect
Hazardous and toxic substances	No effect	No effect
Cumulative effects	No significant adverse cumulative effects	No effect

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APPENDIX A
ENVIRONMENTAL CHECKLIST AND REC

ENVIRONMENTAL CHECKLIST FOR AMC BUILDING DEMOLITION UNDER THE FACILITIES REDUCTION PROGRAM (FRP) AND LAYAWAY INDUSTRIAL FACILITIES (LIF) PROGRAM

This checklist is to be completed for proposed activities under the Army Materiel Command (AMC) Building Demolition Program. Its purpose is to determine whether individual facility removal actions are covered by the Programmatic Environmental Assessment (PEA) for the AMC Building Demolition Program. The true or false answers to questions in Part B of this checklist indicate either compliance with the PEA or the need for additional documentation. If the applicable sections of the checklist have been completed and the Proposed Action qualifies for coverage under the PEA, a Record of Environmental Consideration may be prepared for the action, and the action may proceed. If the checklist indicates the need for additional analysis, or if the proposed building demolition action is not otherwise covered by the PEA, then the need for further National Environmental Policy Act (NEPA) analysis would need to be assessed.

The resource areas reviewed and discussed in the PEA must be assessed individually for each proposed building demolition action. The checklist below includes all resource areas included in the PEA: land use, aesthetics and visual resources, airspace, air quality, noise, soils, water resources, wetlands, biological resources, cultural resources, socioeconomics (including environmental justice and the protection of children), traffic and transportation systems, utilities, and hazardous materials and hazardous waste. Those resource areas eliminated from further consideration in the PEA—land use, aesthetics and visual resources, airspace, and socioeconomics—are included in the checklist to capture the effects of any building demolition actions for which the resource areas are relevant.

PART A BACKGROUND INFORMATION

1. Project name: _____
2. Project description: _____
3. Project location: _____
4. Project Manager: _____
5. Phone: _____
6. E-mail: _____
7. Project contact (if different from Project Manager): _____
8. Proposed project start date and duration: _____
9. Date this checklist was completed: _____
10. **Compliance with the PEA.** The following must be true to use the PEA as the NEPA analysis for the proposed building demolition action: Is the Proposed Action part of the AMC Building Demolition Program? YES NO

Comments: _____

11. **Stand-alone or Umbrella Project.** The Proposed Action may be either the demolition of a single building (a stand-alone project) or it may include the demolition of more than one facility (but be considered a single project and be permitted collectively (an umbrella project).

STAND-ALONE PROJECT: Is this a stand-alone project (a project that involves the removal of a single facility)? YES NO

If yes, respond to each of the statements in Part B (below) as they pertain to the individual facility to be removed.

UMBRELLA PROJECT: Is this an umbrella project (a single project that involves the removal of two or more distinct facilities)? YES NO

If yes, respond to each of the statements in Part B (below) as they pertain to the project that includes all the facilities to be removed under the Proposed Action.

Comments: _____

PART B ENVIRONMENTAL RESOURCE ANALYSIS		
<p>Upon completion of the proposed building demolition action and any associated follow-on activities such as site revegetation, which of the following statements would be true? (Check those that are true.)</p> <p>If any of the following statements cannot be answered as true for the proposed project, then additional analysis under NEPA could be required.</p>		
B.1. Review of Resource Areas Eliminated from Further Consideration		
B.1.1. Land Use		
a. The action will not create a land use incompatibility. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
b. The action will comply with the installation land use plan (if applicable). If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
B.1.2. Aesthetics and Visual Resources		
a. The action will not adversely affect a valued scenic view or sensitive aesthetic or visual resource. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
b. The action will comply with the installation design guide (if applicable). If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
B.1.3. Airspace		
a. The action will not violate any airspace regulation. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
B.1.4. Socioeconomics, Environmental Justice, and Protection of Children		
a. The action will not cause a long-term loss or displacement of recreational opportunities and resources. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
b. The action will not exceed the Rational Threshold Value (RTV, obtained using the Army's EIFS model) or historical precedent for past economic fluctuation for employment and regional income (as estimated by an acceptable economic model). If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
c. The action will not have a disproportionate adverse economic, social, or health impact on a minority or low-income population. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
d. The action will not create a disproportionate environmental health or safety risk to children. If FALSE, please explain.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE

B.2. Review of Other Resource Areas	
B.2.1. Air Quality	
a. The action will not violate the installation's air operating permit.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>If the use of best management practices (BMPs) cannot bring the emissions within regulatory limits, contact the state air quality agency for further assistance.</p>	
b. The demolition project will not remove more than 1,000,000 gsf/yr in a nonattainment area.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Estimate the total emissions of criteria pollutants for the project to determine whether they will still be less than <i>de minimis</i>. If not, consider dividing the project into separate phases that can be accomplished over multiple years.</p>	
B.2.2. Noise	
a. The project will not have demolition activities within 800 feet of the installation boundary for more than 1 year.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Determine the distance from the project site to the nearest noise-sensitive receptor (e.g., church, school). If the distance is more than 800 feet, the project may proceed. If it is less than 800 feet, consider dividing the project into phases with quiet periods between the phases or using BMPs to minimize off-post noise.</p>	
b. The project will not have blasting activities for which a blast management plan that addresses noise and vibration is needed.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Ensure that the population potentially affected by the noise is informed of when blasting activities will occur, what level of noise and vibration they might experience, and how to contact the installation to report damage.</p>	
B.2.3. Soils and Water Resources	
a. The action will be permitted under a construction general stormwater permit and an approved erosion and sediment control plan (for actions that will result in total ground disturbance of 1 acre or more).	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Ground-disturbing activities that disturb less than 1 acre total do not need coverage under a construction general stormwater permit. Actions that disturb 1 acre or more must be permitted; contact the state agency to obtain a permit.</p>	
b. The action will not violate a National Pollutant Discharge Elimination System (NPDES) stormwater permit.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Contact the state water quality agency to determine how surface waters and stormwater runoff can be controlled sufficiently to ensure that no NPDES permits are violated.</p>	
c. The action will not occur within a floodplain.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Executive Order 11988 requires federal agencies to avoid to the extent possible adverse impacts on floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Because the proposed project involves removing a structure from a floodplain, compliance with the EO is not an issue. To ensure safety during the project, schedule it outside a time when flooding might occur and ensure that the ground is stabilized before flooding occurs.</p>	
d. The action will not cause an exceedance of a Total Maximum Daily Load (TMDL).	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
<p>If FALSE, please explain. _____</p> <p>Contact the state water quality agency to determine how the affected surface water can be protected sufficiently to ensure that the TMDL is not exceeded.</p>	

e. The action will not cause a change in the impairment status of a surface water.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Contact the state water quality agency to determine how the affected surface water can be protected sufficiently during project activities to minimize any impairment.		
f. The action will not require a Clean Water Act Section 401 Water Quality Certification.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Obtain a Clean Water Act Section 401 Water Quality Certification if required by the state agency.		
g. The action will not occur in a coastal zone and require a Coastal Zone Management Act Federal Consistency Determination.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
If the action occurs in a coastal zone and requires a Coastal Zone Management Act Federal Consistency Determination, one must be prepared and submitted to the state coastal zone management agency.		
B.2.4. Biological Resources and Wetlands		
a. The action will not adversely affect a federal or state protected plant or animal species.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Contact the appropriate agency (USFWS, NMFS, or state wildlife agency) for species-specific guidance. Consider scheduling the project outside the animal's breeding and nesting season or relocating a plant to an appropriate location.		
b. The action will comply with installation-specific tree replacement and other natural resources protection policies.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Contact the installation Natural Resources Manager for guidance on complying with natural resources protection policies.		
c. The action will not cause the unpermitted loss or destruction of more than 1 acre of jurisdictional wetlands.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Complete a wetland delineation of the project site. Obtain a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers. If permitted, you might have to mitigate any wetland loss to ensure compliance with the permit.		
B.2.5. Cultural Resources		
a. The action will not result in the demolition of a building or structure that is included in the Program Comments for Cold War Era Unaccompanied Personnel Housing, World War II and Cold War Era (1939–1974) Ammunition Storage Facilities, or World War II and Cold War Era (1939–1974) Army Ammunition Production Facilities and Plants.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Consult the installation ICRMP's building inventory to determine the NRHP status of the building(s) to be demolished.		
b. The action will not result in the demolition of buildings or structures that are eligible for or listed on the National Register of Historic Places (NRHP) not covered by a program comment or by the World War II Temporary Buildings Programmatic Agreement.	<input type="checkbox"/> TRUE	<input type="checkbox"/> FALSE
If FALSE , please explain. _____		
Consult the installation ICRMP's building inventory to determine the NRHP status of the building(s) to be demolished.		
c. The action will not adversely affect a historic district that is eligible for or listed on the NRHP.	<input type="checkbox"/> TRUE	<input type="checkbox"/> TRUE
If FALSE , please explain. _____		
Section 106 compliance must be initiated with the SHPO. Please refer to the installation's ICRMP and/or consult with the SHPO for further guidance on how to proceed.		

B.2.6. Traffic and Transportation Systems	
a. The demolition project will not create any long-term road closures or traffic delays.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Reroute construction traffic to minimize impacts on the surrounding road network. Contact the state transportation agency for guidance on how to minimize impacts on the road network.	
B.2.7. Utilities	
a. The action will not cause an exceedance of the existing capacity of an element of infrastructure.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Impose temporary restrictions on use of the utility (e.g., water, electricity) wherever possible on the installation to avoid an exceedance. Determine what conservation measures can be used to minimize project use of the utility.	
b. The action will not violate a regulatory limit of any infrastructure system.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Contact the appropriate state agency to determine whether an exception to the limit can be made.	
B.2.8. Hazardous Substances and Hazardous Waste	
a. The action will not disturb known or create new contaminated sites that would be subject to regulatory control. Note that this includes soil contamination, underground storage tanks, spills, and burial pits within the area that would be disturbed during the proposed demolition.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Coordinate with the installation Environmental Division to ensure that site assessments (record searches, soil gas surveys, monitoring well documentation, or other sample results) that could indicate the presence of contamination within the footprint of the proposed demolition have been thoroughly reviewed.	
b. The building and ancillary structures to be demolished are absent of hazardous substances and wastes (ACM, LBP, PCBs, explosive residues, and other regulated materials) or the project has been permitted by the state to proceed with one or more known hazardous substances in place.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Coordinate with the Environmental Affairs Division to determine whether abatement or remediation is necessary.	
c. The action will not cause a violation of a law or regulation governing hazardous substances or wastes or an installation hazardous waste permit.	<input type="checkbox"/> TRUE <input type="checkbox"/> FALSE
If FALSE , please explain. _____	
Coordinate with the installation Environmental Affairs Division and regulatory agencies as necessary.	

Record of Environmental Consideration (REC)

To (Environmental Officer): _____

From (Proponent): _____

Project title: _____

Brief description:

Anticipated date and/or duration of proposed action (mm/yyyy): ____/____

Reason for using a REC (choose one):

- a. Adequately covered in the *Programmatic Environmental Assessment for the U.S. Army Materiel Command Building Demolition Program*, dated _____.
- b. Categorically excluded under the provisions of CX (___)(___), 32 CFR Part 651, Appendix B (and no extraordinary circumstances, as defined in 32 CFR 651.29(b)(1)–(14), exist) because:

Date

Project Proponent

Date

Installation Environmental Coordinator

APPENDIX B
AIR QUALITY SUPPORTING DOCUMENTATION

RECORD OF NON-APPLICABILITY
In Accordance with the Clean Air Act - General Conformity Rule in Support of the
Proposed Army Materiel Command Demolition
Programmatic Environmental Assessment

The Proposed Action encompasses a multiyear project to remove unused and unneeded facilities from AMC installations. The number and identification of facilities for removal at each installation would be determined annually and would depend on mission priorities and funding. AMC has a tentative goal to demolish 1,050 facilities within the first 7 years of the program, which would assist AMC in meeting the Army policies set forth in the Department of the Army's Facility Investment Strategy and the Army 2020 Plan.

General conformity under the Clean Air Act, section 176, has been evaluated according to the requirements at 40 CFR Part 93, Subpart B. To assess general conformity for installations in nonattainment areas, the total annual direct and indirect emissions of all criteria pollutants were estimated for a large (i.e., 1,000,000-gsf) demolition project compressed into a single year. This is considered a reasonable upper bound of effects. The requirements of the General Conformity Regulation do not apply to the Proposed Action for one of the following reasons:

- (1) All activities associated with the action are in areas designated by USEPA to be in attainment for all criteria pollutants, or
- (2) The highest total annual direct and indirect emissions from the Proposed Action have been estimated at 63.8 tons of oxides of nitrogen (NO_x), 7.8 tons of volatile organic compounds (VOCs), 4.9 tons of fine particulate matter (PM_{2.5}), and 0.1 ton of sulfur dioxide (SO₂) per year, which are below the applicability threshold values of 50 tons VOCs and 100 tons each for SO₂, PM_{2.5} and NO_x.

For purposes of analysis, it was assumed that individual projects would be compressed into one 12-month period. Therefore, regardless of the ultimate implementation schedule, annual emissions would be less than those specified herein for a project of this size. Moderate changes in the quantity and types of equipment used would not substantially change these emission estimates and would not affect the determination under the General Conformity Rule or the level of effects under the National Environmental Policy Act (NEPA).

This is true regardless of the location of the installation, the pollutant(s) of interest, or the severity of nonattainment. Any additional activities other than demolition or projects that demolish more than 1,000,000 gsf in a single year in nonattainment regions might require additional analysis under the General Conformity Rule and additional review under NEPA. Such activities also might require additional emission estimations to ensure that the total direct and indirect emissions from the Proposed Action would not exceed the applicability thresholds and that the General Conformity Rules still would not apply.

Signature

Date

Title

Table B-1. Attainment Status and Air Quality Control Region

Installation	AQCR	Attainment status
Anniston Army Depot	§ 81.199 East Alabama Intrastate	Attainment
Blue Grass Army Depot	§ 81.192 Bluegrass Intrastate	Attainment
Hawthorne Army Depot	§ 81.159 Great Basin Valley Intrastate Air Quality Control Region	Attainment
Holston Army Ammunition Plant	§ 81.57 Eastern Tennessee-Southwestern Virginia Interstate	Attainment (Lead 2008 Bristol, TN)
Iowa Army Ammunition Plant	§ 81.98 Burlington-Keokuk Interstate	Attainment
Lake City Army Ammunition Plant	§ 81.25 Metropolitan Kansas City Interstate	Attainment
Letterkenny Army Depot	§ 81.105 South Central Pennsylvania Intrastate	8-hr O ₃ (1997) Maintenance Former Subpart I Whole
Lima Army Tank Plant	§ 81.202 Northwest Ohio Intrastate	8-hr O ₃ (1997) Maintenance Former Subpart I Whole
McAlester Army Ammunition Plant	§ 81.123 Southeastern Oklahoma Intrastate	Attainment
Milan Army Ammunition Plant	§ 81.119 Western Tennessee Intrastate	Attainment
Military Ocean Terminal Concord	§ 81.21 San Francisco Bay Area Intrastate	CO Moderate 12.7 ppm, 8-hr O ₃ (1997 & 2008) Marginal, PM _{2.5}
Military Ocean Terminal Sunny Point	§ 81.152 Southern Coastal Plain Intrastate	Attainment
Pine Bluff Arsenal	§ 81.138 Central Arkansas Intrastate	Attainment
Pueblo Chemical Depot	§ 81.175 San Isabel Intrastate	Attainment
Radford Army Ammunition Plant	§ 81.146 Valley of Virginia Intrastate	Attainment
Red River Army Depot	§ 81.94 Shreveport-Texarkana-Tyler Interstate	Attainment
Scranton Army Ammunition Plant	§ 81.55 Northeast Pennsylvania-Upper Delaware Valley Interstate	8-hr O ₃ (1997) Maintenance Former Subpart I Whole
Sierra Army Depot	§ 81.162 Northeast Plateau Intrastate	Attainment
Tobyhanna Army Depot	§ 81.55 Northeast Pennsylvania-Upper Delaware Valley	8-hr O ₃ (1997) Maintenance Former Subpart I
Tooele Army Depot	§ 81.168 Great Falls Intrastate	SO ₂ Nonattainment
Watervliet Arsenal	§ 81.129 Hudson Valley Intrastate	8-hr O ₃ (1997) Marginal

Source: USEPA 2013a.

Table B-2. Demolition and Air Regulations by Installation

Name	State	Air regulations
Anniston Army Depot	AL	Open Burning (ADEM Admin Code 335-3-3-.01) Fugitive Dust and Fugitive Emissions (ADEM Admin Code 335-3-4-.02) Applicability Demolitions (ADEM Admin Code 335-16-.04)
Pine Bluff Arsenal	AR	Visible Emissions Limitations (18.501) Emissions from Open Burning (18.601) Control of Fugitive Emissions (18.901)
Sierra Army Depot	CA	Smoke Management Guidelines (CCR 17-3.1, Subchapter 2)
Military Ocean Terminal Concord		Airborne Toxic Control Measures (CCR 17-3.1, Subchapter 2.6-7.5) Consumer Products (CCR 17-3.1, Subchapter 2.6-8.5)
Pueblo Chemical Depot	CO	Odor emission (5 CCR 1001-4) Open burning, prescribed fire, and permitting (5 CCR 1001-11) Control of emission of ozone depleting compounds (5 CCR 1001-19)
Iowa Army Ammunition Plant	IA	Open Fires (326 IAC 4-1) Emissions of VOCs from Consumer Products (326 IAC 8-15-1)
Blue Grass Army Depot	KY	Open burning (401 KAR 63-005) Fugitive Emissions (401 KAR 63-010)
Lake City Army Ammunition Plant	MO	Open Burning Requirements (10 CSR 10-6.045) Restriction of Emission of Odors (10 CSR 10-6.165) Restriction of Particulate Matter (10 CSR 10-6.170)
Military Ocean Terminal Sunny Point	NC	Open Burning (2 DAQ 1900) Volatile Organic Compounds (2 DAQ 0900)
Hawthorne Army Depot	NV	Fugitive dust (NAC 445B.22037) Open Burning (NAC 445B.22067) Odors (NAC 445B.22087)
Watervliet Arsenal	NY	Control of Open Burning (NYSDEC Chapter III, Part 215) Control of Particulate Emissions (NYSDEC Chapter III, Subpart 257-3) Control of Organic Emissions (NYSDEC Chapter III, Part 212) Control of Fuels (NYSDEC Chapter III, Part 225)
Lima Army Tank Plant	OH	Particulate Matter Standards (OAC 3745-17) Open Burning Standards (OAC 3745-19) NO _x and VOC Emissions Statements (OAC 3745-24)
McAlester Army Ammunition Plant	OK	Open Burning (252:100-11-1) Visible Emissions and Particulate matter (252:100-25-1) Control of Fugitive Dust (252:100-29-1) Control of Emission of Volatile Organic Compounds (252:100-37-1)
Scranton Army Ammunition Plant	PA	Control of Fugitive Particulate Emissions (PCR 129.14.)
Letterkenny Army Depot		Open Burning Operations (PCR 29.14)
Milan Army Ammunition Plant	TN	Open Burning Certification Process Chapter 1200-3-4: Visible Emission Regulations Chapter 1200-3-5: Fugitive dust (Chapter 1200-3-8)
Holston Army Ammunition Plant		
Red River Army Depot	TX	General Air Quality Rules (Chapter 115 TAC A) Visible Emissions and Particulate Matter (Chapter 30 TAC H) Open Burning (Chapter 30 TAC H) Volatile Organic Compounds (Chapter 30 TAC C)
Tooele Army Depot	UT	Permissible Open Burning (Utah Code 19-2-114) Prohibition of Particulate Matter (Utah Code 19-2-102)

Table B-2. (continued)

Radford Army Ammunition Plant	VA	Anti-idling (9 VAC 5-40-5670) Work Practice Standards (9 VAC 5-50-20) Visible Emissions and Fugitive Dust (9 VAC 5-40-60) Open Burning (9 VAC 5-40-5600) Portable Fuel Containers (9 VAC 5-40-5700) Consumer Products (9 VAC 5-40-7240 et seq.)
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Table B-3. Demolition Equipment Use

Equipment type	Number of units	Days on site	Hours per day	Operating hours
Excavators	10	230	4	9,200
Rubber Tired Dozers	10	230	8	18,400
Cranes	10	230	7	16,100
Generator Sets	10	230	4	9,200
Loaders/Backhoes	10	230	7	16,100

Table B-4. Demolition Equipment Emission Factors (lb/hour)

Equipment	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Excavators	0.5828	1.3249	0.1695	0.0013	0.0727	0.0727	119.6
Rollers	0.4341	0.8607	0.1328	0.0008	0.0601	0.0601	67.1
Cranes	0.6011	1.6100	0.1778	0.0014	0.0715	0.0715	128.7
Generator Sets	0.3461	0.6980	0.1075	0.0007	0.0430	0.0430	61.0
Loaders/Backhoes	0.4063	0.7746	0.1204	0.0008	0.0599	0.0599	66.8

Source: CARB 2013.

Table B-5. Demolition Equipment Emissions (tons)

Equipment	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Excavators	2.6811	6.0945	0.7797	0.0061	0.3346	0.3346	550.0736
Rollers	14.6837	30.0582	3.3525	0.0226	1.2962	1.2962	2199.7719
Cranes	4.8388	12.9608	1.4316	0.0111	0.5759	0.5759	1035.7703
Generator Sets	1.5921	3.2108	0.4943	0.0032	0.1978	0.1978	280.5663
Loaders/Backhoes	3.2711	6.2352	0.9693	0.0062	0.4820	0.4820	537.7913
Total	27.07	58.56	7.03	0.0491	2.89	2.89	4603.97

Table B-6. Emissions from Delivery of Demolition Equipment and Debris Removal

Number of Deliveries	18						
Number of Trips	2						
Miles Per Trip	45						
Days of Demolition	230						
Total Miles	372,600						
Pollutant	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Emission Factor (lb/mi)	0.0219	0.0237	0.0030	0.0000	0.0009	0.0007	2.7
Total Emissions (lb)	8,178.3	8,835.3	1,115.1	9.6	319.0	275.5	1,013,261.1
Total Emissions (tons)	4.09	4.42	0.56	0.0048	0.16	0.14	506.63

Source: CARB 2013.

Table B-7. Particulates from Surface Disturbance

TSP Emissions	80.00	lb/acre				
PM ₁₀ /TSP	0.45					
PM _{2.5} /PM ₁₀	0.15					
Period of Disturbance	30	days				
Capture Fraction	0.5					
Building/Facility	Area [acres]	TSP [lb]	PM ₁₀ [lb]	PM ₁₀ [tons]	PM _{2.5} [lb]	PM _{2.5} [tons]
All Facilities	46.0	110,400	49,680	24.84	3726	1.86
Total	46.0	110,400	49,680	24.84	3726	1.86

Source: USEPA 1995.

Table B-8. Emissions from Demolition Worker Commutes

Number of Workers	100						
Number of Trips	2						
Miles Per Trip	30						
Days of Construction	58						
Total Miles	348,000.00						
Pollutant	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Emission Factor (lb/mi)	0.0105	0.0011	0.0011	0.0000	0.0001	0.0001	1.1
Total Emissions (lb)	3,670.9	383.8	375.6	3.7	29.6	18.4	382,637.2
Total Emissions (tons)	1.84	0.19	0.19	0.0019	0.01	0.01	191.32

Source: CARB 2013.

Table B-9. Total Demolition Emissions (tons)

Activity/Source	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}	CO ₂
Demolition Equipment	27.07	58.56	7.03	0.0491	2.89	2.89	4603.97
Delivery of Equipment and Supplies	4.09	4.42	0.56	0.0048	0.16	0.14	506.63
Surface Disturbance	0.00	0.00	0.00	0.0000	24.84	1.86	0.00
Worker Commutes	1.84	0.19	0.19	0.0019	0.01	0.01	191.32
Total Demolition Emissions	33.0	63.2	7.8	0.1	27.9	4.9	5301.9

Source: CARB 2013; SCAQMD 1993; USEPA 1995.

APPENDIX C
NOISE SUPPORTING DOCUMENTATION

Table C-1. Background Noise Levels for AMC Installations

Installation	County population	Area (square miles)	Population density	Background sound level [dBA]		
				DNL	Daytime L _{eq}	Nighttime L _{eq}
Military Ocean Terminal Concord	1,049,025	716	565.9	50	49	42
Lake City Army Ammunition Plant	674,158	604	430.8	48	47	40
Watervliet Arsenal	304,204	523	224.7	46	45	38
Scranton Army Ammunition Plant	214,437	459	180.4	45	44	37
Lima Army Tank Plant	106,331	403	102.0	42	41	<35
Radford Army Ammunition Plant	94,392	387	94.2	42	41	<35
Tobyhanna Army Depot	169,842	608	107.8	42	41	<35
Blue Grass Army Depot	82,916	437	73.2	41	40	<35
Anniston Army Depot	118,572	606	75.6	41	40	<35
Letterkenny Army Depot	149,618	772	74.8	41	40	<35
Holston Army Ammunition Plant	56,833	487	45.1	39	38	<35
Military Ocean Terminal Sunny Point	107,431	847	49.0	39	38	<35
Red River Army Depot	92,565	885	40.4	38	37	<35
Iowa Army Ammunition Plant	40,325	416	37.4	38	37	<35
Milan Army Ammunition Plant	49,683	603	31.8	37	36	<35
Pine Bluff Arsenal	77,435	871	34.3	37	36	<35
Pueblo Chemical Depot	106,543	2,386	17.2	<35	<35	<35
McAlester Army Ammunition Plant	45,837	1,305	13.6	<35	<35	<35
Tooele Army Depot	58,218	6,941	3.2	<35	<35	<35
Sierra Army Depot	34,895	4,541	3.0	<35	<35	<35
Hawthorne Army Depot	4,772	3,753	0.5	<35	<35	<35

Source: ANSI 2003, U.S. Census Bureau 2013.

Table C-2. Installations with Noise Regulations (City, County, and State)

Installation	State	City	County	State Noise Regulation
Blue Grass Army Depot	KY	Richmond Code Chapter 98:Noise	Madison	
Iowa Army Ammunition Plant	IA	Burlington §21-13. Noise control ordinance	Des Moines	
Lake City Army Ammunition Plant	MO	Independence	Jackson Chapter 5564 Noises Prohibited	
McAlester Army Ammunition Plant	OK	McAlester §82-162. Noise generally	Pittsburg	
Milan Army Ammunition Plant	TN	Milan §11-402. Anti-noise regulations.	Gibson	
Military Ocean Terminal Concord	CA	Concord	Contra Costa	Health and Safety Code Section 46000-46002
Pine Bluff Arsenal	AR	Pine Bluff §14-79. Loud and unnecessary noises prohibited. (mufflers exhaust)	Jefferson	27-37-601. Noise or smoke producing devices prohibited
Pueblo Chemical Depot	CO	Pueblo	Pueblo Chapter 10.06 Noise Ordinance	25-12-103 Colorado Noise Statute
Radford Army Ammunition Plant	VA	Radford §70-14. - Noise—Prohibited	Montgomery/ Pulaski Montgomery Co. Article V Noise.	
Red River Army Depot	TX	Texarkana COO Chapter 14 Noise	Bowie	
Tooele Army Depot	UT	Toole	Toole	Noise Control §6-21-5
Watervliet Arsenal	NY	Watervliet COO Chapter 197 Noise	Albany	

Source: Municode 2013

APPENDIX D
FEDERAL LISTED SPECIES OF AMC INSTALLATIONS

ANNISTON ARMY DEPOT, ALABAMA

U.S. Fish and Wildlife Service (USFWS) lists no protected species as potentially occurring on Anniston Army Depot (ANAD).¹

No federal listed animal species have been found on ANAD.

One federal listed plant species has been found on ANAD:

Tennessee yellow-eyed grass (*Xyris tennesseensis*)

Sources: ANAD 2012, USFWS 2013

PINE BLUFF ARSENAL, ARKANSAS

USFWS lists one species as potentially occurring on Pine Bluff Arsenal:

Florida panther (*Puma (=felis) concolor coryi*)

Source: USFWS 2013

MILITARY OCEAN TERMINAL CONCORD, CALIFORNIA

USFWS does not have a list of species that potentially occur at Military Ocean Terminal Concord (MOTCO).

USFWS lists the following critical habitat in the vicinity of MOTCO:

Delta smelt (*Hypomesus transpacificus*)

Steelhead (*Oncorhynchus (=salmo) mykiss*)

Federal listed species known or likely to occur on MOTCO include:

Soft bird's-beak (*Cordylanthus mollis* ssp. *mollis*)

Delta smelt (*Hypomesus transpacificus*)

Sacramento splittail (*Pogonichthys macrolepidotus*)

Green sturgeon (*Acipenser medirostris*)

Central Valley steelhead (*Oncorhynchus mykiss irideus*)

Central California coast steelhead (*Oncorhynchus mykiss*)

Sacramento River Chinook salmon, winter-run (*Oncorhynchus tshawytscha*)

Central Valley Chinook salmon, fall run (*Oncorhynchus tshawytscha*)

Central Valley Chinook salmon, spring run (*Oncorhynchus tshawytscha*)

California tiger salamander (*Ambystoma californiense*)

California red-legged frog (*Rana aurora draytoni*)

California clapper rail (*Rallus longirostris obsoletus*)

California least tern (*Sternula antillarum browni*)

Golden eagle (*Aquila chrysaetos*)

Loggerhead shrike (*Lanius ludovicianus*)

Salt marsh harvest mouse (*Reithrodontomys raviventris*)

Humpback whale (*Megaptera novaeangliae*)

¹ All references to the USFWS listings of protected species indicate listings on the *Information, Planning, and Conservation System* website (<http://ecos.fws.gov/ipac/>).

Pacific harbor seal (*Phoca vitulina richarii*)
California sea lion (*Zalophus californianus*)

Sources: USACE, Mobile District 2010; USFWS 2013

IOWA ARMY AMMUNITION PLANT, IOWA

USFWS lists three species for Iowa Army Ammunition Plant (IAAAP):

Western prairie fringed orchid (*Platanthera praeclara*)
Indiana bat (*Myotis sodalis*)
Northern long-eared bat (*Myotis septentrionalis*)

Notes:

The western prairie fringed orchid and the prairie bush clover (*Lespedeza leptostachya*) have a potential to occur statewide based on historical records and habitat distribution; the species are not known to occur on IAAAP.

The Indiana bat and bald eagle (*Haliaeetus leucocephalus*) (federally protected under the Bald and Golden Eagle Protection Act) are known to occur on IAAAP.

Sources: Gene Stout and Blythe & Trousil 2007, USFWS 2013

SIERRA ARMY DEPOT, CALIFORNIA

USFWS lists two species as potentially occurring on Sierra Army Depot:

Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*)
Carson wandering skipper (*Pseudocopaeodes eunus obscurus*)

Notes:

SIAD does not have critical habitat for the Carson Wandering Skipper. SIAD does not have bodies of water that could sustain the Lahontan Cutthroat Trout. SIAD plans to work with the USFWS to create more accurate range maps.

Source: USFWS 2013

BLUE GRASS ARMY DEPOT, KENTUCKY

USFWS lists four species as potentially occurring on Blue Grass Army Depot (BGAD):

Running buffalo clover (*Trifolium stoloniferum*)
Short's bladderpod (*Physaria globosa*)
Gray bat (*Myotis grisescens*)
Indiana bat (*Myotis sodalis*)

Notes:

Running buffalo clover (*Trifolium stoloniferum*): BGAD supports the species, but its presence is declining; it occurs in open woodlands, grasslands, savannas, floodplains, and along stream terraces on well-drained sites.

Indiana bat (*Myotis sodalis*): BGAD contains suitable but limited Indiana bat habitat in the form of small forested blocks, wooded fencerows, and stream corridors, all of which are used as foraging and nesting sites.

Gray bat (*Myotis grisescens*): The species has been observed in Madison County, but it has not been found on BGAD.

Bald eagle (*Haliaeetus leucocephalus*): BGAD supports the species.

Sources: Gene Stout, A. Colwell, and T. Edwards 2010; USFWS 2013

LAKE CITY ARMY AMMUNITION PLANT, MISSOURI

The USFWS lists no species as potentially occurring on Lake City Army Ammunition Plant.

Source: USFWS 2013

MILITARY OCEAN TERMINAL SUNNY POINT, NORTH CAROLINA

USFWS lists 14 species as potentially occurring on Military Ocean Terminal Sunny Point (MOTSU):

Four sea turtles: Green sea turtle (*Chelonia mydas*), Hawksbill sea turtle (*Eretmochelys imbricata*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), and Leatherback sea turtle (*Dermochelys coriacea*)

One mammal: West Indian Manatee (*Trichechus manatus*)

Four plants: Cooley's meadowrue (*Thalictrum cooleyi*), golden sedge (*Carex lutea*), rough-leaved loosestrife (*Lysimachia asperulaefolia*), and seabeach amaranth (*Amaranthus pumilus*)

Two fish: Shortnose sturgeon (*Acipenser brevirostrum*) and Waccamaw silverside (*Menidia extensa*)

Three birds: red cockaded woodpecker (RCW) (*Picoides borealis*), wood stork (*Mycteria americana*), and piping plover (*Charadrius melodus*)

Note: MOTSU has an Endangered Species Management Plan for RCW and loosestrife. MOTSU has surpassed its RCW recovery goals and currently has 20 active and 0 inactive RCW clusters..

Sources: Hayden 1997, USFWS 2013

HAWTHORNE ARMY DEPOT, NEVADA

USFWS lists two species as potentially occurring on Hawthorne Army Depot (HWAD):

Greater sage-grouse (*Centrocercus urophasianus*)

Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*)

Notes:

The Lahontan cutthroat trout is federally listed threatened and state protected, but it has been recently extirpated from Walker Lake because of high salinity levels.

The greater sage-grouse, a federal candidate species, is of concern at Mount Grant.

Sources: Tetra Tech 2013a, USFWS 2013

WATERVLIET ARSENAL, NEW YORK

USFWS lists four species as potentially occurring on Watervliet Arsenal:

- Karner blue butterfly (*Lycaeides melissa samuelis*)
- Indiana bat (*Myotis sodalis*)
- Northern long-eared bat (*Myotis septentrionalis*)
- Bog turtle (*Glyptemys muhlenbergii*)

Source: USFWS 2013

LIMA ARMY TANK PLANT (JOINT SYSTEMS MANUFACTURING CENTER), OHIO

USFWS lists two species as potentially occurring on Lima Army Tank Plant:

- Indiana bat (*Myotis sodalis*)
- Northern long-eared bat (*Myotis septentrionalis*)

Source: USFWS 2013

MCALESTER ARMY AMMUNITION PLANT, OKLAHOMA

USFWS lists four species as potentially occurring on McAlester Army Ammunition Plant:

- Least tern (*Sternula antillarum*)
- Piping plover (*Charadrius melodus*)
- Sprague's pipit (*Anthus spragueii*)
- American burying beetle (*Nicrophorus americanus*)

Source: USFWS 2013

LETTERKENNY ARMY DEPOT, PENNSYLVANIA

USFWS lists two species for Letterkenny Army Depot (LEAD):

- Northeastern bulrush (*Scirpus ancistrochaetus*)
- Indiana bat (*Myotis sodalis*)

The bog turtle (*Clemmys muhlenbergii*) has been observed at LEAD.

Notes:

No evidence of bog turtles and no potential bog turtle habitat were found on LEAD during a bog turtle survey conducted in 2000.

Indiana bats were not found during a limited bat survey that was conducted at LEAD in June 2000.

Viable habitat for the northeastern bulrush has been found on LEAD, but no evidence of the species has been observed.

Sources: Tetra Tech 2013b, USFWS 2013

TOBYHANNA ARMY DEPOT, PENNSYLVANIA

USFWS lists three species as potentially occurring on Tobyhanna Army Depot:

- Indiana bat (*Myotis sodalis*)
- Northeastern bulrush (*Scirpus ancistrochaetus*)
- Bog turtle (*Clemmys muhlenbergii*)

Source: USFWS 2013

SCRANTON ARMY AMMUNITION PLANT, PENNSYLVANIA

USFWS lists two species as potentially occurring on Scranton Army Ammunition Plant:

- Indiana bat (*Myotis sodalis*)
- Northeastern bulrush (*Scirpus ancistrochaetus*)

Note: The installation has no habitat that could support either species.

Sources: Google Maps 2013, USFWS 2013

HOLSTON ARMY AMMUNITION PLANT, TENNESSEE

USFWS lists 24 species as potentially occurring on Holston Army Ammunition Plant, many of which are fish, mussels, and beans.

Federal listed species that could be encountered during implementation of the Proposed Action are the Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*).

Source: USFWS 2013

MILAN ARMY AMMUNITION PLANT, TENNESSEE

USFWS lists one species as potentially occurring on Milan Army Ammunition Plant:

- Indiana bat (*Myotis sodalis*)

Source: USFWS 2013

RED RIVER ARMY DEPOT, TEXAS

USFWS lists no species as potentially occurring on Red River Army Depot (RRAD).

No federally listed species or their habitats have been identified on RRAD.

Sources: Tetra Tech 2011, USFWS 2013

TOOELE ARMY DEPOT, UTAH

USFWS lists four species as potentially occurring on Tooele Army Depot:

Greater sage grouse (*Centrocercus urophasianus*)
Yellow-billed cuckoo (*Coccyzus americanus*)
Least chub (*Lotichthys phlegethontis*)
Ute ladies'-tresses (*Spiranthes diluvialis*)

Source: USFWS 2013

RADFORD ARMY AMMUNITION PLANT, VIRGINIA

USFWS lists six species as potentially occurring on Radford Army Ammunition Plant:

Smooth coneflower (*Echinacea laevigata*)
Virginia spiraea (*Spiraea virginiana*)
Mitchell's satyr butterfly (*Neonympha mitchellii mitchellii*)
Indiana bat (*Myotis sodalis*)
Virginia big-eared bat (*Corynorhinus (=plecotus) townsendii virginianus*)
Virginia fringed mountain snail (*Polygyriscus virginianus*)

Source: USFWS 2013

PUEBLO CHEMICAL DEPOT, COLORADO

USFWS lists six species as potentially occurring on Pueblo Chemical Depot:

Mexican spotted owl (*Strix occidentalis lucida*)
Arkansas darter (*Etheostoma cragini*)
Greenback cutthroat trout (*Oncorhynchus clarki stomias*)
Black-footed ferret (*Mustela nigripes*)
Canada lynx (*Lynx canadensis*)
North American wolverine (*Gulo gulo luscus*)

Source: USFWS 2013

APPENDIX E
PROGRAMMATIC AGREEMENT AND PROGRAM COMMENTS

PROGRAMMATIC MEMORANDUM OF AGREEMENT

AMONG

THE UNITED STATES DEPARTMENT OF DEFENSE

THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

AND THE

NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

WHEREAS, the Department of Defense (DoD) has been directed by United States Senate Armed Services Committee Report 97-440 to the Military Construction Authorization Bill for 1983 to demolish World War II (1939-1946) temporary buildings (buildings); and

WHEREAS, these buildings were not constructed to be permanent facilities and were intended to be demolished; and

WHEREAS, DoD has determined that these buildings may meet the criteria of the National Register of Historic Places; and

WHEREAS, DoD has determined that its program of demolition of these buildings (program) may have an effect on their qualities of significance and has requested the comments of the Advisory Council on Historic Preservation (Council) pursuant to Section 106 of the National Historic Preservation Act, as amended, (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800).

NOW, THEREFORE, DoD, the National Conference of State Historic Preservation Officers (NCSHPO), and the Council agree that the Program will be carried out in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

I. DoD will ensure that the following actions are carried out:

A. In consultation with the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) (National Park Service, Washington, DC), DoD will develop documentation that includes:

1. A narrative overview of WW II military construction establishing the overall historical context and construction characteristics of each major type of building and including:

a. Explanation of the origins and derivations of the construction techniques and designs.

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b. Chronology that summarizes the political and military decisions that affected scheduling, locations, quantity, design, and construction techniques. Photocopies shall be made of all military manuals used to guide significant aspects of design or construction.

c. Summary statements of major installations' WW II development including site plans, lists of buildings, photocopies of appropriate photographs, and evaluations of the significance of the various building types and groups.

2. Documentation of one example of all major building types that includes: drawings (title sheet, floor plans, sections, elevations, and isometrics of framing systems and other pertinent construction details), photographs (perspective corrected, large format negative and contact print), and appropriate explanatory data. All documentation shall meet HABS/HAER Standards for format and archival stability.

3. Submission of the above documentation to HABS/HAER, for deposit in the Library of Congress, not later than three years from the date of this agreement.

4. Development of the above documentation will be undertaken with periodic reviews by HABS/HAER to ensure that completed documentation will meet HABS/HAER Standards.

B. In consultation with the Council and the NCSHPO, DoD will select some examples of building types or groups to treat in accordance with historic preservation plans (HPP), until such time as demolished or removed from DoD control. The HPPs will be submitted to the Council and the NCSHPO within three years from the date of this agreement. Work done in accordance with the HPPs will require no further review by a SHPO or the Council.

C. All buildings that are identified within sixty days of the Federal Register publication of this Agreement by organizations and individuals will be considered by DoD in its selection of examples to be documented and/or treated in accordance with Stipulations A and B above.

D. Until the documentation program is completed and HPPs have been developed for the representative sample of building types and groups, DoD will continue its current program of building demolition with caution, avoiding disposal of obviously unique and well-preserved, original buildings that are not documented.

II. NCSHPO agrees to:

A. Assist the appropriate SHPO in informing DoD within sixty days of the Federal Register publication of this agreement of buildings that they wish to have considered in the selection of examples to be documented and/or treated in accordance with Stipulations I.A and I.B.

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B. Represent all SHPOs in the consultation on a selection of examples of buildings to be treated in accordance with Stipulation I.B.

III. If any of the signatories to this Agreement determines that the terms of the Agreement cannot be met or believes that a change is necessary, the signatory will immediately request an amendment or addendum to the Agreement. Such an amendment or addendum will be executed in the same manner as the original Agreement.

EXECUTION of this Agreement evidences that DoD has afforded the Council a reasonable opportunity to comment on its program of disposal of temporary WW II buildings and that DoD has taken into account the effects of this program on historic resources.

John M. Bule 7/2/86
Executive Director, Advisory Council
on Historic Preservation

Robert G. Ste
Department of Defense

Walter D. Palmer 7/7/86
Chairman
Advisory Council on Historic
Preservation

Department of Army

Department of Navy

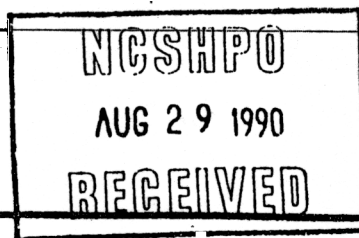
Charles E. Lee 6/6/86
President
National Conference of
State Historic Preservation
Officers

U. S. Marine Corps

Robert A. Cooper 5/13/86
Historic American Buildings Survey/
Historic American Engineering Record

Department of Air Force

**Advisory
Council On
Historic
Preservation**



The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

AMENDMENT to the
PROGRAMMATIC MEMORANDUM OF AGREEMENT
among
THE UNITED STATES DEPARTMENT OF DEFENSE,
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS, and the
HISTORIC AMERICAN BUILDINGS SURVEY/ HISTORIC AMERICAN ENGINEERING
RECORD, regarding
DEMOLITION OF WORLD WAR II TEMPORARY BUILDINGS

WHEREAS, the Department of Defense (DOD), the Advisory Council on Historic Preservation (Council) and the National Conference of State Historic Preservation (NCSHPO), and the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) entered into a Programmatic Memorandum of Agreement (PMOA) under Section 106 of the National Historic Preservation Act, which became effective on June 7, 1986, regarding the demolition of World War II temporary (buildings);

WHEREAS, DOD has determined that some stipulations of the PMOA cannot be met and require modification;

WHEREAS, the parties to the PMOA have consulted regarding such modifications;

NOW, THEREFORE, it is mutually agreed that the PMOA is amended as follows:

A new stipulation I.A 1.d is added, to read as follows:

d. Identification of topics for further research, and plans for the conduct of such research.

Stipulation I.A.3 is amended to read as follows:

3. Submission of the above documentation to the HABS/HAER Regional Coordinators, not later than December 31, 1992.

Stipulation I.B. is amended by changing its second sentence to read as follows:

The HPPs will be submitted to the Council and the NCSHPO no later than December 31, 1992.

A new stipulation IV is added, to read as follows:

A. The signatories to this Agreement will undertake to ensure that relevant research activities carried out under Memoranda of Agreement, Programmatic Agreements, and other Instruments executed pursuant to 36 CFR Part 800 are coordinated with implementation of this Agreement, in order to allow their results to be integrated with the development of documentation under stipulation I.

B. The signatories to this Agreement will cooperate with the National Building Museum in its development, if feasible, of a major exhibition concerning architecture and engineering in World War II, and will make information produced by research activities pursuant to this and other Agreements available to the National Building Museum for use in preparing such an exhibition. DOD will provide materials from this study to the National Building Museum for development of the exhibit.

Advisory Council on Historic Preservation

Robert W. Bush 4/27/90
Executive Director Date

National Conference of State Historic Preservation Officers

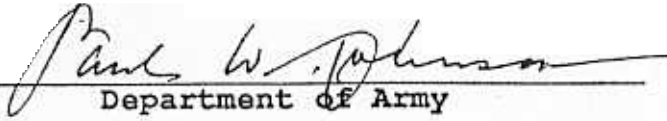
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President Date

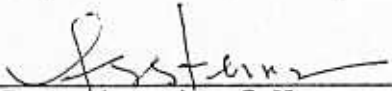
Historic American Buildings Survey/
Historic American Engineering Record

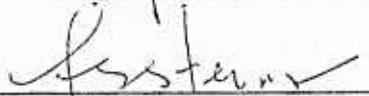
[Signature] 1.08.91
Chief HABS/HAER Date


Department of Defense

[Signature] 5/1/91
Deputy Assistant Secretary of Defense
(Environment) Date


Department of Army


Department of Navy F. S. STERNS
Deputy, Office of the Assistant
Secretary of the Navy (I&E)


U.S. Marine Corps F. S. STERNS
Deputy, Office of the Assistant
Secretary of the Navy (I&E)


Department of Air Force



Preserving America's Heritage

PROGRAM COMMENT FOR COLD WAR ERA UNACCOMPANIED PERSONNEL HOUSING (1946 – 1974)

I. Introduction

This Program Comment provides DoD, and its Military Departments with an alternative way to comply with their responsibilities under Section 106 of the National Historic Preservation Act with regard to the effect of the following management actions on Cold War Era Unaccompanied Personnel Housing (UPH) that may be listed or eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities.

The term UPH means all buildings and structures, listed or eligible for listing on the National Register of Historic Places, that were designed and built as UPH in the years 1946-1974, regardless of use. This will be all such buildings and structures with the DoD Category Group (2 digit) Code of 72, Unaccompanied Personnel Housing, in the Military Service's Real Property Inventory currently or at the time of construction. Buildings in Category Group Code 72 include UPH and associated buildings and structures such as dining halls and laundry facilities constructed to support military housing needs. Table 1 (attached) provides all such buildings and structures, by Military Department, that are applicable to this program comment.

In order to take into account the effects on such UPH, DoD and its Military Departments will conduct documentation in accordance with The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. As each Military Department will be responsible for conducting its own mitigation actions, the following required documentation is structured by Military Department, followed by DoD-wide requirements.

II. Treatment of Properties

A. Army Mitigation

1. In 2003, the Army completed a study entitled Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989). This Historic Context study was undertaken to support the analysis of real property related to Army UPH, and to support the identification and evaluation of historic properties. In addition to providing historic information regarding the UPH program, the study also documents the property types defined in their historic context. In-depth archival research of primary and secondary sources was undertaken on the organizational history, doctrines, and policies that influenced the design and development of Army UPH during the Cold War era. Data were collected to identify significant events and policies that influenced site plans, building design, and spatial arrangement of Army UPH

ADVISORY COUNCIL ON HISTORIC PRESERVATION

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facilities. Archival research was also directed to compile data on the evolution and modification of these property types over time. In addition, site visits to six Army installations containing UPH facilities were completed. The installations were examined to identify and document UPH-related property types based on extant real property in the Army inventory. These case studies included a summary installation history, interview data from the cultural resource management, a review of extant real property, and a detailed architectural analysis of the design, materials, construction and modification of over 700 examples of Army UPH. The resulting report provides a comprehensive and detailed record of Army UPH, including a collection of site plans, as-built building plans, and photographs (Chapter 4). Since these standard designs have already been well documented, no additional documentation of the Army's UPH is needed as part of the overall DoD mitigation. However, the Army should verify and document, as necessary, any building types and structures included on Table 1 that may not have been included in Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989).

2. The Army, in order to take into account effects on potentially historic UPH, will amend Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989) in order to make it available to a wider audience. Due to security concerns, the distribution of the context study is limited to US Government Agencies Only. The Army will remove the elements of the document that are security risks and then make the context available to DoD for consolidation with information gathered on Navy and Air Force UPH as required by Section II(D)(2), below..

B. Navy Mitigation

1. The Navy will produce a supplemental context study appendix that will be attached as an appendix to the Army's Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989). The final product will be a separately bound volume of additional information and photographs and tabular appendices that, when taken with the Army's and Air Force's context studies, provide a clear picture of the DoD's UPH. The context study appendix will:

explore the post-World War II changing demographics of Navy personnel and its impact on housing needs;

amend, as necessary, and adopt the Army's criteria for evaluating the historic significance of UPH;

consider the importance of major builders, developers and architects that may have been associated with design and construction of UPH; and

describe the inventory of UPH in detail, providing information on the various types of buildings and architectural styles and the quantity of each.

2. The Navy shall document a representative sample of the basic types of UPH. The Navy will choose three geographically dispersed installations with the greatest number and variety of such resources. The Marine Corps will choose one such example. The sample chosen shall be the best representative examples of the range of UPH types constructed during the Cold War era. This documentation would include collecting existing plans and drawings, writing a historic description in narrative or outline format, and compiling historic photographs of the buildings (similar in scope to the Army's documentation).

C. Air Force Mitigation

1. The Air Force will produce a supplemental context study appendix that will be attached to the Army's Unaccompanied Personnel Housing (UPH) During the Cold War (1946-1989). The final product will be a

separately bound volume of additional information and photographs and tabular appendices that, when taken with the Army's and Navy's context studies, provide a clear picture of the Department of Defense's UPH. The context study appendix will:

explore the post-World War II changing demographics of Air Force personnel and its impact on housing needs;

amend, as necessary, and adopt the Army's criteria for evaluating the historic significance of UPH;

consider the importance of major builders, developers and architects that may have been associated with design and construction of UPH; and

describe the inventory of UPH in detail, providing information on the various types of buildings and architectural styles and the quantity of each.

The Air Force shall include documentation of representative sampling of the basic types of UPH. The Air Force will choose three geographically dispersed installations with the greatest number and variety of such resources. The sample chosen shall be the best representative examples of the range of UPH types constructed during the Cold War era. This documentation would include collecting existing plans and drawings, writing a historic description in narrative or outline format, and compiling historic photographs of the buildings, and would be similar in scope to the Army's documentation.

D. DoD-Wide Mitigation

1. Additionally, DoD recently completed a draft context study entitled The Built Environment of Cold War Era Servicewomen through the Legacy Resource Management Program. This context study examines how the needs of women service members shaped construction plans and practices of several types of facilities, including UPH. The Legacy Program recently approved funds for the completion of this document. The legacy program will make the context study available to the Military Departments and the public to enhance the consideration and documentation of the UPH story.

2. DoD and its Military Departments will make copies of all documentation available electronically, to the extent possible under security concerns, and hard copies will be placed in a permanent repository, such as the Center for Military History. DoD will consolidate information from the Navy and Air Force documentation with the context provided by the Army, as required by Section II(A)(2) above, and make it available for public distribution.

3. As a result of on-going consultations with stakeholders, each Military Department will provide a list of its UPH properties covered by the Program Comment, by State, to stakeholders. Each Military Department will be responsible for determining how to convey its information.

4. All Military Departments will encourage adaptive reuse of UPH properties as well as the use of historic tax credits by private developers under lease arrangements. Military Departments will also incorporate adaptive reuse and preservation principles into master planning documents and activities.

These actions satisfy DoD's requirement to take into account the effects of the following management actions on DoD UPH that may be listed or eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, ceasing maintenance activities, new construction, demolition, deconstruction and salvage, remedial activities, and transfer, sale, lease, and closure.

III. Applicability

A. This Program Comment applies solely to Cold War Era DoD UPH as defined in Section I, above. The Program Comment does not apply to the following properties that are listed, or eligible for listing, on the National Register of Historic Places: (1) archeological properties, (2) properties of traditional religious and cultural significance to federally recognized Indian tribes or Native Hawaiian organizations, and/or (3) UPH in listed or eligible National Register of Historic Places districts where the UPH is a contributing element of the district and the proposed undertaking has the potential to adversely affect such historic district. This exclusion does not apply to historic districts that are made up solely of UPH properties. In those cases the Program Comment would be applicable to such districts.

Since the proposed mitigation for UPH documents site plans, building designs, and the spatial arrangement of UPH, along with the events and actions that lead to the development of UPH, the important aspects of UPH, whether single buildings or districts made up entirely of UPH, will be addressed regardless of the type of undertaking that may affect this particular property type.

B. An installation with an existing Section 106 agreement document in place that addresses UPH can choose to:

- (1) continue to follow the stipulations in the existing agreement document for the remaining period of the agreement; or
- (2) seek to amend the existing agreement document to incorporate, in whole or in part, the terms of this Program Comment; or
- (3) terminate the existing agreement document, and re-initiate consultation informed by this Program Comment if necessary.

C. All future Section 106 agreement documents developed by the Military Departments related to the undertakings and properties addressed in this Program Comment shall include appropriate provisions detailing whether and how the terms of this Program Comment apply to such undertakings.

IV. Completion Schedule

On or before 60 days following approval of the Program Comment, DoD, its Military Departments and ACHP will establish a schedule for completion of the treatments outlined above.

V. Effect of the Program Comment

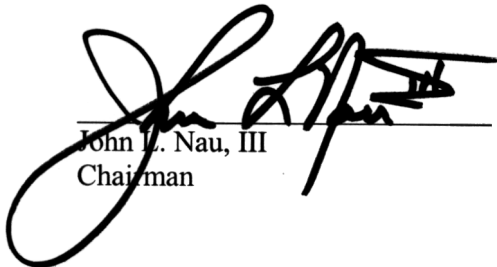
By following this Program Comment, DoD and its Military Departments meet their responsibilities for compliance under Section 106 regarding the effect of the following management actions on Cold War era DoD UPH that may be listed or eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, ceasing maintenance activities, new construction, demolition, deconstruction and salvage, remedial activities, and transfer, sale, lease, and closure. Accordingly, DoD installations are no longer required to follow the case-by-case Section 106 review process for such effects.

As each of the Military Departments is required under this Program Comment to document their own facilities, failure of any one Military Department to comply with the terms of the Program Comment will not adversely affect the other Departments' abilities to continue managing their properties under the Program Comment.

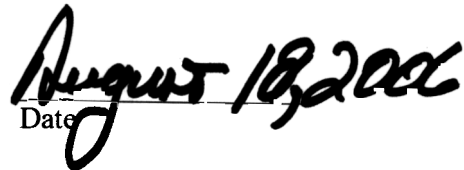
VI. Duration and Review of the Program Comment

This Program Comment will remain in effect until such time as DoD or its individual Military Departments determine that such comments are no longer needed and notifies ACHP in writing, or ACHP withdraws the comments in accordance with 36 CFR § 800.14(e)(6). Following such withdrawal, DoD or its individual Military Departments would be required to comply with the requirements of 36 CFR §§ 800.3 through 800.7 regarding the effects under this Program Comments' scope.

DoD, its Military Departments and ACHP will review the implementation of the Program Comment seven years after its issuance and determine whether to take action to terminate the Program Comment as detailed in the preceding paragraph.



John L. Nau, III
Chairman



Date

Attachment: Table 1

TABLE 1 - RPCS Heirarchy for Category Group 72

CG & Title	BC	BC Title	FAC	UM	FAC Title	MilDep	CAT CODE	UM AREA	UM OTH	UM ALT	CATCOD E LONG NAME
- 72 - Unaccompanied Personnel Housing											
	721	Enlisted Unaccompanied Personnel Housing									
			7210	SF							
						Air Force	721312	SF	PN		DORMITORY AIRMAN PERMANENT PARTY/PCS-STUDENT
						Air Force	721313	SF	PN		TECHNICAL TRAINING STUDENT HOUSING
						Air Force	721314	SF	PN		DORMITORY, UNACCOMPANIED NCO
						Army	72111	SF	SP		ENLISTED UNACCOMPANIED PERSONNEL HOUSING
						Army	72170	SF	SP		UNACCOMPANIED PERSONNEL HOUSING, SENIOR NCO
						Navy	72111	SF	PN		BACHELOR ENLISTED QUARTERS E1/E4
						Navy	72112	SF	PN		BACHELOR ENLISTED QUARTERS E5/E6 (MARINE CORPS E-5 ONLY)
						Navy	72113	SF	PN		BACHELOR ENLISTED QUARTERS E7 THRU E9 (MARINE CORPS E6/E9)
						Navy	72124	SF	PN		BACHELOR ENL QTRS-MARINES E1/E4
						Navy	72125	SF	PN		BACHELOR ENL QTRS-MARINES E5
						Navy	72126	SF	PN		BACHELOR ENL QTRS-MARINES E6/E9
						Navy	72130	SF	PN		CIVILIAN BARRACKS -GS 01 THRU 06
						Navy	72131	SF	PN		CIVILIAN BARRACKS-BASE OPERATING SUPPORT CONTRACTOR
						Navy	72146	SF	PN		BERTHING--NAVAL HOME

7212 SF Enlisted Unaccompanied Personnel Housing, Transient

Air Force	721315	SF	PN	DORMITORY VISITING AIRMAN QUARTERS
Navy	72121	SF	PN	BACHELOR ENL QTRS-TRANSIENT E1/E4
Navy	72122	SF	PN	BACHELOR ENL QTRS-TRANSIENT E5/E6
Navy	72123	SF	PN	BACHELOR ENL QTRS-TRANSIENT E7/E9
Navy	72153	SF	PN	TRANSIENT PERSONNEL UNIT BARRACKS E7-E9
Army	72121	SF	SP	TRANSIENT UPH, ADVANCED INDIVIDUAL TRAINEES (AIT)
Army	72122	SF	SP	TRANSIENT UPH, ADVANCED SKILLS TRAINEES (AST)
Navy	72114	SF	PN	CLASS A STUDENT BARRACKS
Navy	72117	SF	PN	OFFICER CANDIDATE SCHOOL (OCS)
Navy	72118	SF	PN	NAVAL ACADEMY PREPARATORY SCHOOL (NAFS)
Navy	72119	SF	PN	BROADENED OPPORTUNITY FOR OFFICER SELECTION TRNG (BOOST)
Navy	72424	SF	PN	OFFICER INDOCTRINATION SCHOOL (OIS)

7213 SF Student Barracks

7214 SF Annual Training/Mobilization Barracks

Army	72114	SF	SP	ENLISTED BARRACKS, TRANSIENT TRAINING
Army	72115	SF	SP	ENLISTED BARRACKS, MOBILIZATION

7218 SF Recruit/Trainee Barracks

Air Force	721311	SF	PN	RECRUITS DORMITORY
Army	72181	SF	SP	TRAINEE BARRACKS
Navy	72115	SF	PN	RECRUIT-TYPE BARRACKS

722 Unaccompanied Personnel Housing Mess Facilities

7220 SF Dining Facility

Air Force	721215	SF	PN	DINING HALL IN AIRMAN DORMITORY
Air Force	722345	SF	PN	FAST FOOD SERVICE
Air Force	722351	SF	PN	AIRMAN DINING HALL - DETACHED
Air Force	722356	SF	PN	DINING HALL, OFFICER, DETACHED
Army	72210	SF	PN	DINING FACILITY
Army	72212	SF	PN	DINING FACILITY - TRANSIENT TRAINING
Navy	72145	SF	PN	DINING-FACILITY -BUILT-IN/ATTACHED
Navy	72210	SF	PN	ENLISTED DINING-FACILITY
Navy	72231	SF	PN	DINING-FACILITY -DETACHED-CIV PERS
Navy	72241	SF	PN	DINING-FACILITY -DETACHED-COM PERS
Navy	72430	SF	PN	COMMISSIONED-OFFICERS MESS -CLOSED(BLT-IN/ATCHD)

723 Detached Unaccompanied Personnel Housing Facility

7231 SF Miscellaneous UPH Support Building

Air Force	723155	SF	PN	DAYROOM LOUNGE
Army	72310	SF	PN	UPH LAUNDRY BUILDING, DETACHED
Army	72360	SF	PN	MISCELLANEOUS FACILITIES, DETACHED
Navy	72330	SF	PN	LAUNDRY DETACHED
Navy	72360	SF	PN	TROOP-HOUSING -OTHER DETACHED BUILDINGS
Navy	72377	SF	PN	TROOP HOUSING STORAGE (READY ISSUE/SHOP STORES/MISC.)

7232 SF Unaccompanied Personnel Housing Garage/Carport

Air Force	723241	SF	VE	GARAGE AUTOMOBILE
Army	72350	SF	VE	GARAGE, UPH, DETACHED
Army	72351	SF	VE	CARPORT, UPH

7233	SF	Dining Support Facility	Navy	72340	SF	VE	GARAGES DETACHED -BACHELOR HOUSING
7234	SF	Latrine/Shower Facility	Air Force	723385	SF	NS	KITCHEN, CENTRAL PREPARATION
			Air Force	723388	SF		FLIGHT KITCHEN
			Navy	72250	SF	SH	COLD-STORAGE -DETACHED-FROM-GALLEY
			Air Force	714124	SF		ATTENDANTS SANITARY FACILITIES
			Air Force	723392	SF		SANITARY LATRINE
			Navy	72320	SF	PN	LATRINE DETACHED
7235	EA	Miscellaneous UPH Support Facility	Air Force	750663	EA		PRIVATELY OWNED VEHICLE WASHRACK
			Navy	72350	EA		WASH-RACK DETACHED
			Navy	72361	EA		TROOP-HOUSING -OTHER DETACHED FACILITIES
7240	SF	Officer Unaccompanied Personnel Housing	Air Force	724415	SF	PN	OFFICER'S QUARTERS
			Air Force	724433	SF	PN	CADET QUARTERS
			Army	72410	SF	PN	UNACCOMPANIED OFFICERS QUARTERS, MILITARY
			Navy	72411	SF	PN	BACHELOR OFFICERS' QUARTERS PERMANENT PARTY W1/W2 & 01/02
			Navy	72412	SF	PN	BACHELOR OFFICERS QUARTERS PERMANENT PARTY W3-W5 & 03UP
			Navy	72422	SF	PN	CIVILIAN QUARTERS -GS 07 AND ABOVE
			Navy	72423	SF	PN	CIVILIAN QUARTERS-BASE OPERATING SUPPORT CONTRACTOR

724 Officer Unaccompanied Personnel Housing Facilities

7241 SF Officer UPH,
Transient

Air Force	724417	SF	PN	VISITING OFFICER'S QUARTERS
Army	72412	SF	PN	TRANSIENT TRAINING OFFICERS QUARTERS
Navy	72413	SF	PN	BACHELOR OFFICERS QUARTERS TRANSIENT W1/W2 AND 01/02
Navy	72414	SF	PN	BACHELOR OFFICERS QUARTERS TRANSIENT W3-W5 AND 03&UP

725 Emergency
Unaccompanied
Personnel
Housing
Facility

7250 SF Emergency
Unaccompanied
Personnel
Housing

Air Force	725513	SF	PN	CIVILIAN CAMP
Air Force	725517	SF	PN	CAMP TROOP
Army	72510	SF	PN	HUTMENT
Navy	72510	SF	PN	TROOP-HOUSING-EMERGENCY BUILDING

7251 SF EUPH Tent
Pad

Army				TENT PAD
Navy				TROOP-HOUSING-EMERGENCY FACILITY



Preserving America's Heritage

**PROGRAM COMMENT FOR
WORLD WAR II AND COLD WAR ERA (1939 – 1974)
AMMUNITION STORAGE FACILITIES**

I. Introduction

This Program Comment provides the Department of Defense (DoD) and its Military Departments with an alternative way to comply with their responsibilities under Section 106 of the National Historic Preservation Act with regard to the effect of the following management actions on World War II and Cold War Era ammunition storage facilities that may be eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities.

The term Ammunition Storage Facilities means all buildings and structures, listed in or eligible for listing in the National Register of Historic Places, that were designed and built as ammunition storage facilities within the years 1939-1974, regardless of current use, and that are identified by a DoD Category Group (2 digit) code of 42, Ammunition Storage (category code 42XXXX), in the Military Service's Real Property Inventory currently or at the time of construction. Table 1 (attached) provides all such buildings and structures associated with ammunition storage, by Military Department, that are applicable to this program comment.

In order to take into account the effects on Ammunition Storage Facilities, DoD and its Military Departments will conduct documentation in accordance with The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. As each Military Department will be responsible for conducting its own mitigation actions, the following required documentation is structured by Military Department, followed by DoD-wide requirements.

II. Treatment of Properties

A. Army Mitigation

1. The Army shall expand and revise its existing context study, Army Ammunition and Explosives Storage in the United States, 1775-1945 to include the Cold War Era. This document provides background information and criteria for evaluating the historic significance of such buildings. The updated context study will:

identify the changes in ammunition storage during the Cold War;

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focus on the changes required for ammunition storage due to technological advancement in weaponry;

consider the importance of major builders, architects or engineers that may have been associated with design and construction of Ammunition Storage Facilities throughout the Army or at specific Army installations; and

describe the inventory of Ammunition Storage Facilities in detail, providing information on the various types of buildings and architectural styles and the quantity of each.

2. The Army shall undertake in-depth documentation on Ammunition Storage Facilities at nine installations. The existing context study concluded that the Army possessed “only a few basic types and an abundance of examples” of Ammunition Storage Facilities, due to the standardization of ammunition storage facilities beginning in the 1920s. The context study suggests that six geographically dispersed installations contain an array of primary examples of both aboveground and underground magazines with a high degree of integrity:

Hawthorne Army Depot, Nevada – early igloos;

McAlester Army Ammunition Plant, Oklahoma – Corbetta Beehive;

Pine Bluff Arsenal, Arkansas – biological and chemical igloos;

Ravenna Army Ammunition Plant, Ohio – standard World War II and aboveground magazines;

Blue Grass Army Ammunition Plant, Kentucky – standard World War II igloos and aboveground magazines; and

Louisiana Army Ammunition Plant, Louisiana – Stradley special weapons.

The Army shall document these six as well as three additional installations that possess Cold War Era Ammunition Storage Facilities. Documentation at the three additional installations will be determined after completion of the expanded context study described in section II.A.1., above. This study will include a brief history of the installation and the surrounding community, if appropriate, and a detailed history of the storage facilities and documentation of the buildings. The documentation will primarily consist of historic photographs and existing plans. Documentation will be tailored to address the different natures of aboveground and underground storage.

B. Navy Mitigation

1. The Navy will develop a supplemental context study that will be attached as an appendix to the Army’s existing context study, Army Ammunition and Explosives Storage in the United States, 1775-1945. The final product will be a separately bound volume of additional information and photographs and tabular appendices that, when presented with the Army’s and Air Force’s context studies, provide a clear picture of the Department of Defense’s Ammunition Storage facilities. This context study appendix will:

cover both World War II and the Cold War Era, from 1939-1974;

explore the changes in ammunition storage resulting from World War II;

examine the changes required for ammunition storage due to technological advancement in weaponry during the Cold War;

consider the importance of major builders, architects or engineers that may have been associated with design and construction of Ammunition Storage Facilities; and

describe the inventory of Ammunition Storage Facilities in detail, providing information on the various types of buildings and architectural styles and the quantity of each.

2. The Navy shall document a representative sample of the basic types of both aboveground and underground ammunition storage facilities. The Navy will choose three geographically dispersed installations with the greatest number and variety of such resources. The Marines will choose one such installation. The sample chosen shall be the best representative examples of the range of Ammunition Storage types constructed during World War II and the Cold War era. This documentation will include collecting existing plans and drawings, writing a historic description in narrative or outline format, and compiling existing historic photographs of the structures. Documentation will be tailored to address the different natures of aboveground and underground storage.

C. Air Force Mitigation

1. The Air Force will develop a supplemental context study that will be attached as an appendix to the Army's existing context study, Army Ammunition and Explosives Storage in the United States, 1775-1945. The final product will be a separately bound volume of additional information and photographs and tabular appendices that, when presented with the Army's and Navy's context studies, provide a clear picture of the Department of Defense's Ammunition Storage facilities. This context study appendix will:

cover the Cold War Era, from 1946-1974;

explore the changes in ammunition storage resulting from the Cold War;

examine the changes required for ammunition storage due to technological advancement in weaponry during the Cold War;

consider the importance of major builders, architects or engineers that may have been associated with design and construction of Ammunition Storage Facilities; and

describe the inventory of Ammunition Storage Facilities in detail, providing information on the various types of buildings and architectural styles and the quantity of each.

2. The Air Force shall document a representative sample of the basic types of both aboveground and underground ammunition storage facilities. The Air Force will choose three geographically dispersed installations with the greatest number and variety of such resources. The sample chosen shall be the best representative examples of the range of Ammunition Storage types constructed during the Cold War era. This documentation would include collecting existing plans and drawings, writing a historic description in narrative or outline format, and compiling existing historic photographs of the structures. Documentation will be tailored to address the different natures of aboveground and underground storage.

3. The Air Force will not be required to consider its World War II Era facilities in these mitigation actions. The Air Force was established in September 1947 and therefore was not associated with structures constructed during this era. Rather the Air Force has inherited its current inventory of 263 World War II Era Ammunition Storage facilities from former Army installations. Given the substantial

mitigation actions that will be undertaken by the Army to document its facilities, further documentation for the small number of similar facilities located at Air Force installations provides no additional historic value. While no documentation will be done on World War II facilities under the Air Force's control, all of the 263 facilities in its inventory are covered under this Program Comment.

D. DoD-Wide Mitigation

1. Copies of the documentation described above will be made available electronically, to the extent possible under security concerns, and hard copies will be placed in a permanent repository, such as the Center for Military History.
2. In addition, as a result of on-going consultations, each Military Department will provide a list of properties covered by the Program Comment, by State, to State Historic Preservation Officers, Tribal Historic Preservation Officers, and other interested parties, as appropriate. Each Military Department will be responsible for determining how to convey its information.
3. All Military Departments will encourage adaptive reuse of the properties as well as the use of historic tax credits by private developers under lease arrangements. Military Departments will also incorporate adaptive reuse and preservation principles into master planning documents and activities.

The above actions satisfy DoD's requirement to take into account the effects of the following management actions on World War II and Cold War Era ammunition storage facilities that may be eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities.

III. Applicability

A. 1. This Program Comment applies solely to Ammunition Storage Facilities as defined in Section I, above. The Program Comment does not apply to the following properties that are listed, or eligible for listing, on the National Register of Historic Places: (1) archeological properties, (2) properties of traditional religious and cultural significance to federally recognized Indian tribes or Native Hawaiian organizations, and/or (3) ammunition storage facilities in listed or eligible National Register of Historic Places districts where the ammunition storage facility is a contributing element of the district and the proposed undertaking has the potential to adversely affect such historic district. This third exclusion does not apply to historic districts that are made up solely of ammunition storage facility properties. In those cases the Program Comment would be applicable to such districts.

Since the proposed mitigation for the Ammunition Storage facilities documents site plans, building designs, and the spatial arrangement of ammunition storage facilities, along with the events and actions that lead to the development of standardized ammunition storage facilities in DoD, the important aspects of ammunition storage, whether single buildings or districts made up entirely of ammunition storage, will be addressed regardless of the type of undertaking that may affect this particular property type. The one currently known ammunition storage district, at Hawthorne Army Ammunition Plant, has been identified for further study, as outlined in Section II(A)(2) above.

2. An installation with an existing Section 106 agreement document in place that addresses ammunition storage facilities can choose to:

(i) continue to follow the stipulations in the existing agreement document for the remaining period of the agreement; or

(ii) seek to amend the existing agreement document to incorporate, in whole or in part, the terms of this Program Comment; or

(iii) terminate the existing agreement document, and re-initiate consultation informed by this Program Comment if necessary.

3. All future Section 106 agreement documents developed by the Military Departments related to the undertakings and properties addressed in this Program Comment shall include appropriate provisions detailing whether and how the terms of this Program Comment apply to such undertakings.

IV. Completion Schedule

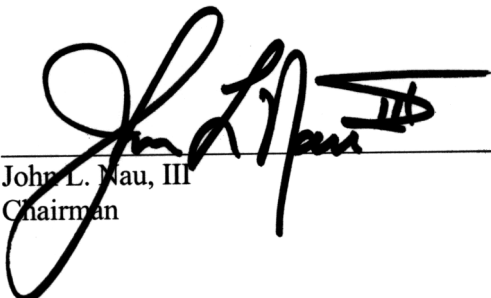
On or before 60 days following issuance of the Program Comment, DoD, its Military Department and ACHP will establish a schedule for completion of the treatments outlined above.

V. Effect of the Program Comment

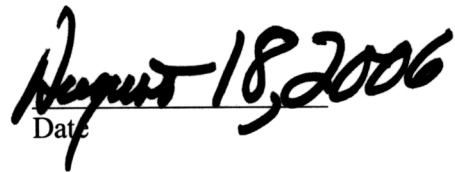
By following this Program Comment, DoD and its Military Departments meet their responsibilities for compliance under Section 106 regarding the effect of the following management actions on World War II and Cold War Era ammunition storage facilities that may be eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities. Accordingly, DoD installations are no longer required to follow the case-by-case Section 106 review process for such effects. As each of the Military Departments is required under this Program Comment to document their own facilities, failure of any one Military Department to comply with the terms of the Program Comment will not adversely affect the other Departments' abilities to continue managing their properties under the Program Comment.

This Program Comment will remain in effect until such time as the Office of the Secretary of Defense determines that such comments are no longer needed and notifies ACHP in writing, or ACHP withdraws the comments in accordance with 36 CFR § 800.14(e)(6). Following such withdrawal, DoD and its Military Departments would be required to comply with the requirements of 36 CFR §§ 800.3 through 800.7 regarding the effects under this Program Comments' scope.

DoD, its Military Departments and ACHP will review the implementation of the Program Comment seven years after its issuance and determine whether to take action to terminate the Program Comment as detailed in the preceding paragraph.



John L. Nau, III
Chairman



Date

Attachment: Table

TABLE 1 - RPCS Hierarchy for Category Group 42

CG & Title	BC	BC Title	FAC	UM	FAC Title	MilIDep	CAT CODE	UM AREA	UM OTH	UM ALT	CATCOD E LONG NAME
-42- Ammunition Storage											
	421	Depot and Arsenal Ammunition Storage									
			4211	SF	Ammunition Storage, Depot and Arsenal						
						Army	42104	SF			EXPLOSIVE TRANSFER BUILDING, DEPOT LEVEL
						Army	42107	SF			STRADLEY, NONATOMIC BLAST RESISTANT, DEPOT LEVEL
						Army	42110	SF			FUSE AND DETONATOR MAGAZINE, DEPOT LEVEL
						Army	42120	SF			HIGH EXPLOSIVE MAGAZINE, DEPOT LEVEL
						Army	42150	SF			SMOKELESS POWDER MAGAZINE, DEPOT LEVEL
						Army	42160	SF			SPECIAL WEAPONS MAGAZINE, DEPOT LEVEL
						Army	42170	SF			GUIDED MISSILE MAGAZINE, DEPOT LEVEL
						Army	42180	SF			IGLOO STORAGE, DEPOT LEVEL
						Army	42181	SF			AMMUNITION STOREHOUSE, DEPOT LEVEL
						Army	42182	SF			SMALL ARMS AMMUNITION MAGAZINE, DEPOT LEVEL
						Army	42183	SF			GENERAL PURPOSE MAGAZINE, DEPOT LEVEL
						Army	42184	SF			AMMUNITION HUT, DEPOT LEVEL
						Army	42186	SF			AMMUNITION STORAGE STRUCTURE, DEPOT LEVEL
						Army	42288	SF			AMMO STORAGE OTHER THAN DEPOT OR UNIT
						Navy	42112	SF		CF	FUSE&DETONATOR MAGAZINE
						Navy	42122	SF		CF	HIGH-EXPLOSIVE MAGAZINE
						Navy	42132	SF		CF	INERT STOREHOUSE
						Navy	42142	SF		CF	SMOKEDRUM STOREHOUSE
						Navy	42148	SF		CF	SMALL-ARMS PYROTECHNIC MAGAZINE
						Navy	42152	SF		CF	SMOKELESS-POWDER-PROJECTILE MAGAZINE
						Navy	42162	SF		CF	SPECIAL-WEAPONS MAGAZINE
						Navy	42172	SF		CF	MISSILE MAGAZINE

4212 SF Intercontinental Ballistic Missile Storage Facility

Navy 42182 SF SUBMARINE LAUNCHED BALLISTIC MISSILE STORAGE FACILITY

422 Installation and Ready Issue Ammunition Storage

4221 SF Ammunition Storage, Installation

Air Force	422253	SF	STORAGE, MULTI-CUBICLE MAGAZINE
Air Force	422256	SF	STORAGE, ROCKET CHECKOUT AND ASSEMBLY
Air Force	422257	SF	STORAGE SEGREGATED MAGAZINE
Air Force	422258	SF	STORAGE MAGAZINE ABOVE GROUND TYPE A, B, & C
Air Force	422259	SF	MISSILE STORAGE FACILITY
Air Force	422264	SF	STORAGE IGLOO
Air Force	422271	SF	STORAGE, MODULE BARRICADED
Air Force	422273	SF	STORAGE IGLOO STEEL ARCH UNDERPASS
Army	42210	SF	FUSE AND DETONATOR MAGAZINE, INSTALLATION
Army	42215	SF	HIGH EXPLOSIVE MAGAZINE, INSTALLATION
Army	42225	SF	SMOKEDRUM STOREHOUSE, INSTALLATION
Army	42230	SF	SMALL ARMS AMMUNITION AND PYROTECHNICS MAGAZINE, INSTAL
Army	42231	SF	AMMUNITION STOREHOUSE, INSTALLATION
Army	42235	SF	READY MAGAZINE, INSTALLATION
Army	42240	SF	FIXED AMMUNITION MAGAZINE, INSTALLATION
Army	42250	SF	SPECIAL WEAPONS MAGAZINE, INSTALLATION
Army	42260	SF	GUIDED MISSILE MAGAZINE, INSTALLATION
Army	42280	SF	IGLOO STORAGE, INSTALLATION
Army	42281	SF	AMMUNITION HUT, INSTALLATION
Army	42283	SF	GENERAL PURPOSE MAGAZINE, INSTALLATION
Army	42285	SF	UNIT SMALL ARMS AMMUNITION STORAGE, INSTALLATION
Army	42286	SF	AMMUNITION STORAGE STRUCTURE, INSTALLATION

EA

Navy 42135 SF CF READY MAGAZINE

423	Liquid Propellant Ammunition Storage	4231	GA	Liquid Propellant Storage, Ammunition Related				
					Air Force	42311		LIQUID PROPELLANT AMMO STORAGE
					Army	42310	SF	LIQUID PROPELLANT STORAGE, AMMUNITION, BUILDING
					Army	42311	GA	LIQUID PROPELLANT STORAGE, AMMUNITION, FACILITY
					Army	42312	GA	LIQUID PROPELLANT STORAGE, AMMUNITION, STRUCTURE
					Navy	42310	GA	LIQUID-PROPELLANT STORAGE

424	Weapon-Related Battery Storage	4241	SF	Battery Storage, Weapon Related				
					Army	42410	SF	BATTERY COLD STORAGE BUILDING
					Navy	42410	SF	WEAPON-RELATED BATTERY STORAGE

425	Open Ammunition Storage	4251	SY	Open Ammunition Storage				
					Army	42510	SY	AMMUNITION STORAGE PAD
					Navy	42510	SY	OPEN-AMMUNITION-STORAGE PAD
					Navy	42520	SY	CONTAINER-HOLDING YARD -EMPTY
					Navy	42530	SY	BARRICADED MODULE (OPEN)



Preserving America's Heritage

**PROGRAM COMMENT FOR
WORLD WAR II AND COLD WAR ERA (1939 – 1974)
ARMY AMMUNITION PRODUCTION FACILITIES AND PLANTS**

I. Introduction

This Program Comment provides the Department of the Army (Army) with an alternative way to comply with its responsibilities under Section 106 of the National Historic Preservation Act with regard to the effect of the following management actions on World War II (WWII) and Cold War Era Army Ammunition Production Facilities and Plants that may be eligible for listing on the National Register of Historic Places (Facilities and Plants): ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities.

In order to take into account the effects on Facilities and Plants, the Army will conduct documentation in accordance with The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

II. Treatment of Properties

A. Army Mitigation

1. The Army has an existing context study, Historic Context for the World War II Ordnance Department's Government-Owned Contractor-Operated (GOCO) Industrial Facilities 1939-1945 as well as documentation of nine World War II GOCO Plants.

2. The Army will prepare a supplemental volume that revises and expands the existing context to include the Cold War Era (1946-1974). The updated context study will:

focus on the changes that the plants underwent to address changing weapons technology and defense needs; and

identify prominent architect-engineer firms that may have designed architecturally significant buildings for Army Ammunition Plants.

3. The Army will prepare documentation that generally comports with the appropriate HABS/HAER standards for documentation for selected architecturally significant Facilities and Plants at two installations. This documentation will be similar to and follow the format of the existing documentation described in section II.A.1, above.

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4. Upon completion of the documentation, the Army will then make the existing documentation of the nine WWII GOCO Army Ammunition Plants and the WWII GOCO context and the new documentation, to the extent possible under security concerns, available in electronic format to Federal and State agencies that request it.

5. In addition, as a result of on-going consultations with stakeholders, the Army will provide a list of properties covered by the Program Comment, by state, to the National Conference of State Historic Preservation Officers and the Advisory Council on Historic Preservation.

6. The Army will also develop additional public information on the Army ammunition process, from production through storage, to include:

a display that can be loaned to one of the Army's museums, such as the Ordnance Museum at Aberdeen Proving Ground, or used at conferences; and

a popular publication on the ammunition process to accompany the display.

Copies of this information will be available electronically, to the extent possible under security concerns, and hard copies will be placed in a permanent repository, such as the Center for Military History.

7. The Army will encourage adaptive reuse of the properties as well as the use of historic tax credits by private developers under lease arrangements. The Army should also incorporate adaptive reuse and preservation principles into master planning documents and activities.

The above actions satisfy the Army's requirement to take into account the effects of the following management actions on Facilities and Plants: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance activities, new construction, demolition, deconstruction and salvage, remedial activities, and transfer, sale, lease and/or closure of such facilities.

III. Applicability

A. This Program Comment applies solely to Facilities and Plants. The Program Comment does not apply to the following properties that are listed, or eligible for listing, on the National Register of Historic Places: (1) archeological properties, (2) properties of traditional religious and cultural significance to federally recognized Indian tribes or Native Hawaiian organizations, and/or (3) Facilities and Plants listed or eligible National Register of Historic Places districts where the ammunition production facility is a contributing element of the district and the proposed undertaking has a potential to adversely affect such historic district. This third exclusion does not apply to ammunition production related historic districts that are entirely within the boundaries of an ammunition production plant. In those cases the Program Comment would be applicable to such districts.

B. An installation with an existing Section 106 agreement document that addresses Facilities and Plants can choose to:

1. continue to follow the stipulations in the existing agreement document for the remaining period of the agreement; or

2. seek to amend the existing agreement document to incorporate, in whole or in part, the terms of this Program Comment; or

3. terminate the existing agreement document and re-initiate consultation informed by this Program Comment, if necessary.

C. All future Section 106 agreement documents developed by Army installations related to undertakings and properties addressed in this Program Comment shall include appropriate provisions detailing whether and how the terms of the Program Comment apply to such undertakings.

IV. Completion Schedule

On or before 60 days following issuance of the Program Comment, the Army and ACHP will establish a schedule for completion of the treatments outlined above.

V. Effect of the Program Comment

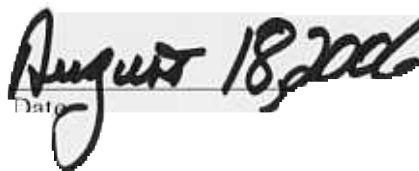
By following this Program Comment, the Army has met its responsibilities for compliance under Section 106 regarding the effect of the following management actions on WWII and Cold War Era Army Ammunition Production Facilities and Plants that may be eligible for listing on the National Register of Historic Places: ongoing operations, maintenance and repair, rehabilitation, renovation, mothballing, cessation of maintenance, new construction, demolition, deconstruction and salvage, remediation activities, and transfer, sale, lease, and closure of such facilities. Accordingly, the Army will no longer be required to follow the case-by-case Section 106 review process for such effects.

VI. Duration and Review of the Program Comment

This Program Comment will remain in effect until such time as Headquarters, Department of the Army determines that such comments are no longer needed and notifies ACHP in writing, or ACHP withdraws the comments in accordance with 36 CFR § 800.14(e)(6). Following such withdrawal, the Army would be required to comply with the requirements of 36 CFR §§ 800.3 through 800.7 regarding the effects under this Program Comments' scope.

Headquarters, Department of the Army and ACHP will review the implementation of the Program Comment seven years after its issuance and determine whether to take action to terminate the Program Comment as detailed in the preceding paragraph.


John L. Nau, III
Chairman


Date

APPENDIX F
TRANSPORTATION SUPPORTING DOCUMENTATION

Table F-1. Transportation Network and Closest Population Center for AMC Installations

Installation	Closest population center	State	Approximate distance (miles)	Transportation network
Lake City Army Ammunition Plant	Independence	MO	8	Suburban
Military Ocean Terminal Concord	Concord	CA	4	
Watervliet Arsenal	Watervliet	NY	1	
Anniston Army Depot	Anniston	AL	10	Rural
Blue Grass Army Depot	Richmond	KY	4	
Letterkenny Army Depot	Chambersburg	PA	6	
Lima Army Tank Plant	Lima	OH	4	
Pueblo Chemical Depot	Pueblo	CO	18	
Radford Army Ammunition Plant	Radford	VA	5	
Scranton Army Ammunition Plant	Scranton	PA	0	
Tobyhanna Army Depot	Tobyhanna	PA	1	
Hawthorne Army Depot	Hawthorne	NV	7	Remote
Holston Army Ammunition Plant	Kingsport	TN	4	
Iowa Army Ammunition Plant	Burlington	IA	10	
McAlester Army Ammunition Plant	McAlester	OK	0	
Milan Army Ammunition Plant	Milan	TN	7	
Military Ocean Terminal Sunny Point	Oak Island	NC	16	
Pine Bluff Arsenal	Pine Bluff	AR	15	
Red River Army Depot	Texarkana	TX	18	
Sierra Army Depot	Herlong	CA	5	
Tooele Army Depot	Toole	UT	11	

Source: U.S. Census Bureau 2013.

Table F-2. Estimated Truck Trips Generated by Removal of Demolition Debris

Demolition Debris					
Debris Density [lbs/sqft]		155			
Debris Density [cu yds/tons]		2.4			
Truck Capacity [cu yds]		18			
Work Days/Year		230			
Building Area [SqFt]	Weight [tons]	Volume [cu yds]	Trucks/Year	Trucks/Day	
500,000	38,750	16,146	897	4	
1,000,000	77,500	32,292	1,794	8	
1,500,000	116,250	48,438	2,691	12	
2,000,000	155,000	64,583	3,588	16	
2,500,000	193,750	80,729	4,485	19	
3,000,000	232,500	96,875	5,382	23	

Source: USEPA 1998

Note: cu yds=cubic yards, lbs =pounds, sqft=square feet/foot

DRAFT FINDING OF NO SIGNIFICANT IMPACT

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT FOR THE U.S. ARMY MATERIEL COMMAND BUILDING DEMOLITION PROGRAM

- 1. PROPOSED ACTION:** The Proposed Action and subject of this Programmatic Environmental Assessment (PEA) is the removal of unused and unneeded facilities from the Real Property Inventories of AMC installations. Implementing the Proposed Action would reduce fixed facility costs (i.e., utilities), save energy, reduce risks from structural deterioration, and make otherwise idle areas of an installation available for productive reuse.
- 2. ALTERNATIVES CONSIDERED:** During the preparation of this PEA, no reasonable alternatives to the Proposed Action were identified. The alternative to the Proposed Action was to renovate the facilities for reuse rather than demolish them, but that alternative was found to be unreasonable and was dismissed from further consideration. Both the Proposed Action and the No Action Alternative are evaluated in the PEA. The PEA characterizes the likely environmental impacts, including impacts on human health, that could result from implementing the Proposed Action and the No Action Alternative.
- 3. ENVIRONMENTAL CONSEQUENCES AND MITIGATION MEASURES:** It is unlikely that significant adverse environmental impacts would result from implementing the Proposed Action. The Proposed Action includes adherence to existing health, safety, and environmental regulations applicable to the Proposed Action. Each facility to be demolished would be analyzed under the National Environmental Policy Act before being demolished. Implementing standard best management practices during the demolition of individual facilities would mitigate risk to people and ensure environmental protection.
- 4. FACTORS CONSIDERED IN THE FINDING OF NO SIGNIFICANT IMPACT:** The PEA discusses the nature of the Proposed Action and the likely environmental effects, including cumulative effects, on all relevant resource areas associated with its implementation.
- 5. CONCLUSIONS:** On the basis of the analysis, the Proposed Action would have no significant adverse effects on the natural or human environment. Preparation of an EIS is not required. Not implementing the Proposed Action would eliminate the negligible to minor environmental effects associated with its implementation but would not reduce energy use and maintenance costs or make idle land available for future use on AMC installations.

GUSTAVE F. PERNA
Major General, USA
Deputy Chief of Staff
For Operations, G-3/4

Date

The document can be downloaded at <http://www.amc.army.mil/amc/environmental.html>. Instructions for commenting on the PEA and this Finding of No Significant Impact are provided at the same web page. Comments must be received by 30 days from the publication of the Notice of Availability in the local paper.