



*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;

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 809 • Washington, DC 20004  
Phone: 202-606-8503 • Fax: 202-606-8647 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)

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**

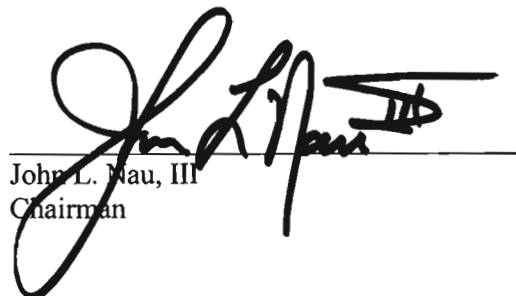
On or before 60 days following issuance of the Program Comment, DoD, its Military Department and ACHP will establish a schedule for completion of the treatments outlined above.

#### **V. Effect of the Program Comment**

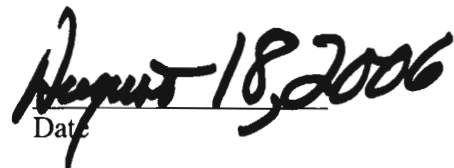
By following this Program Comment, DoD and its Military Departments meet their responsibilities for compliance under Section 106 regarding the effect of the following management actions on World War II and Cold War Era ammunition storage facilities that may be eligible for listing on the National Register 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. Mau, III  
Chairman



August 18, 2006  
Date

Attachment: Table

**TABLE 1 - RPCS Hierarchy for Category Group 42**

CG & Title	BC	BC Title	FAC	UM	FAC Title	MilDep	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, INSTALI
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

Navy 42135 SF CF READY MAGAZINE

423 Liquid Propellant Ammunition Storage

4231 GA Liquid Propellant Storage, Ammunition Related

Air Force 423111 GA LIQUID PROPELLANT AMMO STORAGE  
 Army 42310 SF GA LIQUID PROPELLANT STORAGE, AMMUNITION, BUILDING  
 Army 42311 GA LIQUID PROPELLANT STORAGE, AMMUNITION, FACILITY  
 Army 42312 SF 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)