APPENDIX G: MUSEUM FIREARMS, SMALL ARMS AMMUNITION, MUNITIONS, AND ARTILLERY

Museum Firearms, Small Arms Ammunition, Munitions, Artillery, and Explosives Overview

Note: Overview summarizes key points from this appendix. See individual sections for detailed information.

Overview

Implement NPS Museum Standards for Firearms, Small Arms Ammunition, Munitions, Artillery, and Non-Combat Explosives.

Implement safe handling procedures at all times.

Do not accession loaded firearms and artillery, or live munitions and non-combat explosives into the collection. ***Only*** unloaded firearms and artillery, and inert munitions can be accessioned into the collection.

Stable live small ammunition may be accessioned into the collection without being inerted, but ***must*** be stored in a locking, fire-resistant magazine or anti-static box in accordance with nationally recognized fire codes.

NPS Historical Significance Contributing Factors Tool must be completed for munitions, artillery, and non-combat explosives, and included in Park Inerting Request Package(s). Submit Request Package(s) through regional curator to regional director for concurrence.

EOD unit, bomb squad, or certified blaster determines final disposition in consultation with NPS park, zone, or regional safety manager and curator.

Follow applicable federal, state, and local laws and regulations for firearms, small arms ammunition, munitions, and artillery.

Document actions in accordance with this appendix. Process and document deaccession and disposal actions in accordance with *MH* II.6: Deaccessioning.

Firearms in the Collection

An experienced specialist must evaluate firearms to determine status (loaded or unloaded), and unload and clear loaded firearms. Curator documents processes using the Museum Firearms Evaluation and Unloading Record.

Render modern firearms inoperable when exhibited. ***Do not*** exhibit loaded firearms, or modern firearms that cannot be rendered inoperable.

Store firearms separately from other objects in a secure, locking museum-quality cabinet or gun safe in a dedicated collections storage space.

Move modern firearms in accordance with applicable federal and state laws and regulations.

Do not load or fire museum firearms in demonstrations or store black powder used by the Historic Weapons Program in any space housing collections.

Small Arms Ammunition in the Collection

An experienced specialist must evaluate small arms ammunition to determine status (live, solid metal, or inert). Based on specialist determination of risk level, retain live in storage, *or* render inert if safe to do so. Document processes using the Museum Small Arms Ammunition Evaluation and Mitigation Record.

Store inert and solid metal small arms ammunition separately from firearms in a dedicated collections storage space.

Store stable live small arms ammunition in a locking, fire-resistant magazine *or* anti-static box within a locking cabinet in accordance with nationally recognized fire codes. Secure and label as “Live Small Arms Ammunition.”

Do not exhibit live small arms ammunition.

Munitions in the Collection

NPS museum staff ***must not*** handle, disturb, move, transport, or attempt to deactivate live munitions under any circumstance.

Implement Emergency Response Steps: Suspected Live Munitions in the Collection when observing a change in condition in a museum munition, such as new cracks or bulging, leaking, or ticking.

Department of Defense (DOD) (US Marine Corps or other) Explosive Ordnance Disposal (EOD) unit or accredited Public Safety Bomb Squad must evaluate munitions to determine status (live, solid metal, or inert).

On regional director concurrence of Park Inerting Request Package, US Marine Corps EOD unit renders live munitions inert and completes inert certification. Other DOD EOD units or bomb squads complete NPS Museum Verification Document. ***Inert munitions must be returned to the park museum collection***. Curator documents processes using the Museum Munitions and Artillery Evaluation and Inerting Record. If not safe to inert, process in accordance with *MH* II, Chapter 6: Deaccessioning.

Do not accession or exhibit live munitions.

Store inert munitions in a dedicated, secure, museum-quality storage space. File inert certification or verification document in accession and/or catalog folder.

Artillery in the Collection

A DOD EOD unit (US Marine Corps or other) or accredited Public Safety Bomb Squad must evaluate artillery to determine status (loaded or unloaded) and unload loaded artillery if safe to do so. Curator documents processes using the Museum Munitions and Artillery Evaluation and Inerting Record.

Securely store and exhibit artillery. ***Do not*** exhibit loaded artillery.

Non-Combat Explosives in the Collection

An accredited Public Safety Bomb Squad or trained and licensed certified blaster must evaluate non-combat explosives to determine status (live or inert), and render live explosives inert if safe to do so. Curator documents processes.

Store inert non-combat explosives in a secure, dedicated collections storage space. ***Do not*** exhibit, handle, move, transport, or attempt to deactivate.

APPENDIX G: MUSEUM FIREARMS, SMALL ARMS AMMUNITION, MUNITIONS, AND ARTILLERY

A. Overview

Firearms, small arms ammunition, military munitions, artillery, and non-combat explosives in National Park Service museum collections are potentially dangerous and must be managed with extreme caution. Implement standards and best practices in the text and figures of this appendix to prevent injury or death of staff and visitors.

This is an appendix of Chapter 11: Curatorial Health and Safety.

Section I. Overview

1. What is included in this appendix

This appendix provides standards and procedures for safe management of museum firearms, small arms ammunition, munitions, artillery, and non-combat explosives. It includes:

- NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives, and other relevant laws and regulations.
- Handling, storage, and exhibit guidance for life safety and preservation of firearms, small arms ammunition, military munitions and artillery, and non-combat explosives in collections. Each object type is defined and discussed separately.
- Park Inerting Request Package(s) for munitions, artillery, and non-combat explosives for regional director concurrence, including the NPS Historical Significance Contributing Factors Tool.
- Working with US Marine Corps (USMC) Explosive Ordnance Disposal (EOD) or other Department of Defense (DOD) Explosive Ordnance Disposal unit, and/or accredited Public Safety Bomb Squad to evaluate status (live or inert, loaded or unloaded) and inert or unload live or loaded munitions and artillery. Process objects not safe to inert in accordance with MH II.6: Deaccessioning.
- Working with an experienced specialist to evaluate status of firearms and small arms ammunition, and unload loaded firearms.
- Working with a trained and licensed certified blaster to evaluate status of non-combat explosives and render live explosives inert. Process objects not safe to inert in accordance with MH II.6: Deaccessioning.
- Shipping and transportation.
- Documentation.
- Forms and figures, including Emergency Response Steps for suspected live munitions in the museum collection.

For terminology for objects covered in this appendix, see individual sections below, *Museum Handbook*, Part II: Museum Records (*MH* II), and *Nomenclature for Museum Cataloging* website for classifications. See also Chapter 11: Curatorial Health and Safety, and NPS *Conserve O Grams*, Section 2: Security, Fire, and Curatorial Safety.

2. Levels of risk

Museum collections may include firearms, small arms ammunition, military munitions (referred to as "munitions" in this appendix), artillery, and/or non-combat explosives. *Each object type presents a different level of risk* to life and safety.

- Munitions pose a ***high safety risk***, as they were designed to explode, maim, and kill.
  - ***Live*** munitions (containing explosive material) pose the ***highest safety risk***, particularly if unstable.
  - ***Immediately implement Emergency Response Steps: Suspected Live Munitions in the Collection (Figure G.14) if instability is noted***. This includes new cracks, bulges or dents, leaking fluid or powder, corrosion, smoking, odor, or ticking.
  - A DOD EOD unit (USMC or other) or accredited Public Safety Bomb Squad will determine if these are "Munitions and Explosives of Concern (MECs)" such as unexploded ordnance (UXO) during evaluation.
    See Sections E.I.1: How are munitions defined in this appendix and E.1.3: Who can evaluate munitions, render live munitions inert, and dispose of munitions.
  - Munitions certified as inert do not pose an explosive safety risk.
- Artillery poses a ***high safety risk if loaded*** with munitions. Unloaded artillery does not pose an explosive safety risk.
- Certain non-combat explosives such as blasting caps or dynamite pose a ***high safety and explosion risk if live***, as they are highly unstable.
- Small arms ammunition ***pose a low safety risk***, as they are designed to be ejected from a firearm rather than explode. There is an ***increased structural fire risk*** *if* the ammunition is outside a firearm *and* exposed to fire or sparks, *or* percussion if the primer is directly contacted.

  Mitigate risk by safely storing in a locking, fire-resistant magazine or anti-static box,[1] for a net explosive weight of 50 pounds or less.
- Loaded firearms *do not pose an explosion risk*. However, they do pose a risk of injury or death if fired. Unloaded firearms do not pose a safety risk.

[1] Guidance for mitigating small arms ammunition risk was developed in consultation with the NPS WASO Office of Risk Management, and updates the NPS Safety Alert: Discarded Military Munitions and Unexploded Ordnance (Feb 10, 2022).

A *DOD* (USMC or other) *EOD unit* or *accredited Public Safety Bomb Squad* ***must*** identify live munitions and loaded artillery in accordance with Museum Standard for Firearms, Small Arms Ammunition, Munitions, Artillery, and Non-Combat Explosives (2) (G.B.1.2). USMC or other DOD EOD units will be referred to as "DOD EOD units", and accredited Public Safety Bomb Squads will be referred to as "accredited bomb squads" in this appendix unless otherwise indicated.

An *experienced specialist* ***must*** identify lower-risk objects, including live small arms ammunition and loaded firearms in accordance with Museum Standards for Firearms, Small Arms Ammunition, Munitions, Artillery, and Non-Combat Explosives (3) and (5) (G.B.1.3, 5). See Sections C.I.4: Experienced specialist for firearms and D.I.4: Experienced specialist evaluation of small arms ammunition for detailed information.

Objects evaluated and determined to be inert, unloaded, and/or solid metal are managed as regular museum objects. *If* proposed for deaccessioning, *then* all deaccessioning actions must be processed in accordance with *MH* II.6: Deaccessioning.

There are currently few training options for identification and safe management of these types of objects. Contact the regional curator, WASO Museum Management Program, and/or regional or WASO Office of Risk Management for information. Parks with similar collections should pursue joint training.

3. *Responding to risk*

Advanced planning, evaluation, and taking appropriate action based on risk level are critical for life safety and protection of collections and structures.

Take safe and appropriate action(s) based on risk level, as determined by the DOD EOD unit, accredited bomb squad, or experienced specialist.

Arrange for evaluations and determine the safest course of action for munitions in consultation with the DOD EOD unit, accredited bomb squad, *and* the park, zone, or regional safety manager, regional curator, park structural fire coordinator, and park or regional Chief Ranger. Actions will vary by object type, condition, number, location, and other factors. They range from restricting access to storage or exhibit areas, to building evacuation, to contacting the DOD EOD unit or accredited bomb squad to transport a live munition away from the building for inerting or disposal.

Note that USMC EOD units are experienced in working with and preserving museum munitions if safe to do so. If a USMC or other DOD EOD unit is not immediately available to respond to a discovery of live munitions, then work with an accredited bomb squad.

Consult with the park, zone, or regional safety manager to determine if Job Hazard Analyses (JHAs) are needed.

See Sections E.I.3: Who can evaluate munitions, render live munitions inert, and dispose of munitions and E.I.6: Accredited bomb squad procedures for live munitions (MECs), as well as Chapter 10: Emergency Planning for additional planning guidance. See also Marine Corps Order 3571.2G: Explosive Ordnance Disposal (EOD) Program.

4. Phased approach for managing museum firearms, small arms ammunition, munitions, artillery, and non-combat explosives

Use a *phased approach based on level of risk*. Address high-risk categories such as munitions, artillery, and non-combat explosives first, followed by lower-risk categories such as small arms ammunition and firearms. Curator takes the following steps.

- **Know the collection**
  Review accession and catalog records and generate a safety data list of *all* munitions, artillery, non-combat explosives, small arms ammunition, and firearms in the collection. Include uncataloged and misidentified or misspelled items. Record legacy USMC EOD unit inert certifications or written verification documents that the munitions are inert from other DOD EOD units or accredited bomb squads. Update safety data as steps below are completed.

- **Visually inspect all munitions, artillery, non-combat explosives, small arms ammunition, and firearms**
  Verify presence or absence of objects within each type and note condition.

  Limit access until evaluated.

  For munitions, if a condition change such as leaking fluid or new bulging is noted, see Section E.I.2: Potential safety risks of munitions and when an emergency response is needed.

DO NOT touch, handle, move, or attempt to inert munitions.

- **Assess historical significance of munitions, artillery, and non-combat explosives**
  Complete the NPS Historical Significance Contributing Factors Tool ("Tool") (Figure G.6) to assess historical significance of munitions, artillery, and non-combat explosives that will be proposed for inerting, in consultation with the Collections Advisory Committee (CAC).

  Submit completed Tool as part of a Park Inerting Request Package ("Request Package") for regional director concurrence through the regional curator to inert munitions and non-combat explosives and unload artillery with historical significance.
  See Section A.6: Park Inerting Request Package for regional director concurrence.

- **Evaluate munitions and artillery status (live, loaded, solid metal, unloaded, or inert) and determine appropriate action**
  Contact a DOD (USMC or other) EOD unit or accredited bomb squad to evaluate and determine if munitions in storage and on

exhibit, or loaded in artillery, are live or inert once the regional director has concurred with Park Inerting Request Package. See Section E.I.3: Who can evaluate munitions, render live munitions inert, and dispose of munitions.

The DOD EOD unit or bomb squad takes appropriate action, such as implementing render safe procedures until final disposition of the munition is determined, in consultation with the NPS park, zone, or regional safety manager and curator. USMC EOD unit renders live munitions inert *if safe to do so*, and returns to park collection. See Figure G.1: Munitions Retention or Deaccession Decision Matrix.

- **Evaluate status (live or inert) of non-combat explosives and determine appropriate action**
  Contact a trained and licensed certified blaster to evaluate and identify if non-combat explosives are live or inert, *and* determine if safe to render inert. If not safe to inert, then dispose in accordance with certified blaster recommendations, in consultation with the park, zone or regional safety manager and curator. Process and document deaccessioning actions in accordance with *MH* II.6: Deaccessioning.

  Certain stable non-combat explosives such as fireworks pose a lower safety risk. To be retained live in the collection, these objects *must* be stored in a locking, fire-resistant magazine in a collection storage space.

- **Assess and evaluate small arms ammunition and determine appropriate action**
  After addressing munitions and artillery, address small arms ammunition.

  Arrange for an experienced specialist to evaluate and identify small arms ammunition status (live, solid metal, or inert), *and* determine if it is safe to:

  – *Retain* live small arms ammunition and store in a locking, fire-resistant magazine or anti-static box in a collection storage space.

  or

  – *Inert* unstable small arms ammunition that cannot be safely stored live, *if* safe to do so. If not, then follow procedures in *MH* II.6: Deaccessioning.

  Curator documents evaluation and inerting or safe storage using the Museum Small Arms Ammunition Evaluation and Mitigation Record (Figure G.10). Submit the completed Record to the regional curator, and include copies in park museum and central files. A Park Inerting Request Package is *not* required for small arms ammunition.

- **Evaluate and unload firearms**
  After addressing small arms ammunition, work with an experienced specialist to evaluate and identify loaded firearms, *and* unload loaded firearms.

- **Safely house objects**
  Safely store unloaded firearms and artillery, inert or solid metal small arms ammunition, and inert munitions and non-combat explosives in dedicated, secure storage in a stable environment. Safely store stable live small arms ammunition and lower-risk non-combat explosives such as fireworks and flares in a fire-resistant magazine or anti-static box in accordance with this appendix.

- **Deaccessioning considerations**
  Objects evaluated and determined to be inert, unloaded, and/or solid metal are managed as regular museum objects. *If* proposed for deaccessioning, *then* determine if the objects may be deaccessioned under the categories authorized by law and in accordance with *MH* II.6: Deaccessioning. The park submits the Tool (Figure G.6) together with evaluation, status determination, and deaccession documents to the regional curator for review of the proposed action. Regions may convene a committee to consider the proposed actions. The committee should include a curator, archeologist, historian, and/or other subject matter experts as appropriate.

- **Update information**
  Keep assessment and evaluation information current. Update safety data on munitions, artillery, non-combat explosives, small arms ammunitions, and firearms. Include annual updates in the Collections Management Report (CMR), in Section IV "Noteworthy Accessions, Deaccessions, & Other."

See *MH* I Chapters 4: Museum Collections Environment, 6: Handling, Packing, and Shipping, 7: Museum Collections Storage, and 9: Museum Fire Protection.

5. *NPS Historical Significance Contributing Factors Tool*

The NPS Historical Significance Contributing Factors Tool (Figure G.6) includes factors relating to park purpose, context, values (associational, evidential, intrinsic, informational), rarity, and documentation that supports the significance of an object to the park, its mission, and the museum collection. The Tool cannot be modified.

The Tool ***must*** be completed to assess the historical significance of each object or lot of munitions, artillery, or non-combat explosives included in the Park Inerting Request Package. The CAC must concur with the Tool.

6. *Park Inerting Request Package for regional director concurrence*

The *park curator* must convene the *Collections Advisory Committee* (CAC) to complete the Tool to determine which objects have historical significance and should be rendered inert or unloaded for retention in the park collection if safe to do so. See *Museum Handbook* Part II, Appendix B: Collections Advisory Committee for CAC composition, and include a historian, interpretive ranger, and/or archeologist with relevant subject matter expertise as appropriate.

The CAC must concur with the Park Inerting Request Package for each object or lot of munitions, artillery, and/or non-combat explosives

proposed for inerting. The curator submits each park Package to the superintendent for approval.

Parks must submit the completed Park Inerting Request Package(s) to the regional director through the regional curator. Inerting requests must be concurred by the regional director.

- Each park Request Package includes:

  - cover memo and signature page (Figure G.5: Park Inerting Request Package Cover and Signature Page)
  - completed NPS Historical Significance Contributing Factors Tool (Figure G.6)
  - list of objects with historical significance proposed for retention in the collection
  - inerting justification (Figure G.7: Park Inerting Justification (Sample)), with CAC concurrence and superintendent approval

The *regional curator* compiles park submissions and coordinates a *regional review panel* comprised of subject matter experts such as an archeologist and historian. The panel reviews each Request Package and makes an inerting recommendation. The panel documents recommendations using a Regional Panel Inerting Request Review (see Figure G.8: Regional Panel Inerting Request Review (Sample)). Submission, review, and contact processes may vary by region.

If the panel concurs with the Park Inerting Request, the regional curator forwards the Request Package and Regional Panel Inerting Request Review to the regional director for review and concurrence. Panel concurrence *does not* ensure regional director concurrence.

If the regional panel *does not* concur with the Park Inerting Request, the Request Package is returned to the park for revision and resubmission.

If the regional director concurs with a Park Inerting Request, the regional curator notifies the park and returns a copy of the completed Package to the park. The *park and/or region* then contacts and coordinates with a DOD EOD unit or accredited bomb squad to schedule an evaluation of munitions, artillery, and non-combat explosives, to determine if they can be safely rendered inert.

If the *regional director does not concur* with a Park Inerting Request for historically significant munitions, artillery, and non-combat explosives, the Associate Director, Cultural Resources, Partnerships, and Science Directorate and Associate Director, Visitor and Resource Protection should convene a panel to review the Request Package and make a recommendation. The panel should include a curator, archeologist and/or historian, safety manager, park structural fire coordinator and/or regional structural fire manager (marshal), solicitor, USMC EOD unit representative, and/or other subject matter experts.

As regional director concurrence is not required for inerting small arms ammunition, a Park Inerting Request Package is *not* required for these objects.

Section II. Documentation

1. *Scope of Collections Statement*

The Scope of Collections Statement (SOCS) must include language that establishes an appropriate number, range, or representative sample of firearms, small arms ammunition, munitions, artillery, and non-combat explosives for inclusion in the collection. Make this determination in consultation with the CAC that includes a historian and an archeologist with relevant subject matter expertise.

2. *Accessioning*

Do not accession live munitions or non-combat explosives, loaded artillery, or loaded firearms into the collection. The potential source of accession (such as donor or field collector) is responsible for arranging the following processes.

- Firearms and artillery ***must*** be unloaded and munitions ***must*** be inerted ***before*** being considered for accessioning into the collection.
- Obtain a USMC EOD unit inert certification *or* other DOD EOD unit or accredited bomb squad verification document for munitions, in consultation with the regional curator, park or regional archeologist, historian, park or regional Chief Ranger or law enforcement, and park, zone, or regional safety manager.
- Schedule evaluations for new accessions, and take appropriate action as determined by the DOD EOD unit, bomb squad, or experienced specialist.
- Small arms ammunition being considered for accessioning ***must*** be stored in a locking fire-resistant magazine or anti-static box until the decision to accession is made. If accessioned, live small arms ammunition ***must*** be stored in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (5) (G.B.1.5).
  See Section D.II.2: Safe storage of small arms ammunition.
- Fieldwork permit and/or authorization needs to follow guidance in NPS Archeology Guide: Developing Explosives Field Safety Response Plans for Military and Commercial Explosives Encountered in National Park Units (*under development*) and include the following language:
  - *Munitions* recovered during fieldwork that will be considered for inclusion in the collection are to be rendered inert and artillery unloaded by a USMC EOD unit *before* accessioning. If recovered live munitions *cannot* be rendered inert by USMC, they ***will not*** be accessioned into the collection, and ***cannot*** be

stored in a structure housing collections.
(NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (4) (G.B.1.4)).

- *Small arms ammunition* that will be considered for inclusion in the collection ***must*** be evaluated by an experienced specialist to identify if live or inert *before* accessioning. Store in a locking fire-resistant magazine or anti-static box until evaluated.
- *Guidance on representative sampling* for firearms, small arms ammunition, munitions, artillery, and non-combat explosives to be included in the collection.

See Sections C.II.2: Safe storage of firearms and D.II.2: Safe storage of small arms ammunition.

3. *Retention and deaccession considerations for munitions*

Make every effort to retain inert munitions in the collection ***if safe to do so***, particularly if rare, unique, novel, or limited in production. These objects are important for education, interpretation, and research. Ensure that all NPS "museum objects are treated in a careful and deliberate manner that protects the public interest", in accordance with the Museum Properties Act of 1955 (54 USC 1025.102504).

If the DOD EOD unit or accredited bomb squad determines that a munition *cannot* be safely inerted and retained in the collection, ***then*** deaccession and dispose in accordance with *MH* II.6: Deaccessioning.

Complete the following before taking any deaccession and disposal actions.

- Submit Park Inerting Request Package, including the completed Tool, and obtain regional director concurrence.
- DOD EOD unit or accredited bomb squad evaluates and determines that a munition is live and *cannot* be safely inerted.
- Park curator consults with regional curator about the proposed deaccession and disposal actions.
- Process and document in accordance with *MH* II.6: Deaccessioning, and NPS Personal Property Handbook #44 Section 8: Survey Procedures. For archeologically recovered materials, see 43 CFR 7: Protection of Archeological Resources and 36 CFR 79: Curation of Federally Owned or Administered Archeological Collections as amended May 2022.

Then, take action in accordance with Figure G.1: Munitions Retention or Deaccession Decision Matrix below.

If the munition…	*Then…*
Does not pose an explosion risk, *and* is within the park's Scope of Collections Statement,	Retain in the collection (do not deaccession).
Does not pose an explosion risk, *and* is outside the park's Scope of Collections Statement,	Deaccession by transfer, exchange, or conveyance in accordance with *MH* II.6: Deaccessioning.
Poses an explosion risk and is within the Scope of Collections Statement, *and* EOD unit or bomb squad *can* safely render inert,	Render inert and return to the collection.
Poses an explosion risk and is within the Scope of Collections Statement, *and* EOD unit or bomb squad *cannot* safely render inert,	Deaccession and dispose in accordance with *MH* II.6: Deaccessioning.
Does not pose an explosion risk *and* is outside the Scope of Collections Statement *and* has "no scientific, cultural, historic, educational, esthetic, or monetary value" in accordance with The Museum Properties Act of 1955 (54 USC 1025.102503(i)),	Deaccession by transfer, exchange, or conveyance in accordance with *MH* II.6: Deaccessioning.
Poses an explosion risk and is outside the Scope of Collections Statement *and* has "no scientific, cultural, historic, educational, esthetic, or monetary value" in accordance with The Museum Properties Act of 1955 (54 USC 1025.102503(i)),	Deaccession and dispose in accordance with *MH* II.6: Deaccessioning.

Figure G.1. Munitions Retention or Deaccession Decision Matrix

4. *Other deaccessioning considerations*

Firearms, small arms ammunition, artillery, and non-combat explosives evaluated and determined to be inert, unloaded, and/or solid metal are managed as regular museum objects. *If* proposed for deaccessioning, *then* determine if they may be deaccessioned under the categories authorized by law and in accordance with *MH* II.6: Deaccessioning. The park submits the Tool (Figure G.6) together with evaluation, status determination, and deaccession documents to the regional curator for review of the proposed action. Regions may convene a committee to consider the proposed actions. The committee should include a curator, archeologist, historian, and/or other subject matter experts as appropriate.

5. *Documentation*

Update the accession and catalog records and safety data after completing actions in this appendix. Retain completed copies of the following in the accession and/or catalog folder and park central files, and create an inerting file as needed.

- Completed Park Inerting Request Package(s) and Regional Panel Inerting Request Review (Figure G.8), including regional director concurrence.
- Museum Firearms Evaluation and Unloading Record (Figure G.9).
- Museum Small Arms Ammunition Evaluation and Mitigation Record (Figure G.10).
- Museum Munitions and Artillery Evaluation and Inerting Record (Figure G.11).
- EOD unit or accredited bomb squad-generated documents such as:
  - Inert certification by USMC EOD unit, with photographs and description of inerting procedures.
  - Written confirmation by DOD EOD unit or accredited bomb squad that a munition was evaluated as inert or solid metal.
  - Render safe procedures documentation by accredited bomb squad.
  - Memorandum of record documenting destruction by EOD unit or accredited bomb squad if a munition cannot be safely inerted.

  See Section E.I.9: Inert certification and other verification documents for required information.
- Loan agreements such as for inerting away from the park, if applicable, in accordance with *MH* II.5: Outgoing Loans.
- Deaccession and disposal documentation, in accordance with *MH* II.6: Deaccessioning.
- Include a brief description of updates in the CMR, Section IV "Noteworthy Accessions, Deaccessions, & Other."

B. Museum Standards, Laws, and Regulations

1. *NPS Museum Standards for Firearms, Small Arms Ammunition, Munitions, Artillery, and Non-Combat Explosives*

Implement NPS Museum Standards for firearms, small arms ammunition, munitions, artillery, and non-combat explosives in collections storage and on exhibit.

1. Firearms, small arms ammunition, munitions, artillery, and non-combat explosives must be stored in a secure and dedicated museum collections storage space separated from curatorial office, research/reference, and work areas.

2. A US Marine Corps or other Department of Defense (DOD) Explosive Ordnance Disposal (EOD) unit or accredited Public Safety Bomb Squad must evaluate military munitions and artillery to determine if live or loaded with live munitions. An experienced specialist must evaluate firearms and small arms ammunition to determine if loaded or live.

3. Firearms
   (a) Loaded firearms must be unloaded or cleared of ammunition. Modern firearms must be rendered inoperable before exhibiting. An experienced specialist must complete these processes.
   (b) Firearms must be stored in locking museum-quality cabinets or gun safes separately from other objects.
   (c) Unloaded and inoperable firearms must be exhibited in secure, locking exhibit cases.
   (d) Loaded firearms must not be accessioned into the collection.

4. Military Munitions and Artillery
   (a) Live military munitions must be rendered inert and loaded artillery must be unloaded if safe to do so. USMC EOD unit renders munitions inert if safe to do so and provides inert certification. DOD EOD unit or accredited Public Safety Bomb Squad determines final disposition of the munition in consultation with NPS park, zone, or regional safety manager and curator.
   (b) Staff must not handle, move, transport, or attempt to deactivate or dispose of live munitions or loaded artillery. Restrict access to live munitions and loaded artillery until final disposition.
   (c) Inert munitions must be exhibited in secure, locking exhibit cases.
   (d) Live munitions and loaded artillery must not be accessioned into the collection.
   (e) Munitions that have been rendered and certified inert, and that are no longer hazardous, and any artillery that has been unloaded, remain NPS museum property. They must be returned to the NPS museum collection as they are historic objects that must be conserved (preserved) in accordance with the Organic Act, 54 USC 100101 and 100701, and, in some cases, the National Historic Preservation Act, the Archaeological Resources Protection Act or park-specific statutes, regulations, and executive orders.

5. Small Arms Ammunition
   (a) An experienced specialist must determine if live small arms ammunition may be safely retained live in the collection or rendered inert.
   (b) Live small arms ammunition must be stored in a fire-resistant magazine and/or anti-static box in a locking cabinet, separate from firearms and other objects.
   (c) Inert small arms ammunition must be exhibited in secure, locking exhibit cases. Live small arms ammunition cannot be exhibited.

6. Non-Combat Explosives
   (a) Live non-combat explosives must be rendered inert if safe to do so. A trained and licensed certified blaster must complete this process. Certified blaster determines final disposition of the explosive in consultation with NPS park, zone, or regional safety manager and curator.

(b) NPS museum staff must not transport live non-combat explosives under any circumstance. Restrict access to live non-combat explosives until final disposition.
(c) Live lower-risk non-combat explosives such as fireworks and flares must be stored in a fire-resistant magazine and/or anti-static box in a locking cabinet.
(d) Inert non-combat explosives must be exhibited in secure, locking exhibit cases. Live non-combat explosives must not be exhibited.
(e) Live non-combat explosives must not be accessioned into the collection. Lower-risk non-combat explosives such as fireworks and flares may be only be accessioned live if stored in a fire-resistant magazine and/or anti-static box.

7. Append Emergency Response Steps: Suspected Live Munitions in the Collection to the Museum Collections Emergency Operations Plan (MCEOP) and park Emergency Operations Plan.

8. Museum firearms, small arms ammunition, and artillery must not be loaded and fired in public programs, Historic Weapons programs, and demonstrations. Historic Weapons Program materials, including black powder, must not be housed in or near collections storage and museum exhibits.

2. *Federal laws and regulations for firearms, small arms ammunition, munitions, and artillery*

The following federal laws and regulations are pertinent to the management of museum firearms, small arms ammunition, munitions, and artillery.

- NPS *Organic Act of 1916* (54 USC 100101) "The Secretary, acting through the Director of the National Park Service, shall promote and regulate the use of the National Park System by means and measures that conform to the fundamental purpose of the System units, which purpose is to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

- *Museum Properties Act of 1955* (54 USC Chapter 1025: Museums), as amended.

- *Gun Control Act of 1968* (18 USC Chapter 44) (GCA): The GCA regulates transportation, shipping, receipt, possession, and importation of firearms and ammunition.

  Federal (NPS) or state-owned firearms and ammunition are *not* subject to the GCA (18 USC 925). However, the GCA *does apply* to NPS museum firearms and ammunition when transported or shipped to or from non-federal or non-state entities, such as a non-federal museum or private conservation organization.

- *National Firearms Act* (26 USC 5841 – 5849) (NFA): The NFA regulates registration of certain types of items (referred to as "NFA items" or "NFA firearms" in this appendix), such as rifles and shotguns with barrels of certain sizes, machine guns, silencers, and destructive devices (which also generally include artillery) into the National Firearms Registration and Transfer Record (NFRTR).

  Federally (NPS) -owned firearms are *exempt* from NFA registration requirements. NPS collections can therefore include both registered and unregistered NFA items.

- Occupational Safety and Health Administration (OSHA) Regulations *(29 CFR 1910 Section 109: Explosives and Blasting Agents)* regulate storage of hazardous munitions and non-combat explosives.

- International Fire Code, Chapter 56: *Explosives and Fireworks* and National Fire Protection Association code, *NFPA 495: Explosive Materials Code* includes guidance for storage of small arms ammunition, hazardous munitions and non-combat explosives.

- Department of Transportation (DOT) *Hazardous Materials Regulations* (HMR) (49 CFR 171 – 180) regulates packing, transportation, and shipment of hazardous materials, including small arms ammunition, munitions and non-combat explosives.

  The DOT HMR *does not* regulate firearms and artillery, which are instead regulated by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF).

- *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) (42 USC 9601 *et seq.*) governs releases and threatened releases of hazardous substances into the environment. See also 42 USC 9601(14)(C): Definitions.

- Defense Environmental Restoration Program, *10 USC 2701(c)(1): Responsibility for Response Actions* governs DOD responsibility to respond to the release of hazardous substances or pollutants and contaminants under the jurisdiction of DOD.

- *Resource Conservation and Recovery Act* (RCRA) (42 USC 6901 *et seq.*) gives the Environmental Protection Agency (EPA) the authority to control hazardous waste, including regulation of its generation, transportation, treatment, storage, and disposal.

- *EPA Military Munitions Rule: Hazardous Waste Identification and Management; Explosives Emergencies; Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties* (MMR) (40 CFR 266, Subpart M) specifically regulates DOD's responsibilities for response when military munitions must be managed as a solid waste or hazardous waste.

- *43 CFR 7: Protection of Archeological Resources* and *36 CFR 79: Curation of Federally Owned or Administered Archeological Collections* as amended May 2022.

- *Sunken Military Craft Act of 2004* (H.R. 4200) and *Final Rule 32 CFR 767* regulates the preservation and protection of sunken military craft that lie within U.S. waters.

3. NPS Policy

NPS Personal Property Management Handbook #44.9.2: Museum Collection Firearms and Ammunition
"Museum collection firearms and ammunition are managed in accordance with the NPS *Museum Handbook*. Firearms and ammunition, acquired for museum exhibits and research purposes, are not intended for use as operational firearms."

NPS Safety Alert: Discarded Military Munitions and Unexploded Ordnance, dated February 10, 2022
"No NPS employee or volunteer is authorized to inert a munition under any circumstance."

C. Museum Firearms

Section I. Evaluating and Unloading Museum Firearms

Implement procedures in this section in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (2) and (3) (G.B.1.2-3).

1. How firearms are defined in this appendix

Firearms are weapons designed to expel a projectile by the action of explosive and expanding gasses. See 27 CFR 447.11: Importation of Arms, Ammunition, and Implements of War and 27 CFR 478.11: Commerce in Firearms and Ammunition for definitions.

Museum firearms may include handguns such as derringers, pistols and revolvers, long arms such as carbines, muskets, rifles, and shotguns, and other similar small-caliber weapons or "small arms" carried and operated by an individual. They may include *machine guns* as defined in 27 CFR 279.11: Machine Guns, Destructive Devices and Certain Other Firearms.

Antique firearms are defined in 27 CFR 478.11 as: "(1) **Any firearm** (including any firearm with a matchlock, flintlock, percussion cap, or similar type of ignition system) **manufactured in or before 1898**; [*emphasis added*]" or "(2) any **replica** [*emphasis added*]…" of such a firearm.

Note that while "antique firearms" generally refers to any firearm manufactured in or before 1898, there are certain exceptions under the GCA. These include exceptions cited in paragraph (3) of 27 CFR 47.8.11, *and* those "designed or redesigned for using …fixed ammunition" (26 USC 5845(g)).

Antique firearms are considered regular museum objects for shipping and transportation, and *are not* subject to the GCA (18 USC Chapter 44) and NFA (26 USC Chapter 53).

"*Modern*" firearms are those manufactured **after 1898**. Modern firearms owned (title) by private individuals and/or entities are subject to the GCA and NFA for shipping and transportation.

A firearm is composed of *component parts* such as a barrel, trigger set, stock, lock, bolt, and firing pin. These parts are not generally considered firearms when disassembled. The "*frames* or *receivers* of such weapons" as per 27 CFR 278.12: Definition of Frame or Receiver (including those of machine guns), usually carry a serial number. Frame and receivers *are* considered firearms and are subject to the GCA (18 USC (a)(3)(b)) and NFA, (26 USC 5845 (b)) even when not attached to other component parts. This includes welded, corroded, and permanently inoperable frames and receivers.

GCA and NFA definitions of firearms do not distinguish between handguns or long arms. The NFA's more limited scope generally targets firearms larger than handguns.

2. *Potential safety risks of firearms*

Firearms do not pose an explosion risk. If loaded firearms are fired, they pose a risk of injury or death from expelled ammunition. Unloaded firearms do not pose a safety risk. For safety purposes, ***treat every firearm as though it is loaded***, even those identified as unloaded.

Firearms bayonets pose an injury risk if handled incorrectly.

Note that any firearm, loaded or unloaded, proposed for deaccessioning is subject to *MH* II.6: Deaccessioning and the laws and regulations outlined in this appendix.

3. *Steps to evaluate and unload firearms*

The curator takes the following steps:

- Establish and maintain safety data on firearms, including review of legacy documentation of status.
- ***Visually*** confirm presence of the firearm, but ***do not*** handle or touch. Restrict access until evaluated by an experienced specialist. (See Section C.I.4 below).
- Arrange for an experienced specialist to evaluate, identify and unload loaded firearms, *and* render modern firearms inoperable if going on exhibit. This evaluation will involve handling by the specialist, and must take place in a safe location away from the collection, staff, and visitors.
  - If work is done away from the park, process the loan in accordance with Section C.III: Moving Museum Firearms for

Accession, Transfer and Loan and *MH* II.5: Outgoing Loans. Return firearms to the collection after work is completed.

  - Consult with a conservator to determine an appropriate course of action if the process of unloading is likely to damage a firearm.

- Document processes on the Museum Firearms Evaluation and Unloading Record (Figure G.9). Update accession and catalog records and safety data list.

- Tag firearms and store and number removed parts in accordance with Section C.II.2: Safe storage of firearms.

See *MH* II.5, Sections C.9: Must I require insurance for outgoing loans to U.S. Government agencies?, 10: Should I require non-federal borrowers to insure the objects in an outgoing loan?, and 11: Should I require non-NPS conservators to have insurance?

4. *Experienced specialist for firearms*

Only a specialist with considerable experience and expertise in museum firearms, or in modern, antique and/or "historic" firearms, is considered qualified to evaluate and unload firearms and render modern firearms inoperable. The individual may be an NPS or federal employee, non-federal museum staff, contractor, or member of a private organization. At this time, there is no certification of expertise for museum firearms. Consult with a conservator if the firearm is not in good condition.

Consult with the regional curator and other parks and museums with firearms collections to locate a qualified experienced specialist such as:

- *Curator* with specialized knowledge and experience in museum firearms.

- *Park or regional Chief Ranger*, if a commissioned officer, or *park law enforcement* is required to complete NPS firearms qualification courses for operational firearms in accordance with RM-9.8: Firearms Training and Qualifications, and may be able to unload and render inoperable certain modern museum firearms.

- *Park, zone, or regional safety manager*, if a commissioned officer, may be able to unload and render inoperable certain modern museum firearms.

- *NPS Historic Weapons Program Regional Inspectors* are certified to identify and safely handle reproduction 18th, 19th, and 20th-century weapons, and manage black powder.

- *Armorers and gunsmiths*, defined in 27 CFR 478.11 as persons who engage in "trade or business with the principal objective of livelihood and profit," are licensed by ATF to engage in the firearms trade.

Note that the experienced specialist for firearms is likely to also be experienced working with small arms ammunition.

See Sections C.III.2: Licensing and D.I.4: Experienced specialist evaluation of small arms ammunition.

5. *Museum Firearms Evaluation and Unloading Record*

The Museum Firearms Evaluation and Unloading Record (Figure G.9) documents the processes of evaluating and unloading firearms. The curator completes the Record in collaboration with the experienced specialist, park or regional Chief Ranger, and park, zone, or regional safety manager. Include a completed copy in the accession and/or catalog folder and update the catalog record. File in the park central and museum files and provide a copy to the regional curator.

Section II. Managing Firearms in the Collection

1. *Safe handling of firearms*

Proper handling of firearms reinforces safe habits and reduces risk of negligent discharge, injury or death. Practice safe handling in accordance with Chapter 6: Handling, Packing, and Shipping and:

- **Practice safe handling *at all times*:**
  - treat *every* firearm as though it is loaded, even those identified as unloaded
  - *always* keep firearm muzzle pointed in a safe direction, away from individuals or objects
  - always keep finger *off* the trigger and outside the trigger guard
- Always wear nitrile gloves when working with firearms.
- Ensure adequate space is available *before* moving. Pad surface of cart or container to prevent shifting.
- Handle one firearm at a time. Hold with both hands.
- Provide support and cushion when moving.
- *Do not* hold a long arm solely by the stock wrist, as this may cause the stock to separate from the barrel.
- *Never* handle or hold a firearm by an attached bayonet.

See 29 CFR 1910.133: Eye and face protection and ATF Learn About Firearms Safety and Security website.

2. *Safe storage of firearms*

Store firearms in a locking, fire-resistant gun safe or cabinet in a secure, dedicated collections storage space separated from curatorial office, research/reference, and work areas in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (1) (G.B.1.1):

- Store *unloaded* firearms separately from other objects and:

- tag firearms and label cabinet "Unloaded Firearm(s)" for ease of identification and to reduce handling
- number removed parts (such as those removed when rendering inert) in accordance with *MH* II: Museum Records

- Store *long arms* such as muskets and rifles vertically or horizontally, depending on condition. Support and secure with foam-padded mounts to prevent tipping.

- Cavity pack or support *handguns* with museum-quality materials to prevent movement in drawers.

- Store firearms separately from leather cases, holsters, slings and other accoutrements, and bayonets. Number and tag each object in accordance with *MH* II Appendix J: Marking.

- Work with the experienced specialist to identify *loaded* firearms whose ammunition *cannot* be removed due to corrosion or damage. Store securely in a locking cabinet or gun safe and:

  - do not comingle if storing loaded firearms in the same cabinet or gun safe as unloaded firearms
  - tag loaded firearms and label the gun safe "Loaded Firearms" for ease of identification and to reduce handling
  - consult a conservator for treatment options

- To determine appropriate storage for firearms containing mixed materials such as inlaid bone or ivory, precious metals, or paint embellishments, see Chapter 4: Museum Collections Environment and Appendix N: Curatorial Care of Wooden Objects. For further information, consult with the regional curator.

3. *Exhibiting firearms*

Do not exhibit loaded firearms. Firearms can ***only*** be exhibited after evaluation and unloading. Modern firearms must be rendered inoperable before being exhibited.

Exhibit firearms in secure cases with hardware such as keyed locks and security screws that are fully functional and checked regularly. Display using secure mounts. Photograph rare historic firearms for research and education, and make available online.

4. *Rendering modern firearms inoperable for exhibit*

Modern (post-1898) firearms must be *rendered inoperable* before being exhibited, in addition to unloading. An experienced specialist ***must*** conduct this process.

Only use reversible procedures, such as removing component parts such as the firing pin to make the weapon incapable of firing. *Do not* weld cylinders shut, destroy the trigger mechanism, or make any other permanent and irreversible alteration to the firearm. Reassemble the firearm when returning to storage. In rare cases, rendering a modern

firearm inoperable will irreparably damage or destroy the firearm. In these instances, *do not* exhibit the firearm or render it inoperable, and retain in storage.

5. *Controlled property inventory of museum firearms*

Museum firearms, including stripped (disassembled) frames and receivers, ***must*** be designated as controlled property and subject to an annual 100% inventory in accordance with *MH* II.4: Inventory and Other Special Instructions. Other loose (disassembled) component parts such as bolts or locks are not subject to controlled property requirements, as they are not considered firearms under the GCA and NFA.

6. *Prohibition on firing museum firearms and ammunition in demonstrations*

Museum firearms and ammunition ***must not*** be loaded and fired in programs and demonstrations such as the Historic Weapons Program, in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (8) (G.B.1.8) and DO 6.8.9: Museum Objects.

Section III. Movement of Museum Firearms for Accession, Transfer and Loan

In this appendix, "move" or "movement" of firearms encompasses physical movement for various purposes. It includes *receiving*, such as accession or loan. Movement may be completed via *transportation by NPS staff* or *mailing* or *shipping by a third party*. It is regulated by variables such as manufacture date, title (ownership), licensing of entities, and firearm registration requirements.

Consult with the local ATF field office to determine applicable federal, state, and local laws and regulations that may apply to movement of firearms. ATF can advise on whether the GCA and/or NFA applies to a specific firearm or disassembled parts. For example, a privately-owned World War I machinegun is subject to the GCA *and* the NFA, while a privately-owned pistol from the same era is *only* subject to the GCA.

See Local ATF Offices listing and ATF Firearms Industry Programs Branch (FIPB).

1. *Movement of museum firearms*

Antique firearms can be "moved" as regular museum objects, irrespective of ownership.

NPS, as a federal agency, can "move" *modern firearms* to and from federal agencies, state agencies, and private organizations (museums and conservation organizations), within state or out of state, for museum purposes.

Movement of modern firearms between federal agencies is *exempt* from GCA and NFA licensing and registration requirements, but is subject to certain other conditions. Follow all applicable federal, state, and local laws regarding movement of firearms.

See Figure G.2: Movement of Modern Firearms.

Movement:	***If*** a modern firearm is subject to the GCA…	***If*** a modern firearm is subject to the GCA *and* NFA (is a "NFA firearm")…
Can NPS send to a **federal agency** (NPS or other federal agency)?	*Yes* Neither federal agency requires a Federal Firearms License. (18 USC 925(a)(1))	*Yes* Registration of firearm in NFRTR is not required for federally owned firearms. (26 USC 5852(a))
Can NPS receive from a **federal agency** (NPS or other federal agency)?	*Yes* Neither federal agency requires a Federal Firearms License. (18 USC 925(a)(1))	*Yes* Registration of firearm in NFRTR is not required for federally owned firearms. (26 USC 5852(a))
Can NPS send to a **state agency**?	*Yes* Neither federal nor state agency requires a Federal Firearms License. (18 USC 925(a)(1))	*Yes*, if NPS-owned firearm is registered in NFRTR. "Only previously registered firearms may be lawfully transferred*." (ATF NFA Handbook 9.2) *If loaned*, state agency does not need to submit documentation to ATF. *If title is transferred*, state agency needs to submit documentation to ATF and a copy to NPS. (ATF NFA Handbook Section 9.4) *No*, if NPS-owned firearm is unregistered. Firearm cannot be loaned. If conservation is needed, the work must be conducted at the park. (See Section C.III.3: Registration in the National Firearms Registration and Transfer Record) (ATF NFA Handbook Section 9.2) *ATF defines "transfer" as "selling, assigning, pledging, leasing, loaning, giving away, or otherwise disposing of" (26 U.S.C. 5845(j)). NPS defines "transfer" as a "transfer [of] title and control" to another park or federal agency (MH II.2.L.1: What is a transfer?).
Can NPS receive from a **state agency**?	*Yes* Neither federal nor state agency requires a Federal Firearms License. (18 USC 925(a)(1))	*Yes*, if firearm is registered in NFRTR *and* sender submits documentation to ATF and a copy to NPS. If firearm is unregistered, state agency contacts ATF. (ATF NFA Handbook Section 9.4.3)
Can NPS send to a **private organization** (such as for conservation)?	*Yes* Private organization does not need Federal Firearms License, but it is recommended. (18 USC 923)	*Yes*, if NPS-owned firearm is registered in NFRTR. "Only previously registered firearms may be lawfully transferred*." (ATF NFA Handbook 9.2) *If loaned*, private organization does not need to submit documentation to ATF. *If title is transferred*, private organization needs to submit documentation to ATF and a copy to NPS. (ATF NFA Handbook Sections 9.4, 9.5.1, and 9.8) *No*, if NPS-owned firearm is unregistered. Per 26 U.S.C. 5845(j), unregistered NFA firearms cannot be transferred or loaned. If conservation is needed, the work must be conducted at the park. (See Section C.III.3: Registration in the National Firearms Registration and Transfer Record) (ATF NFA Handbook Section 9.2)

Can NPS receive from a **private organization**?	*Yes* Private organization does not need Federal Firearms License, but it is recommended. May be subject to applicable state and/or local licensing requirements. Contact local ATF field office for information.	*Yes* Sender must first submit documentation to ATF and copy to NPS. (ATF NFA Handbook Section 12.1)
Can NPS receive from a **private individual**?	*Yes* Private individual does not need Federal Firearms License. May be subject to applicable state and/or local licensing requirements. Contact local ATF field office for information.	*Yes* Sender must first submit documentation to ATF and copy to NPS. (ATF NFA Handbook Section 12.1)
Can NPS send to a **private individual**?	*Yes* if title is transferred. Private individual does not need Federal Firearms License. *No if loaned*, as NPS cannot make loans of any museum object to a private individual. (*MH* II.5.B.3)	*Yes,* if title is transferred. Private individual submits documentation to ATF and a copy to NPS. (ATF NFA Handbook Section 12.1) *No if loaned*, as NPS cannot make loans of any museum object to a private individual. (*MH* II.5.B.3)

Figure G.2. Movement of Modern Firearms

See Sections C.III.2: Licensing and 3: Registration in the National Firearms Registration and Transfer Record for additional information.

Consult with the local ATF field office if firearms are to be moved internationally.

***Note*:** NPS *cannot* send or receive any firearm from out of state that cannot be detected by metal detectors or X-ray detectors, as described in 18 USC 922(p). NPS cannot transfer firearms to an individual convicted of a misdemeanor crime of domestic violence as described in 18 USC 922(d)(9).

2. *Licensing*

ATF uses several types of Federal Firearms Licenses (FFLs) to regulate commerce in firearms, particularly for interstate commerce. Persons "engaged in the business of manufacturing, importing and/or dealing in firearms" must be licensed by ATF using an appropriate FFL. NPS should only make loans of firearms to private organizations such as *conservation labs* that have an appropriate FFL.

Some *private museums* with large firearms collections may maintain FFLs, as they are "engaged in the business" of firearms. If NPS makes a loan to a private museum that does not have a FFL, the museum must meet NPS outgoing loan conditions and all applicable laws and regulations. *Private individuals* (e.g., individual gun owners not in the firearms business) generally do not require FFLs. State and local firearms licensing requirements may vary.

NPS, other *federal entities,* and *state entities* are not "engaged in the business" of firearms and *do not* require a Federal Firearms License.

When a modern firearm subject to the GCA owned by a private organization or individual moves to the NPS, the private organization or individual must provide copies of appropriate federal, state, and/or local licenses to NPS for inclusion in the accession and/or catalog folder.

See ATF Types of Federal Firearms Licenses web page.

3. *Registration in the National Firearms Registration and Transfer Record*

The National Firearms Registration and Transfer Record (NFRTR) is "the central registry of all NFA firearms in the U.S. which are not in the possession or under the control of the U.S. Government. The registry includes (1) the identification of the firearm, (2) date of registration, and (3) identification and address of the person entitled to possession of the firearm (the person to whom the firearm is registered)" (ATF National Firearms Act Handbook, Section 3.1: The National Firearms Registration and Transfer Record).

NPS-owned NFA firearms *do not* need to have been registered in the NFRTR. For additional information, contact the local ATF field office.

NPS-owned (or other federally owned) NFA firearms

- NPS can "move" any NPS-owned NFA firearm, whether registered in the NFRTR or unregistered, to and/or from another NPS unit or another federal agency. For example, a park can send an unregistered NFA firearm to an NPS center for conservation work.

- When a private conservation organization or state agency returns a loan of an NPS-owned *registered* NFA firearm to NPS, the organization needs to complete ATF Form 5: Application for Tax Exempt Transfer and Registration of Firearm. Work with the contracting office to include this requirement in the Scope of Work.

- NPS *cannot* "move" *unregistered* NPS-owned NFA firearms to a non-federal entity (state agency or private organization). NPS museum firearms that have manufacturer's or importer's serial number removed, obliterated, or altered are subject to the same requirement (26 USC 5842).

  When NPS contracts with a private conservation organization or state agency to work on unregistered NFA firearms owned by NPS, work must be conducted at the NPS park or center, with an NPS employee present. The unregistered firearm must be housed in secure locking storage overnight if work exceeds one day. ATF Form 5: Application for Tax Exempt Transfer and Registration of Firearm is *not* required, as the firearm will not be "moved."

Non-federally owned firearms (private individuals and entities, and state and local governmental agencies)

- When offering an unregistered NFA item to NPS, the potential source of accession needs to consult with ATF before the offer can be considered. For NPS to receive (incoming loan or accession) an NFA item owned by a non-federal entity, the non-federal party must submit the forms listed below to ATF for approval and provide a copy of each approved form to NPS.

  - NFRTR proof of registration (ATF NFA Handbook Section 12.1: Maintaining proof of registration).
  - Application for Tax Exempt Transfer and Registration of Firearm, ATF Form 5 (5320.5).
  - Application to Transport Interstate or to Temporarily Export Certain NFA Firearms, ATF Form 5320.20, for interstate transport.
  - Owner needs to document each change of address as described in ATF Form 5: Application for Tax Exempt Transfer and Registration of Firearm. If the registered firearm is to be loaned to NPS, the owner must submit these forms to ATF *once* before sending to NPS, and then *a second time* when the loan is returned to the owner. If the registered firearm is donated to NPS, the owner must submit these forms to ATF *only once*.

- Work with park or local law enforcement to verify serial numbers of modern firearms against the National Crime Information Center Stolen Gun Database *before* accessioning.

See ATF National Firearms Act Division web page.

4. *Safe transportation of firearms by NPS staff*

Pack and ship museum firearms safely in accordance with Chapter 6: Handling, Packing, and Shipping.

NPS, as a federal agency, is exempt from most GCA provisions. ***For safety reasons***, NPS museum staff must transport firearms in accordance with 18 USC 926A: Interstate transportation of firearms. The firearm must be unloaded, and the firearm and ammunition must not be readily accessible from the passenger compartment of the vehicle. If the vehicle does not have a compartment separate from the driver's compartment, then the firearms or ammunition must be placed in a locked container other than the glove compartment or console.

5. *Mailing or shipping unloaded firearms by a third party*

Various commercial carriers have different requirements to mail or ship unloaded firearms. See USPS Publication 52.4.43: Firearms, United Parcel Service of America (UPS™) How to Ship Firearms or Ammunition, and FedEx How to Ship Firearms.

Do not mail or ship loaded firearms.

D. Museum Small Arms Ammunition and Mitigating Risk

Section I. Evaluating Small Arms Ammunition

Implement procedures in this section in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (2) and (5) (G.B.1.2, 5).

1. How small arms ammunition is defined in this appendix

Small arms ammunition in this appendix (referred to as "ammunition" in this section) includes bullets, cartridges and casings, shot, slug, and other ammunition such as Minié balls designed to be fired from the chamber of a firearm at high velocity. They may be present in cartridge boxes, bandeliers, and other containers, and may be intact or fired ("spent"). Note that commercial and military definitions of ammunition differ.

See 27 CFR 555.11: Definitions and 32 CFR 179: Definitions.

Intact cartridges or "rounds" of ammunition are made of paper, metal, or plastic. They contain a *bullet* (or "projectile"), usually made of metal-coated or solid lead. When the *primer* is struck by the firearm's firing pin, it ignites the black powder, smokeless powder, or other explosive propellant contained within the casing, causing the bullet to eject (see Figure G.3: Small Arms Ammunition Components). Certain types of antique ammunition such as musket balls were usually made of solid lead.

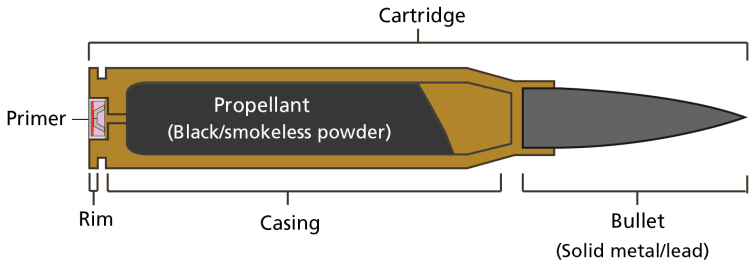

Figure G.3. Small Arms Ammunition Components

The components of an intact round of ammunition, such as black powder, may be used in scientific analyses to provide information on materials and compounds, processes and techniques, metallurgy, and others. For safety reasons, do not conduct chemical analysis on unstable and/or degrading black powder or similar components.

Modern (post-1898) ammunition over 0.50 caliber is generally regarded as a munition rather than small arms ammunition, based on the amount of explosive material and potential presence of a secondary explosive.

Antique (pre-1898) ammunition does not have a clear 0.50 caliber cutoff. For example, Civil War-era 0.69 caliber Springfield Model 1842 musket rounds do not pose an explosion risk despite their large size.

In *centerfire* ("fixed") ammunition, the primer, percussion cap, or other ignition source is separate from the cartridge or casing.

In *rimfire* ammunition, the ignition source is part of the casing.

Powder horns and other similar *containers* such as powder kegs that may contain black powder may be present in Revolutionary or Civil War collections.

Work with the experienced specialist, park, zone or regional safety manager and park law enforcement to determine if small arms ammunition and accessories such as powder horns containing black powder pose an explosion risk, and determine appropriate action(s).

2. *Potential safety risks of small arms ammunition*

Small arms ammunition does not pose a risk of self-detonation. If *loaded in and fired from* a firearm, it poses a risk of injury or death. Live ammunition stored by itself *outside a firearm and* directly exposed to fire will likely produce a loud "popping" sound and project at low velocity. This poses a *low safety risk* as well as a *fire risk*, both of which are mitigated by storage in a locking fire-resistant magazine or anti-static box.

Large quantities of small arms ammunition (net explosive weight over 50 pounds) pose an elevated risk due to the large quantity of explosive material present.

See Section D.II.2: Safe storage of small arms ammunition.

The following may pose additional risks:

- *Antique* (pre-1898) ammunition contains black powder and other compounds with the potential to combust if exposed to a spark or flame. Black powder in ammunition that has become damp and caked, or acclimated to high humidity or a submerged environment, poses an elevated ignition risk and may become volatile as it dries or is exposed to fluctuating humidity.

- *Modern* (post-1898) ammunition containing smokeless powder does not present an explosion risk. It may discharge at low velocity if exposed to fire or percussion if the primer is directly contacted.

- *Unstable* ammunition (antique or modern) may be corroding or leaking powder or fluid, and may pose a risk of injury when handled.

- *Primers* found separately from cartridges may combust if struck directly or exposed to fire or spark. The resulting heat and combustion may pose a fire hazard to adjacent objects.

- *Powder horns*, *powder kegs*, and other similar *containers* were not designed to explode. If these objects still contain black powder, they pose a combustion risk if exposed to fire or sparks.

- *Lead* and other toxic metals may be present in ammunition, even if inert or solid metal. Lead can corrode rapidly, forming a white powder that may be inhaled, ingested, or trapped in clothing. Consult with a conservator to determine an appropriate course of action.

See Chapter 11, Section E: Hazardous Objects in Collections and Appendix O: Curatorial Care of Metal Objects. See also NPS Submerged Resources Center, NFPA 495 Chapter 14: Small Arms Ammunition and Primers, Smokeless Propellants, and Black Powder Propellants, and Facts About Sporting Ammunition Fires.

3. *Steps to evaluate and mitigate small arms ammunition risk*

The curator takes the following steps:

- Establish and maintain safety data on small arms ammunition, including review of legacy documentation of status.

- Conduct an initial ***visual*** inspection of the ammunition. Note condition and photograph changes such as leaking powder or fluid or active corrosion.

- Limit access to ammunition until evaluated by the experienced specialist.

- Arrange for evaluation and appropriate action by an experienced specialist (See Section D.I.4 below). This process may involve handling by the specialist, and must be done in a safe location away from the collection, staff, and visitors. If work is to be done away from the park, process the loan in accordance with *MH* II.5: Outgoing Loans.

- *Experienced specialist evaluates* ammunition to identify status (live and stable, live and unstable, inert, or solid metal) and level of risk.

  Specialist determines *if safe to take appropriate action(s)* based on level of risk and potential to irreversibly damage the object, in consultation with the curator, park or regional Chief Ranger, and park, zone, or regional safety manager. These include:

  – Retain inert or solid metal ammunition.

  or

  – Retain stable live ammunition in a locking fire-resistant magazine or anti-static box (See Section D.II.2: Safe storage of small arms ammunition).

  or

  – Render unstable live ammunition inert *if* it will not cause irreversible damage, and return to collection.

  or

  – Deaccession and dispose of ammunition that *cannot* safely be

retained in accordance with *MH* II.6: Deaccessioning, and arrange for safe disposal.

- *Curator* takes the following steps after specialist determination:

  - Documents processes using the Museum Small Arms Ammunition Evaluation and Mitigation Record (Figure G.10) and updates accession and catalog records.
  - Inspects regularly and includes an inspection schedule in the ICMS Condition and Maintenance Cycle field.
  - Manage small arms ammunition that has been evaluated and determined to be *inert* or *solid metal* as a regular museum object.
  - Manage small arms ammunition evaluated and determined to be *live and stable*, and not a life safety risk in accordance with NPS Museum Standard for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (5) (G.B.1.5).

4. *Experienced specialist evaluation of small arms ammunition*

Only a specialist with considerable experience in safe handling and identification of antique ("historic") and modern small arms ammunition is considered qualified to evaluate museum small arms ammunition, identify status, and determine if live ammunition may be safely retained in the collection or rendered inert.

Work with the regional curator, park, zone or regional safety manager, park or regional Chief Ranger, and local ATF field office to identify an appropriate specialist for small arms ammunition.

See also Section C.I.4: Experienced specialist for firearms.

5. *Rendering small arms ammunition inert*

In rare cases, the experienced specialist may determine that a round of ammunition is too unstable to retain live, with inerting the only safe option for retention. This procedure can be dangerous and *must only* be done by the experienced specialist in a safe location away from the collection, staff, and visitors.

Return the remaining inert casing and bullet or projectile to the collection, as they are not an explosion or fire risk. Dispose of the removed powder and/or propellants in accordance with *MH* II.6: Deaccessioning.

Small arms ammunition must be rendered inert *before* it can be exhibited. Inerting involves *permanently and wholly* removing explosive components such as black powder and primer. As this process is irreversible and may damage or destroy certain historic ammunition, inert reproductions may be exhibited instead.

See *MH* III.1.C.5: What do I need to know about consumptive use?

6. *NPS Museum Small Arms Ammunition Evaluation and Mitigation Record*

The Museum Small Arms Ammunition Evaluation and Mitigation Record (Figure G.10) documents the processes of evaluating small arms ammunition and determining if it can be safely retained live in storage or rendered inert. The curator completes the Record in collaboration with the experienced specialist, park or regional Chief Ranger, and park, zone, or regional safety manager. Include a completed copy in the accession and/or catalog folder and update the catalog record. File in the park central and museum files and provide a copy to the regional curator.

Section II. Managing Small Arms Ammunition in the Collection

1. *Safe handling of small arms ammunition*

Implement safe handling practices in accordance with Chapter 6: Handling, Packing, and Shipping, including:

- Restrict handling and movement of small arms ammunition and components such as black powder that are sensitive to static electricity.
- Always wear nitrile gloves when working with small arms ammunition.
- Check for new signs of active deterioration *before* handling. If degradation or corrosion is noted, consult with the park, zone, or regional safety manager, regional curator, and a conservator. *Do not* handle visibly degrading or corroding small arms ammunition. Photograph changes in condition.
- Handle one at a time. Support using both hands.
- Cushion to prevent shifting when moving.
- Wash hands thoroughly after handling ammunition containing lead or other toxic metals. Use decontamination soap designed to remove heavy metal residues.

See NIOSH workplace safety and health site for lead.

2. *Safe storage of small arms ammunition*

Safely and securely store small arms ammunition in a dedicated museum collections storage space separated from curatorial office, research/reference, and work areas in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (1) (G.B.1.1).

Inert small arms ammunition

- Store inert and solid metal ammunition separately from firearms, in locking museum-quality containers and cabinets.

- Store empty shells and casings and solid metal projectiles, individually or in groups, in boxes or polyethylene bags. Wrap individually to prevent damage if multiples are housed together. Cavity pack or support to prevent shifting in cabinet drawers.

Live small arms ammunition

If the specialist determines that live ammunition is stable and may be safely retained, then:

- Store live small arms ammunition, including separate primers, in a secure, locking fire-resistant magazine or anti-static box within a locking cabinet *or* a separate Type II magazine in a stable environment, depending on quantity, in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (5) (G.B.1.5). Select a magazine in consultation with the park, zone or regional safety manager, park structural fire coordinator and/or regional structural fire manager (marshal), and park law enforcement. It must meet construction, placement, and placarding specifications provided in:

  - International Fire Code Section 5604: Explosive Materials Storage and Handling
  - NFPA 495.9: Aboveground Storage of Explosive Materials, 14: Small Arms Ammunition and Primers, Smokeless Propellants, and Black Powder Propellants, and Annex D: Magazine Construction
  - OSHA 1910.109 (c)(4): Construction of Class II magazines and (j)(2): Small Arms Ammunition
    See ATF P 5400.17: Type II Indoor Magazines (chart).

- Keep the magazine away from sources of static electricity or sparks.

- Label "Live Small Arms Ammunition."

- Identify location of live ammunition during fire department tour of collections storage.
  See Chapter 9.D.4: What special considerations should be addressed with the local fire department?

- If stored in the same magazine, separate live ammunition containing smokeless powder from those containing black powder. *Do not* comingle in the same tray, bag, or box within the magazine.

- ***Do not*** store black powder and other materials used by the Historic Weapons Program in or near any space housing museum collections in accordance with NPS Museum Standard for Firearms, Small Arms Ammunition, Munitions, Artillery, and Non-Combat Explosives (8) (G.B.1.8).

Net explosive weight

Storage regulations for ammunition containing black powder and other explosive materials apply *only* to the *net explosive weight* of explosive material, *not* the weight of the projectile and casing. For example, a live "Brown Bess" musket ball weighs about 32 grams, but only has about 8 grams of black powder.

In accordance with International Fire Code 5604.5.1.3: Quantity limit, "Not more than 50 pounds (23kg) of explosives or explosive materials shall be stored within an indoor magazine." The net explosive weight of black powder in most park collections is likely below 50 pounds. If over 50 pounds, consult with the regional curator, regional safety manager, and regional structural fire manager (marshal) to determine appropriate storage, such as a dedicated munitions safe *or* consolidation at a regional center.

See Chapter 7: Museum Collections Storage, Chapter 9: Museum Fire Protection, Appendix O: Curatorial Care of Metal Objects, NFPA 495: Explosive Materials Code, and OSHA 1910.109 (c): Storage of explosives.

3. *Exhibiting small arms ammunition*

Only exhibit small arms ammunition that has been evaluated and rendered inert. Exhibit in secure cases with hardware such as keyed locks and security screws that are fully functional and checked regularly. Display using secure mounts.

Do not exhibit live ammunition or corroding inert small arms ammunition that may present a lead hazard. Exhibit inert small arms ammunition or inert reproductions in place of live or corroding ammunition. Retain rare live historic ammunition in storage, photograph for research and education, and make available online.

4. *Packing and transporting or shipping small arms ammunition*

Inert small arms ammunition may be packed, shipped, and transported as a regular museum object.

Live small arms ammunition may be shipped within the contiguous U.S. by certain commercial carriers, subject to limitations such as size and weight in accordance with the DOT HMR. DOT classifies live small arms ammunition as a Class 1 explosive material for purposes of shipment and transportation. See UPS™ How to Ship Ammunition webpage, and consult with the carrier's Dangerous Goods specialist for specific information. The US Postal Service does not permit shipment of live small arms ammunition.

Note that Federal employees are exempt from the provisions of the HMR when transporting hazardous materials in the course of non-commercial, official duties (49 CFR 171.1(d)(5)). However, ***for safety reasons***, museum staff must follow the HMR and requirements in NFPA 495.14: Small Arms Ammunition and Primers, Smokeless Propellants, and Black Powder Propellants when shipping or transporting live ammunition.

See 49 CFR 173.60: General packaging requirements for explosives, 173.63: Packaging exceptions, and 173.7: Government operations and materials. See also DOT The Facts on Small Arms-Related Hazmat.

E. Museum Munitions

Munitions may be present in collections storage, on exhibit, encountered in the park during archeological excavation, construction, or other approved ground disturbing activities, or brought into a park building by visitors. Advanced planning is essential to protect staff and visitors, and avoid confusion, delay, injury and loss of life or collections.

Section I. Evaluating and Inerting Munitions

Implement procedures in this section in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (2) and (4) (G.B.1.2, 4).

1. How munitions are defined in this appendix

Munitions in this appendix are defined as explosive devices designed to be fired (projected or launched), dropped, placed, or thrown for military purposes (US Army FM 4-30.51: Unexploded Ordnance (UXO) Procedures). They include artillery shells, bombs, canisters, cannonballs, grenades, land mines, mortars, rockets, shells, torpedoes, and similar objects. Munitions vary in size, shape, and appearance depending on manufacture date, location, and purpose. Munitions may be inert or live.

Munitions and Explosives of Concern (MECs) are live, hazardous military munitions that ***pose the highest level of risk***. They include:

- *Unexploded Ordnance (UXO)* (10 USC 101(e)(5)) is defined as "military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard or potential hazard…and remain unexploded either by malfunction, design, or other cause…" (PL 106-65.3031 (c)(5)(A)). UXO, whether intact or in fragments, presents a potential hazard.

- *Discarded Military Munitions (DMM)* (10 USC 2710(e)(2)) are "military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations" (10 USC 2710(e)(3)).

- *Munitions constituents* such as mercury fulminate are "[a]ny materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions" (10 USC 2710(e)(4)).

MECs will generally be referred to as "live munitions" in this appendix.

Munitions in the collection may be rare, unique, novel, or limited in production (such as Whitworth, Armstrong or Confederate Mullane projectiles). Make every effort to retain these objects *if safe to do so*, as they are important for education, interpretation, and research. Analysis of these objects provides information on materials and compounds, processes and techniques, metallurgy, and others.

Other types of *lower-risk military munitions* and *components* may also be present in collections. These include artillery fuses, including paper fuses, and sources of ignition such as percussion caps or friction primers, described in Section E.I.2 below.

Rendering inert involves removing all explosive compounds from a live munition so that it is no longer an explosion risk. The inerting process is ***extremely dangerous*** and must ***never*** be attempted by NPS staff.

Render safe procedures (RSPs) are defined as those procedures that prevent or mitigate functioning of a hazardous device until final disposition of the munition is determined. These involve interrupting or separating munitions components ("disarming" or "defusing") to prevent an explosion and make a munition safe to transport.

Note: RSPs are *not* considered inerting, and documentation of a RSP is *not* considered an inert certification. A "rendered safe" munition still must be rendered wholly inert to be retained in the museum collection.

See Section E.I.10: Who must transport or ship live munitions.

2. *Potential safety risks of munitions and when an emergency response is needed*

Munitions were designed to explode and maim or kill, and destroy structures. ***Restrict access to all munitions until evaluated and until final disposition.***

> ***Live munitions (MECs) present the highest safety risk due to their high level of explosion risk, particularly if unstable. A USMC or other DOD EOD unit or bomb squad MUST determine if munitions are solid, live, or inert.***

Do not accession or exhibit live munitions.

Identify the general risk levels for the different types of munitions in consultation with the park, zone, and regional safety manager and park or regional Chief Ranger, and arrange for evaluation and determination of safe and appropriate response(s). These range from evacuating the building and following Emergency Response Steps: Suspected Live Munitions in the Collection, to restricting access to the collections, to contacting a DOD (USMC or other) EOD unit to schedule an evaluation and transport live munitions away from the building for inerting.

Implement ***emergency response actions*** or a ***scheduled evaluation*** depending on risk level. Always err on the side of safety.

Emergency response to high-risk munitions

Live munitions contain hazardous chemicals that may become unstable and pose an ***imminent explosion risk***. Evidence of instability includes new cracks, bulges or dents; leaking fluid or powder; corrosion, smoking, odor, ticking; or noting a missing grenade pin or exposed fuse in a cannonball or shell.

If these conditions are observed, evacuate the building, ***immediately call 911, and implement Emergency Response Steps***: Suspected Live Munitions in the Collection (Figure G.14). Do not wait to arrange for a scheduled evaluation.

Other conditions of concern

Consult with the park, zone, or regional safety manager and park or regional Chief Ranger to determine appropriate response if a potentially live munition is subjected to any of the following:

- *Moved* and subjected to vibration or shock.
- *Exposed* to fire or sparks, or other emergency incidents such as a hurricane.
- *Environmental changes* such as substantial changes in moisture (such as wet black powder that has begun to dry and become unstable).

See Section E.III: Emergency Response for Suspected Live Munitions. See also Chapter 10.A.7: What is the Incident Command System (ICS)? and Figure 10.8: Explosion Emergency Response Steps.

Scheduled response for other munitions

For *all other munitions*, schedule an evaluation of status (live, solid metal or inert) by a DOD EOD unit or accredited bomb squad, as described in Section E.I.4: Steps to evaluate and render munitions inert. Restrict access to munitions until evaluated.

The following pose a ***lower safety risk*** than MECs:

- *Artillery fuses* (metal or paper) that contain black powder may be present in Civil War or earlier collections. The fuse was designed to burn at a steady rate when lit, causing an artillery projectile to explode. When outside artillery tubes, they are *not* inherently explosive. However, *they pose a safety risk if exposed to fire*.

  Note that paper artillery fuses *must* be housed in a stable environment (RH and temperature) to prevent the black powder from becoming unstable, as they cannot be rendered inert without being destroyed.

- *Ignition sources* such as percussion caps, friction primers, Bormann fuzes, and similar objects containing an explosive compound filling, chemical, or gas are *not* inherently explosive if found separately from munitions. They *only* pose a high risk if found inside intact

live munitions and exposed to fire or sparks, as they can cause the munition to detonate.

Note that EOD units and bomb squads will generally *not* respond to isolated artillery fuses or ignition sources. Work with an experienced small arms ammunition specialist to determine appropriate action(s) for these objects.

Solid shot cannonballs (made of solid metal) and *canister rounds* filled with metal shot were designed to be ejected from artillery. They may be visually similar to live munitions. However, they do not contain explosive materials, *do not pose an explosion risk*, and are to be retained in the collection. The DOD EOD unit or bomb squad will identify these objects during evaluation.

See Sections D.I.4: Experienced specialist evaluation of small arms ammunition and D.II.2: Safe storage of small arms ammunition.

3. *Who can evaluate munitions, render live munitions inert, and dispose of munitions*

Different DOD services and non-military entities have different capabilities for evaluation, inerting, and disposal, as described below.

> "***No NPS employee or volunteer is authorized to inert a munition under any circumstance.***" (NPS Safety Alert: Discarded Military Munitions and Unexploded Ordnance, February 10, 2022)

USMC EOD units

USMC EOD units can *evaluate* munitions, *render* live munitions inert *if safe to do so*, and issue *inert certifications*. They can *dispose* of live munitions that cannot safely be rendered inert.

"DOD and joint issuances prescribe specific responsibilities for each Service (see Appendix A: Multi-Service Capability Matrix)." (DOD Joint Publication 3-42: Joint Explosive Ordnance Disposal Chapter 1.5: Explosive Ordnance Disposal). USMC EOD units are the only DOD service with the "capability" to inert munitions.

Note that *NPS Safety Alert: Discarded Military Munitions and Unexploded Ordnance* (Feb 10, 2022) states that, "The U.S. Marine Corps (USMC) EOD is the only DOD entity authorized to inert munitions."

USMC EOD units are generally more experienced with historical preservation activities and working with museum collections than other DOD EOD units. They are trained to inert *and* preserve live museum munitions, *if* safe to do so.

DOD EOD units

Other DOD EOD units can *evaluate* the status of museum munitions to determine and document if live, solid metal, or inert at the time of evaluation. They can implement *render safe/neutralize procedures* to transport live munitions until final disposition is determined, and

dispose of live munitions. Final disposition is to be determined in consultation with the NPS curator and park, zone, or regional safety manager.

See Joint Publication 3-42: Joint Explosive Ordnance Disposal Chapter 1.3: Function and Appendix A: Multi-Service Capability Matrix.

Accredited Public Safety Bomb Squads

Accredited bomb squads can *evaluate* museum munitions, and *transport* and *dispose* of live munitions. They include certified Public Safety Bomb Technicians who have completed training, such as Federal Bureau of Investigation (FBI) Hazardous Devices School (HDS) training. FBI HDS includes training on how to implement RSPs for improvised explosive devices (IEDs).

Accredited bomb squads are *not* authorized to render munitions inert. They can document that a munition was already inert at the time of evaluation (such as a solid shot cannonball), but this is *not* considered an inert certification. When responding to military munitions, bomb squads should request DOD EOD unit assistance or advice, and consult with the NPS park, zone or regional safety manager and curator to determine final disposition.

For additional information, contact the Special Agent Bomb Technician Coordinator in the nearest FBI Field Office.

See Marine Corps Order 3571.2G: Explosive Ordnance Disposal (EOD) Program.

4. *Steps to evaluate and render munitions inert*

The curator and DOD (USMC or other) EOD unit or accredited bomb squad take the following steps:

Step for Evaluation and Rendering Munitions Inert:	Completed by:
Establish and maintain safety data on whether munitions in the collection are live or inert.	Curator
Review collections documentation to determine which munitions, if any, have a legacy USMC inert certification *or* other DOD EOD or accredited Public Safety Bomb Squad document verifying munition as already inert during evaluation.	Curator
Conduct a visual inspection, but ***do not*** touch, handle, move, transport or ship, or attempt to deactivate. Consult with the park, zone or regional safety manager to determine how to safely inspect munitions in drawers or boxes. Note size, general description, and condition. Photograph from a safe distance.	Curator
Contact the park, zone, or regional safety manager ***immediately*** if there is a ***change in condition*** (such as leaking, new cracks or dents, or new corrosion) to determine safe and appropriate response. Follow Emergency Response Steps: Suspected Live Munitions in the Collection (Figure G.14).	Curator
Restrict access to munitions until evaluated.	Curator
Complete NPS Historical Significance Contributing Factors Tool (Figure G.6) as part of a *Park Inerting Request Package* to identify munitions proposed for inerting and retention in the collection. Submit Request Package to the regional director, through the regional curator.	Curator

Contact DOD EOD unit or accredited bomb squad to schedule evaluation to determine status and final disposition, if regional director concurs with Park Inerting Request Package.	Curator
Process the loan in accordance with *MH* II.5: Outgoing Loans if work is to be done away from the park.	Curator
Evaluate status of munitions to identify which are live and which are inert or solid metal. Evaluate munitions on exhibit first, then those in storage.	DOD EOD unit (USMC or other) or accredited bomb squad
Based on determination of status, take one of the following actions:	
Determine final disposition of museum munitions. *Restrict access* to munitions until final disposition. This may include cordoning off the area, or removal to a safe location by EOD unit or bomb squad may.	DOD EOD unit (USMC or other) or accredited bomb squad in consultation with curator and park, zone or regional safety manager
If *identified as already inert or solid metal during evaluation*, provide USMC inert certification *or* verification document (Figure G.13) with photographs to park. Return inert munitions to park collection.	DOD EOD unit (USMC or other) or accredited bomb squad
Retain identified solid shot cannonball or metal canister rounds in collection and manage as regular museum objects, as these do not pose an explosion risk.	Curator
If *identified as live,* render live munitions inert, if USMC EOD unit determines it is safe to do so in accordance with Explosives Safety Risk Assessment Process (DDESB TP-23). Complete process in safe location away from the collection, staff, and visitors. Complete an inert certification with inert number for tracking in DOD master inventory of inert munitions (maintained by USMC), and provide copy with photographs to park. Return inerted munition to collection.	USMC EOD unit
Document evaluation and inerting *processes* using NPS Munitions and Artillery Evaluation and Inerting Record (Figure G.11). *Update* accession and catalog records and file a copy of inert certification or verification document. *Tag* inert munitions as "Inert" in storage together with copy of inert certification or verification document.	Curator
If *live munitions cannot safely be rendered inert*, transport to EOD unit base or other safe alternate location away from collection, staff, and visitors for disposal. Return fragments to park collection if safe to do so.	DOD EOD unit (USMC or other) or accredited bomb squad
If inert or solid metal munitions are proposed for deaccessioning *after* evaluation, then determine if they may be deaccessioned under the categories authorized by law and in accordance with *MH* II.6: Deaccessioning. The park submits the completed Tool (Figure G.6), Record (Figure G.10), USMC inert certification or accredited bomb squad verification, *and* deaccession documents to the regional curator for review of the proposed action. Regions may convene a committee to consider the proposed actions. The committee should include a curator, archeologist, historian, and/or other subject matter experts as appropriate.	Curator
Deaccession munitions that have been disposed of in accordance with *MH* II.6: Deaccessioning.	Curator
Inspect regularly and include an inspection schedule in ICMS Condition and Maintenance Cycle field.	Curator

Figure G.4. Steps to Evaluate and Render Museum Munitions Inert

5. *Department of Defense responsibility for military munitions*

The Department of Defense has responsibility for the hazardous materials contained in live military munitions in accordance with CERCLA 42 USC 9601 *et seq.*; DOD's Defense Environmental Restoration Program, 10 USC 2701(c)(1); RCRA, 42 USC 6901 *et seq.*; and the EPA Military Munitions Rule, 40 CFR Part 266 Subpart M.

RCRA requires DOD to manage military munitions from "cradle to grave," meaning DOD is responsible under RCRA for the management of military munitions from identification of when a material is a solid or hazardous waste to management of hazardous waste through transportation, storage, treatment, and disposal, and corrective action including investigation and cleanup. Once inerted, munitions will generally cease to contain potentially hazardous substances, and inert munitions are not considered a solid or hazardous waste.

USMC EOD unit will determine inerting procedures and safety in accordance with Department of Defense Explosives Safety Board Technical Paper 23: Assessing Explosives Safety Risks, Deviations, and Consequences (DDESB TP-23).

- If a USMC EOD unit determines it is *safe to render munitions inert at the park*, then the process must be completed at a safe location away from collections storage, staff, and visitors.

- If inerting *cannot safely be completed at the park*, the USMC EOD unit will transport the munition to be inerted to a DOD location such as the responding EOD unit base or a local DOD Ammunition Supply Point. The inerted munition ***must*** be returned to the park museum collection.
  See Section E.I. 7: Return of inerted military munitions to NPS collections.

- If the *USMC EOD unit determines that inerting poses a safety risk*, the unit will destroy munitions at a safe location away from collections storage, staff, and visitors, such as at the EOD unit base. The DOD EOD unit will comply with National Environmental Policy Act and National Historic Preservation Act of 1966 if destruction is conducted at the park, in consultation with the safety manager and archeologist. Curator processes deaccession in accordance with *MH* II.6: Deaccessioning.

6. *Accredited bomb squad procedures for live munitions (MECs)*

If a USMC or other DOD EOD unit is not immediately available to respond to a discovery of live munitions (MECs), then the park should work with an accredited Public Safety Bomb Squad. Local police or fire departments without an accredited bomb squad should contact the nearest accredited bomb squad to respond.

In coordination with the curator and park, zone or regional safety manager, the accredited bomb squad may take the following actions based on DOD EOD response time and munition risk level:

- Move the munition into a bomb squad Ready Storage Locker (RSL) (deployable explosives magazine) at the park. The Incident Commander, park safety manager and law enforcement, if present, should work with the bomb squad to control access to the RSL until EOD unit arrival.

- Transport live munitions to a safe alternate location such as a DOD Ammunition Supply Point until it can be inerted by the DOD EOD unit or disposed.

Note that bomb squads are *not* trained to preserve these objects, and will likely dispose of suspected live munitions if an EOD unit is not available.

See FBI Critical Incident Response Group website and DOD Instruction 3025.21: Defense Support of Civilian Law Enforcement Agencies.

7. *Return of inerted military munitions to NPS collections*

Once a hazardous (live) munition is rendered inert, it is no longer subject to the EPA Military Munitions Rule, which states that "Military munitions do not include wholly inert items…" (40 CFR 260.10: Definitions). ***Unless otherwise hazardous, it must be returned to the NPS museum collection*** as it is a historic object that must be "conserved" [preserved] in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (4e) (G.B.1.4.e), the National Historic Preservation Act, the Organic Act, 54 USC 100101 and 100701, and, in some cases, the Archaeological Resources Protection Act or park-specific statutes, regulations, and executive orders.

Responsibilities under CERCLA or RCRA are not determinative of the ownership or administrative control of any historic objects from the site or collection.

Where a park area or collection therefrom are found to contain military munitions, then DOD may be responsible for ensuring or funding necessary response actions (clean-up) at that site (10 USC 2701).

Contact the Solicitor's Office through the regional curator and/or Museum Management Program should any questions arise.

8. *Museum Munitions and Artillery Evaluation and Inerting Record*

The Museum Munitions and Artillery Evaluation and Inerting Record (Figure G.11) documents the museum munitions evaluation process. The curator completes this record in collaboration with the DOD EOD unit or accredited bomb squad, park or regional Chief Ranger, and park, zone, or regional safety manager. Include a signed copy in the accession and/or catalog folder and update the catalog record. File in the park central and museum files and provide a copy to the regional curator.

9. *Inert certification and other verification documents*

USMC EOD units issue inert certifications. Other verification documents are issued by different entities noted below. The curator files a signed copy in the accession and/or catalog folder, and updates catalog records.

USMC EOD inert certification

USMC EOD units are authorized to issue an inert certification that documents "…that no hazards remain…. The examination may be

visual or by nondestructive testing method such as an X-ray…" (Marine Corps Order 8020.10.2.5.f).

The USMC EOD unit permanently identifies the inerted munition with an inert number for tracking in the DOD "master inert inventory" maintained by USMC (Marine Corps Order 8020.10.2.5.i). The inert number is included in the inert certification and added to the catalog record. The USMC EOD unit may use the catalog number instead of a new USMC EOD inert number.
See Figure G.12: Completed US Marine Corps Inert Certification for Munitions (Sample).

Other DOD EOD unit and bomb squad verification of munitions identified as already inert during evaluation

Other DOD EOD units and accredited bomb squads can verify in writing that a munition or lot was identified as already inert or solid metal during evaluation. The document should include: park name, catalog number, object name, description, serial number (if present), verifying official's name and signature, date, verification method, object location, and final disposition. Include photographs. If the DOD EOD unit or bomb squad does not have a verification document, use the NPS Museum Munitions Verification Document (Figure G.13).

Legacy Documentation

Legacy documentation of activities such as conservation is *not* considered an inert certification. Museum munitions with this legacy documentation must still be evaluated and rendered and certified inert by a USMC EOD unit.

10. Who must transport or ship live munitions

Only a DOD (USMC or other) EOD unit or accredited bomb squad can pack and transport or ship live munitions (MECs).

Federal employees are generally exempt from provisions in the DOT HMR on transportation of hazardous materials in the course of official duties, (49 CFR 171.1(d)(5). However, for safety reasons, ***NPS staff must not transport live munitions*** (NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (4b) (*MH* I.G.B.1.4b) and NPS Safety Alert: Discarded Military Munitions and Unexploded Ordnance, dated February 10, 2022).

If live munitions are not inerted at the park, the DOD EOD unit will transport them away from and back to the park in accordance with 40 CFR 266.203: Standards applicable to the transportation of solid waste military munitions, MCTP 10-10D (Marine Air-Ground Task Force Explosive Ordnance Disposal, 2016), and TB 700-2/NAVSEAINST 8020.8C/ TO 11A-1-47 (Department of Defense Ammunition and Explosive Hazard Classification Procedures) Chapter 4-6: Hazard Classification of Unexploded Ordnance (UXO).

Accredited bomb squads may transport live munitions to a safe alternate location as described above in Section E.I.6: Accredited local bomb

squad response to live munitions (MECs).

If the munition needs to be removed from the park, the curator processes the action as an outgoing loan in accordance with *MH* II.5: Outgoing Loans.

See Department of Transportation's Pipeline and Hazardous Materials Safety Administration (DOT PHMSA) for further information.

Section II. Managing Munitions in the Collection

1. *Storing inert munitions and associated components*

Store inert munitions, solid shot cannonballs, and similar objects as regular museum objects, as they do not pose an explosion risk.

- House in a dedicated, secure museum collections storage space separated from curatorial office, research/reference, and work areas in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (1) (G.B.1.1).
- Store in secure locking storage cabinets or heavy-duty metal racks that can accommodate heavy weight and are braced and secured.
- Support, pad, or separate to prevent movement or rolling.
- Label as "Inert Munitions." File a copy of the inert certification or verification document in the accession and/or catalog folder.
- Store paper artillery fuses that cannot be inerted without being destroyed and separate ignition sources such as friction primers separately from other objects in an anti-static box within a locking museum storage cabinet or fire-resistant magazine, as determined by the experienced specialist based on identified risk level.

See Section D.II.2: Safe storage of small arms ammunition and Appendix O: Curatorial care of metal objects.

2. *Inventorying munitions*

Do not handle, touch or move munitions during inventory until evaluated and until final disposition. ***Only*** visually confirm presence or absence.

Munitions that have been evaluated and inerted must be inventoried in accordance with *MH* II.4: Inventory and Other Special Instructions.

If a munition has been evaluated and determined to be live, but appropriate action cannot immediately be taken, *then* it should be considered controlled property and subject to a 100% inventory until inerted. ***Do not*** handle, touch or move during inventory; ***only*** visually confirm presence or absence. Note any changes in condition such as leaks or cracks. ***Immediately*** contact the safety manager and implement Emergency Response Steps: Suspected Live Munitions in the

Collection (Figure G.14) if changes are noted.

See *MH* II.4.I.C: Completing the Random Sample and Controlled Property Inventories.

3. *Exhibiting munitions*

Only exhibit munitions that have been evaluated and rendered inert. Exhibit in secure exhibit cases with hardware such as keyed locks and security screws that are fully functional and checked regularly. Display using secure mounts. Photograph rare historic munitions for research and education, and make available online.

Do not exhibit live munitions, artillery fuses, friction primers, percussion caps, or other ignition sources.

4. *Packing and transporting or shipping inert munitions*

NPS museum staff can only transport *inert* munitions. Inert munitions are considered regular museum objects, as they are no longer an explosion risk. They may be mailed via USPS in accordance with packing and labeling requirements in USPS Publication 52.4.43.434: Replica or Inert Explosive Devices. Include a copy of the inert certification or verification document in the shipping container.

See Section E.I.10: Who must transport or ship live munitions for information on transportation of live munitions by a DOD EOD unit or accredited bomb squad.

Section III. Emergency Response for Suspected Live Munitions

1. *Emergency Response Steps for suspected live munitions that pose imminent explosion risk*

Follow Emergency Response Steps: Suspected Live Munitions in the Collection (Figure G.14), comprised of the three "Rs": *Recognize, Retreat, Report*.

Work with the park or regional Chief Ranger and regional safety manager to determine what conditions constitute an ***imminent risk of explosion*** and necessitate implementation of Emergency Response Steps. Conditions include smoking, ticking, noting a grenade with a missing pin, and others.
See Section E.I.2: Potential safety risks associated with munitions.

Incorporate these Emergency Response Steps into the park Emergency Operations Plan in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (7) (G.B.1.7).
See Chapter 10.A.7: What is the Incident Command System?

The incident is documented in the Incident Management Analysis and Reporting System (IMARS) and Serious Incident Notification System. Include copies of the incident report and other documents in the accession and/or catalog folder.

2. *Planning documents*

Ground disturbing activities such as archeological investigations may yield discoveries of live munitions. The curator should collaborate with

the archeologist, safety manager, park structural fire coordinator, law enforcement, and visitor services to:

- Incorporate Emergency Response Steps: Suspected Live Munitions in the Collection (Figure G.14) into the park:
  - Emergency Operations Plan (EOP)
    NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (7) (G.B.1.7)
  - MEC Field Safety Response Plan
    See NPS Archeology Guide: Developing Explosives Field Safety Response Plans for Military and Commercial Explosives Encountered in National Park Units

- Include language in the fieldwork permit and/or authorization requiring that munitions recovered during fieldwork that will be considered for inclusion in the collection are to be rendered inert by a USMC EOD unit and artillery unloaded *before* accessioning. If recovered live munitions *cannot* be rendered inert, they ***will not*** be accessioned into the collection and cannot be stored in a structure housing collections.
  NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (4) (G.B.1.4) and NPS Archeology Guide: Developing Explosives Field Safety Response Plans for Military and Commercial Explosives Encountered in National Park Units (*under development*).

- Develop procedures for frontline staff to safely respond to potential live munitions brought into park buildings by visitors or staff, in consultation with the park Chief Ranger and Chief of Interpretation.

- Determine appropriate course of action for materials subject to the Sunken Military Craft Act of 2004.

F. Museum Artillery

Section I. Evaluating and Unloading Artillery

Implement procedures in this section in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (2) and (4) (G.B.1.2, 4).

1. How artillery is defined in this appendix

Artillery in this appendix are weapons designed to fire munitions. These include cannon, Howitzers, mortars, anti-aircraft and anti-tank guns, sea-coast guns, swivel guns, and others. They are "heavy weapons that employ explosion or combustion to fire projectile munitions. [They] may be portable…but [are] typically … fired from a more or less stationary position" (*Nomenclature for Museum Cataloging*). Artillery may be operated by a single individual or a crew.

Antique artillery refers to certain artillery manufactured in or before 1898. It is exempted from the GCA and NFA as an antique (pre-1898) firearm and is treated as a regular museum object for shipping and transportation.

"*Modern*" artillery refers to artillery manufactured after 1898, unless subject to an exception. It is regulated as a "destructive device" under the definition of "firearm" in the NFA (26 USC 5845(f, g)). Generally, both the expelling device and the expelled object of an artillery set could qualify as destructive devices, with some exceptions – in particular, certain ordnance transferred by the Secretary of the Army. For additional guidance, consult with the regional curator and park, zone or regional safety manager.

2. *Potential safety risks of artillery*

Artillery in collection storage, exhibit, or on open display outdoors may still be loaded with munitions, and presents a ***high safety risk***. It may contain an explosive projectile, or the artillery tube may contain potentially explosive black powder used to fire solid metal projectiles.

Black powder in artillery displayed outdoors that has acclimated may present an explosion risk when moved, exposed to fire or sparks, or when subject to fluctuating relative humidity (RH) and temperature.

Do not accession loaded artillery into the collection.

Artillery that has been evaluated and confirmed to be unloaded does not present a safety risk, and is managed as a regular museum object.

3. *Steps to evaluate artillery*

The curator takes the following steps:

- Establish and maintain safety data on whether artillery is loaded or unloaded, including review of legacy documentation.
- Conduct a ***visual*** inspection of the artillery, but ***do not*** handle or touch. Note condition and photograph changes such as active corrosion.
- Restrict access to artillery in storage and on exhibit until evaluated by a DOD (USMC or other) EOD unit or accredited bomb squad. *If* appropriate action cannot be taken immediately, *then* restrict access until final disposition. This may include cordoning off the area, or removal to a safe location by the EOD unit or bomb squad.
- Complete the NPS Historical Significance Contributing Factors Tool (Figure G.6) for artillery proposed for unloading and/or inerting. Submit as part of a Park Inerting Request Package to the regional director, through the regional curator.
- If the regional director concurs with the park request, arrange for a DOD EOD unit or accredited bomb squad to evaluate the status (loaded or unloaded) of the artillery. This evaluation will likely involve handling, and must be done in a safe area away from collections, staff, and visitors.

- The DOD EOD unit or accredited bomb squad will determine if safe to unload and clear unloaded artillery and take appropriate action.
- If work is to be done away from the park, process the loan in accordance with *MH* II.5: Outgoing Loans.
- Document processes using the Museum Munitions and Artillery Evaluation and Inerting Record (Figure G.11), and update accession and catalog records.
- If artillery cannot safely be unloaded and must be destroyed, implement deaccessioning and disposal guidance in *MH* II.6.I.2: What is voluntary destruction or abandonment? If fragments remain, retain in the collection.

4. Who must evaluate artillery

Only a DOD (USMC or other) EOD unit or accredited bomb squad can evaluate artillery that may be loaded with munitions and/or explosive material such as black powder.

5. Unloading loaded artillery by DOD EOD unit or accredited bomb squad

The process of *unloading* loaded artillery is ***extremely dangerous*** and must only be completed by a DOD EOD unit or accredited bomb squad.

The DOD EOD unit (USMC or other) or accredited bomb squad can determine if artillery is loaded, but may not be able to determine the status (live, solid metal, or inert) of the loaded munition. The unit or bomb squad will determine if it is safe to unload loaded artillery, or take appropriate action(s) if unsafe to do so. These include removal from exhibit, implementing render safe procedures, rendering inert by a USMC EOD unit, and/or deaccessioning and disposal in accordance with *MH* II, Chapter 6: Deaccessioning. Determine final disposition in consultation with the NPS park, zone or regional safety manager and curator.

See Section E.I.4: Steps to evaluate and render munitions inert.

Artillery may be loaded with a solid metal projectile that *does not* contain explosive material, *but* the projectile cannot be removed without irreversible damage or destruction. Work with the DOD EOD unit or bomb squad to determine appropriate action in order to retain in the collection.

Unloaded artillery that is no longer hazardous ***must*** be returned to the park in accordance with NPS Museum Standard for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (4e) (G.B.1.4.e).

Section II. Managing Artillery in the Collection

1. *Securely storing and exhibiting artillery*

House inert artillery securely in collections storage and on exhibit as a regular museum object. Store artillery off the floor on moveable pallets for ease of handling and movement.

Work with the facility manager to ensure unloaded museum artillery such as cannon on outdoor exhibit are safely and securely displayed. Work with a conservator to protect artillery exhibited outdoors against the elements such as rain and severe weather to the greatest extent possible.

Do not exhibit loaded artillery.

2. *Transporting or shipping unloaded artilery*

Unloaded *antique* artillery can be packed and transported or shipped as regular museum objects.

As *modern* artillery is a destructive device, ship unloaded NPS-owned modern artillery in accordance with Section C.III: Moving Museum Firearms for Accession, Transfer and Loan.

NPS museum staff ***must not*** ship or transport loaded artillery.

G. Non-Combat Museum Explosives

Implement procedures in this section in accordance with NPS Museum Standards for Firearms, Small Ammunition, Munitions, Artillery, and Non-Combat Explosives (6) (G.B.1.6).

Section I. Evaluating and Inerting Non-Combat Explosives

Advanced planning is essential to protect staff and visitors, and avoid injury and loss of life or collections. Work with the park, zone, or regional safety manager, park or regional Chief Ranger, park structural fire coordinator and/or regional structural fire manager (marshal), and regional curator, and an appropriately trained and licensed certified blaster or accredited bomb squad to take appropriate action.

1. *How non-combat explosives are defined in this appendix*

Non-combat explosives in this appendix include blasting caps, charges, detonators, fireworks, flares, shock-sensitive compounds (such as nitroglycerin) and others used in mining, engineering, transportation, social history, and non-combat military activities.

2. *Potential safety risks of non-combat explosives*

Certain *live non-combat explosives* such as mining blasting caps were designed to destroy or excavate structures and geological features. They may deteriorate over time and be ***extremely volatile and dangerous***, particularly when leaking fluid, and can pose a *lethal* explosion risk if accidentally detonated due to exposure to fire, sparks,

sources of ignition, or shock. These types of non-combat explosives must be rendered inert or disposed of.

Fireworks, *flares*, and similar objects that contain smokeless powder pose an explosion and fire risk if exposed to fire or sparks. They are designed not to spontaneously explode if exposed to shock. To mitigate risk, they must be stored in a locking fire-resistant magazine.

Inert non-combat explosives do not pose an explosion risk.

See Section D.II.2: Safe storage of small arms ammunition. See Director's Order #65: Explosives Use and Blasting Safety and National Park Service Handbook for the Storage, Transportation, and Use of Explosives for further information on storage, transportation, and other topics.

3. *Steps needed on discovering suspected live non-combat explosives*

Emergency response
If changes in condition such as leaking fluid are observed, ***immediately implement Emergency Response Steps*** in Figure G.14: Emergency Response Steps: Suspected Live Munitions in the Collection.

Scheduled response
For *other non-combat museum explosives*, such as fireworks and flares, schedule an evaluation by an appropriately trained and licensed certified blaster or accredited bomb squad.

Once the non-combat explosives have been rendered or verified inert, follow steps in Section G.II.1: Storing non-combat explosives below.

Do not accession live explosives.

4. *Who must evaluate and render non-combat explosives inert*

Only a trained and licensed certified blaster or, if not available, an accredited bomb squad is qualified to evaluate and render non-combat explosives inert. DOD EOD units generally do not respond to non-combat explosives. The certified blaster determines final disposition of the non-combat explosive in consultation with NPS park, zone, or regional safety manager and curator.

All work with non-combat explosives must be conducted "under the direct supervision of a qualified blaster who holds a current NPS-65 blasters certificate and/or equivalent." (NPS Handbook for the Storage, Transportation, and Use of Explosives Chapter 1: General Requirements). See DOI Office of Surface Mining Reclamation and Enforcement (OSMRE) for training and certification information.

NPS and EPA consider handling and disposal of deteriorated non-combat explosives to be hazardous waste activities, rather than blasting activities. To evaluate and determine final disposition of unstable historic non-combat explosives in the collection, the certified blaster must be *trained* and experienced in handling old and deteriorated non-combat explosives. Training may include specialized classroom and field training, and/or supervised experience specific to the disposal of

unstable or deteriorating non-combat explosives. The certified blaster must also have a *license* to dispose of deteriorated non-combat explosives that is "acceptable to EPA" (NPS Handbook for the Storage, Transportation, and Use of Explosives Chapter 10: General Blasting).

The park SOW for blasting work needs to include a clause that work must be completed safely on site, *or* the non-combat explosives safely transported by the certified blaster for inerting.

See DOI Office of Surface Mining Reclamation and Enforcement Blaster's Training Modules webpage.

5. *Steps to evaluate and inert non-combat explosives*

The curator takes the following steps:

- Establish and maintain safety data on whether non-combat explosives are live or inert, including review of legacy documentation of status.

- Conduct an initial ***visual*** inspection of the non-combat explosives. Note size, general description, and condition.

- Limit access to non-combat explosives until evaluated by a certified blaster or accredited bomb squad. *If* appropriate action cannot be taken immediately, *then* restrict access until final disposition. This may involve cordoning off the area, or removal to a safe location by the certified blaster or bomb squad.
  See Section E.I.6: Accredited bomb squad procedures for live munitions (MECs).

- ***Immediately*** contact the safety manager and regional curator to determine appropriate response steps if a change of condition is noted (such as leaking, new cracks or dents, or new corrosion) during visual inspection. Document and photograph changes in condition from a safe distance.
  See Section G.I.3: Steps needed on discovering suspected live non-combat explosives.

- Complete the NPS Historical Significance Contributing Factors Tool (Figure G.6) to identify non-combat explosives that will be proposed for inerting and retention in the collection. Submit as part of a Park Inerting Request Package to the regional director, through the regional curator.

- If regional director concurs with the park request, arrange for evaluation by an accredited bomb squad or certified blaster. This process may involve handling, and must be done in a safe location away from the collection, staff, and visitors.

- If work is to be done away from the park, process the loan in accordance with *MH* II.5: Outgoing Loans.

- The accredited bomb squad or certified blaster determines if it is safe to render the non-combat explosives inert, implements this process if safe to do so, and returns to the museum collection with a memorandum documenting processes and verifying that the explosive is inert.

  Non-combat explosives that have been evaluated and determined to be inert or stable (not a life safety risk) are to be managed as regular museum objects. *If* proposed for deaccessioning, *then* determine if they may be deaccessioned under the categories authorized by law and in accordance with *MH* II.6: Deaccessioning. The park submits the Tool (Figure G.6) together with evaluation, status determination, and deaccession documents to the regional curator for review of the proposed action. Regions may convene a committee to consider the proposed actions. The committee should include a curator, archeologist, historian, and/or other subject matter experts as appropriate.

- If the explosive cannot safely be inerted, deaccession and dispose of in accordance with *MH* II.6: Deaccessioning.

- Document processes, and update accession and catalog records.

- Inspect fireworks and other lower-risk live non-combat explosives regularly and include an inspection schedule in the ICMS Condition and Maintenance Cycle field.

Section II. Managing Non-Combat Explosives in the Collection

1. Storing non-combat explosives

Live non-combat explosives such as blasting caps that pose an imminent explosion risk ***must*** be rendered inert or disposed. They ***must not*** be retained live in the collection. Store inert and live lower-risk objects as described below.

Inert non-combat explosives
Store inert non-combat explosives as regular museum objects, as they are no longer an explosion risk.

- House in a dedicated, secure collections storage space separated from curatorial office, research/reference, and work areas.

- Store separately from firearms and other objects.

- House in secure locking storage cabinets or heavy-duty metal racks that can accommodate heavy weight and are braced and secured as needed.

- Support, pad, or separate to prevent rolling or shifting.

- Tag containers housing non-combat explosives that have been rendered inert as "Inert Explosives." File copy of documentation verifying the explosive as inert in accession and/or catalog folder.

Live lower-risk non-combat explosives
Fireworks, flares, and similar objects containing smokeless powder may not be able to be rendered inert without irreversible damage.

Consult with the certified blaster or bomb squad, park, zone or regional safety manager, park structural fire coordinator and/or regional structural fire manager (marshal), and regional curator to determine safe and appropriate storage for these live objects.

House in a locking fire-resistant magazine and/or anti-static box in a locking cabinet, in accordance with International Fire Code 56: Explosives and Fireworks, NFPA 495: Explosive Materials Code, and 27 CFR 555, Subpart K: Storage.

See NPS Handbook for the Storage, Transportation, and Use of Explosives.

2. *Exhibiting non-combat explosives*

Only exhibit inert non-combat explosives. Exhibit in secure exhibit cases with hardware such as keyed locks and security screws that are fully functional and checked regularly. Display using secure mounts.

Do not exhibit live non-combat explosives. Exhibit inert reproductions in place of live non-combat explosives that cannot be safely rendered inert. Photograph rare historic non-combat explosives and those that cannot be rendered inert such as fireworks for research and education, and make available online.

3. *Transporting or shipping non-combat museum explosives*

Non-combat explosives that have been rendered inert can be transported or shipped as regular museum objects.

Federal employees are generally exempt from provisions in the DOT HMR on transportation of hazardous materials in the course of official duties, (49 CFR 171.1(d)(5)), and from 18 USC 40: Explosives, with certain exceptions relating to plastic explosives. However, to prevent injury or death, NPS museum staff ***must not transport live non-combat explosives under any circumstance.*** Only an accredited bomb squad or certified blaster should transport live non-combat explosives if safe to do so.

H. Selected Bibliography

American Association for State and Local History Nomenclature Task Force, Canadian Heritage Information Network, and Parks Canada. *Nomenclature for Museum Cataloging.* Lanham, MD: Rowman & Littlefield and Government of Canada, Canadian Heritage Information Network, 2015. <www.nomenclature.info/index.app>

Department of Interior Bureau of Land Management and U.S. Fish and Wildlife Service. Military Munitions and Explosives of Concern: A Handbook for Federal Land Managers, with Emphasis on Unexploded Ordnance, BLM Handbook H-1703-

2. Washington, DC: Bureau of Land Management Protection and Response Group, 2005. <www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_H-1703-2.pdf>

Hampton, Harry. *Facts About Sporting Ammunition Fires*. Newton, CT: Sporting Arms and Ammunition Manufacturers Institute, 1977. <https://saami.org/wp-content/uploads/2018/04/Info-Doc-Facts-About-Sporting-Ammunition-Fires.pdf>

International Code Council. International Fire Code Chapter 56: Explosives and Fireworks. Washington, DC: International Code Council, 2018. <https://codes.iccsafe.org/content/IFC2018P6/chapter-56-explosives-and-fireworks>

National Park Service. *Museum Handbook*
_____. *Part I*, Chapter 11: Curatorial Health and Safety. <www.nps.gov/museum/publications/MHI/CHAP11.pdf>
_____. Chapter 4: Museum Collections Environment. <www.nps.gov/museum/publications/MHI/chap4.pdf>
_____. *Part II*, Chapter 2: Accessioning. <www.nps.gov/museum/publications/MHII/mh2ch2firstfile.pdf>
_____. Chapter 4: Inventory and Other Special Instructions. <www.nps.gov/museum/publications/MHII/mh2ch4.pdf>
_____. Chapter 5: Outgoing Loans. <www.nps.gov/museum/publications/MHII/mh2ch5.pdf>
_____. Chapter 6: Deaccessioning. <www.nps.gov/museum/publications/MHII/mh2ch6.pdf>
_____. Appendix B: Collections Advisory Committee. <https://www.nps.gov/museum/publications/MHII/mh2appb.pdf>
_____. National Park Service Handbook for the Storage, Transportation, And Use of Explosives. <https://www.nps.gov/parkhistory/online_books/npsg/explosives/index.htm>
_____. Personal Property Management Handbook #44. <www.nps.gov/policy/DOrders/RM44.pdf>

White, Philip R. "The Care and Preservation of Firearms." *CCI Technical Bulletin* 16. Ottawa: Government of Canada, Canadian Conservation Institute, 1995. <https://publications.gc.ca/collections/collection_2016/pch/NM95-55-16-1995-eng.pdf>

Windle Moe, Barbara. "Explosive Ordnance Safety: The Boom in the Back." *AASLH Technical Leaflet #201*. Nashville, TN: American Association for State and Local History, 1998. <https://learn.aaslh.org/products/technical-leaflet-201-explosive-ordnance-safety>

Resources for identifying small arms ammunition, munitions, and artillery

Bartleson Jr., John D. *A Field Guide for Civil War Explosive Ordnance*. US Naval School, 1972.

Gersbeck, Thomas. *Practical Military Ordnance Identification*, Second Edition. Boca Raton, FL: CRC Press, 2019.

Jenzen-Jones, N. R. and Matt Schroeder, eds. *An Introductory Guide to the Identification of Small Arms, Light Weapons, and Associated Ammunition*. Geneva, Switzerland: Graduate Institute of International and Development Studies, Small Arms Survey, 2018.

Manucy, Albert. *Artillery Through the Ages: A Short Illustrated History of Cannon, Emphasizing Types Used in America*. National Park Service, 1985.

McKenny, Janice E. *The Organizational History of Field Artillery, 1775-2003*. US Army: Center of Military History, 2006.

Melton Jr., Jack W. Civil War Artillery Projectiles". <http://www.civilwarartillery.com/>

National Park Service. *Manual of Instruction for the Safe Use of Reproduction 18th Century Artillery in Historic Weapons Demonstrations*. NPS Historic Weapons Program, 2016.
_____. *Manual of Instruction for the Safe Use of Reproduction 19th Century Artillery in Historic Weapons Demonstrations*. NPS Historic Weapons Program, 2018.

I. List of Figures

Park Inerting Request Package
Cover and Signature Page (Sample)

Park Name: _____

Package Description: _____

Package completed for (check one): ☐ Munitions ☐ Artillery ☐ Non-Combat Explosive
☐ Other (describe): _____

Package contains (check all that apply):
☐ Cover Memo
☐ Historical Significance Contributing Factors Tool
☐ List of Objects
☐ Park Inerting Justification

Completed by:	Name: Title:	Signature:	Date:
Concurred by Collections Advisory Committee Member 1:	Name: Title:	Signature:	Date:
Concurred by Collections Advisory Committee Member 2:	Name: Title:	Signature:	Date:
Recommended by Safety Manager	Name: Title:	Signature:	Date:
Recommended by Custodial Officer for museum collection:	Name: Title:	Signature:	Date:
Approved by Superintendent:	Name: Title:	Signature:	Date:

Figure G.5. Park Inerting Request Package Cover and Signature Page (Sample)

National Park Service
Historical Significance Contributing Factors Tool

Park Name: _____

Package Description: _____

Check off applicable factors for each object or group of objects and use to develop the Park Inerting Justification.

Park Purpose *(Factors relate to the specific reason(s) for the park's establishment or "park-defining" elements)*

☐ Object(s) directly connects to place where park-defining event occurred
☐ Integral to park's enabling legislation, legislative purpose, and interpretive and educational mission
☐ Component of resources identified in park Foundation Document
☐ Identified as mandatory or highly desired item(s) in the park's Scope of Collections Statement
☐ Critical component of why the park was established, and loss would significantly jeopardize park purpose

Context

☐ Made, used, or present at park during park-defining event
☐ Collected after park-defining event within historically significant period, *or* recovered from an archeological site with high assemblage integrity within the park
☐ Representative of events or significant period/era that took place at the park
☐ Systematically recovered under "authority of the Antiquities Act (16 U.S.C. 431- 433), Reservoir Salvage Act (16 U.S.C. 469-469c), section 110 of the National Historic Preservation Act (16 U.S.C. 470h-2), or Archaeological Resources Protection Act (16 U.S.C. 470aa-mm)" (36 CFR 79.1(a))
☐ Spatial relationship between objects informs or supplements record of park-defining events, activities, and/or people

Associational, Evidential, Intrinsic, and Informational Value

☐ Directly associated with event, activity, place, or use by people for which the park was established
☐ Tangible evidence of park-defining events, commemorative activities, people, and/or places
☐ Supports understanding of military or combatant tactics, strategies, and movements within the park
☐ Documents military technologies or other technical and manufacturing processes relevant to park and nation's history

Rarity

☐ No or few other examples of this kind of object exist in the park collection
☐ Only known example of this kind of object
☐ Limited or novel in production
☐ Design and/or manufacture method or materials are unique or distinctive
☐ Iconic representative of park-defining event, activity, person, or place
☐ One or few remaining objects from park-defining event, activity, person, or place within the park

Supporting Documentation

☐ Record of provenance is complete or free of gaps
☐ Scientific project documentation, including provenience, is comprehensive and well-supported
☐ Used in well-supported documented research or scholarly publication on historic events and people significant to park and nation's history
☐ Potential for scholarly research on historic events and people significant to park and nation's history
☐ Subject to the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)

Concurred by Collections Advisory Committee Member 1:	Name: Title:	Signature:	Date:
Concurred by Collections Advisory Committee Member 2:	Name: Title:	Signature:	Date:
Submitted by Custodial Officer for museum collection:	Name: Title:	Signature:	Date:

Figure G.6. Historical Significance Contributing Factors Tool

National Park Service
Park Inerting Justification (Sample)

Park Name: _____

Package Description: _____

Justification for (check one): ☐ Munitions ☐ Artillery ☐ Non-Combat Explosive
☐ Other (describe): _____

Historical Significance Contributing Factors Tool Attached ☐ Yes ☐ No

List of Objects
Include list of objects here or append. Include justification per object, or as narrative justification statement.

Catalog Number:	Object Name:	Justification:

Narrative Justification Statement
Provide information to support determination of Historical Significance and inerting request here or in List of Objects.

Completed by:	Name: Title:	Signature:	Date:
Concurred by Collections Advisory Committee Member 1:	Name: Title:	Signature:	Date:
Concurred by Collections Advisory Committee Member 2:	Name: Title:	Signature:	Date:
Recommended by Safety Manager	Name: Title:	Signature:	Date:
Recommended by Custodial Officer for the museum collection:	Name: Title:	Signature:	Date:
Approved by Superintendent:	Name:	Signature:	Date:

Figure G.7. Park Inerting Justification (Sample)

National Park Service
Regional Panel Inerting Request Review (Sample)

Region: _____

Park Name: _____

Package Description: _____

Regional Panel Comments:

Regional Panel Recommends Inerting: ☐ **Yes** ☐ **No**

Curatorial representation on panel is required. Include subject matter experts as appropriate.

Curator:	Name: Title:	Signature:	Date:
Archeologist:	Name: Title:	Signature:	Date:
Historian:	Name: Title:	Signature:	Date:
Other:	Name: Title:	Signature:	Date:
Prepared by:	Name: Title:	Signature:	Date:

Concurred by Regional Safety Manager:	Name: Title:	Signature:	Date:
Concurred by Regional Curator:	Name: Title:	Signature:	Date:

Regional Director concurs with Regional Panel recommendation: ☐ **Yes** ☐ **No**

Concurred by Regional Director:	Name:	Signature:	Date:

Regional Director Comments (Complete if not concurred)**:**

Figure G.8. Sample Regional Panel Inerting Request Review (Sample)

National Park Service
Museum Firearms Evaluation and Unloading Record

Park Name: _____

Specialist	Name	Title
	Institution / Affiliation	
	E-mail Address	Phone Number
	Address	

Curator:	Name: Title:	Signature:	Date:
Concurred by Park, Zone, or Regional Safety Manager	Name: Title:	Signature:	Date:
Concurred by Park or Regional Chief Ranger	Name: Title:	Signature:	Date:
Approved by Superintendent	Name:	Signature:	Date:

Catalog Information					**Evaluation**		**Unloading**	
Catalog Number	**Object Name**	**Other Number(s)**	**Description**	**Storage Location**	**Evaluated?** (Yes/No)	**Status** (Loaded, Unloaded, or Indeterminate)	**Verified Unloaded?** (Yes/No)	**Describe Process**
					_Y _N		_Y _N	
					_Y _N		_Y _N	
					_Y _N		_Y _N	
					_Y _N		_Y _N	
					_Y _N		_Y _N	
					_Y _N		_Y _N	

Figure G.9. Museum Firearms Evaluation and Unloading Record

National Park Service
Museum Small Arms Ammunition Evaluation and Mitigation Record

Park Name: _____

Specialist	Name	Title
	Institution / Affiliation	
	E-mail Address	Phone Number
	Address	

Curator:	Name: Title:	Signature:	Date:
Concurred by Park, Zone, or Regional Safety Manager	Name: Title:	Signature:	Date:
Concurred by Park or Regional Chief Ranger	Name: Title:	Signature:	Date:
Approved by Superintendent	Name:	Signature:	Date:

Catalog Information					**Evaluation**		**Mitigation**	
Catalog Number	**Object Name**	**Item Count**	**Description**	**Storage Location**	**Evaluated?** (Yes/No)	**Status** (Live/Stable, Live/Unstable, Solid Metal, or Inert)	**Rendered Inert or Retained Live*?**	**Describe Inerting Process** (If not retained live in storage)
					_Y _N		_Inerted _Retained Live	
					_Y _N		_Inerted _Retained Live	
					_Y _N		_Inerted _Retained Live	
					_Y _N		_Inerted _Retained Live	
					_Y _N		_Inerted _Retained Live	
					_Y _N		_Inerted _Retained Live	

* Must be stored in a locking, fire-resistant magazine or anti-static box (in accordance with *MH* I Appendix G.D.II.2: Safe storage of small arms ammunition).

Figure G.10. Museum Small Arms Ammunition Evaluation and Mitigation Record

National Park Service
Museum Munitions and Artillery Evaluation and Inerting Record

Completed by curator to document evaluation by Department of Defense (DOD) Explosive Ordnance Disposal (EOD) unit (USMC or other) or accredited Public Safety Bomb Squad, *and* inerting by USMC EOD unit.

Park Name: _____

Submitted by Curator: _____
(Print Name) (Title) Signature

Organization: ☐USMC EOD ☐Other DOD EOD ☐Accredited Public Safety Bomb Squad

Unit Name (print)

Responsible Individual (print)

E-mail Address Phone Number

Address Date

Concurred by Park, Zone, or Regional Safety Manager	Name: Title:	Signature:	Date:
Concurred by Park or Regional Chief Ranger	Name: Title:	Signature:	Date:
Approved by Superintendent	Name:	Signature:	Date:

Object Information					**Record of Evaluation**			**Record of Inerting (USMC use only)**		
Catalog Number	**Object Name**	**Item Count**	**Storage Location**	**Description**	**Evaluated?** (Yes/No)	**Describe Process**	**Status** (Live, Inert or Solid metal)	**Inerted?** (Yes/No)	**Describe Process**	**USMC EOD Inert Number**
					_Y _N			_Y _N		
					_Y _N			_Y _N		
					_Y _N			_Y _N		

Figure G.11. Museum Munitions and Artillery Evaluation and Inerting Record

Completed US Marine Corps Inert Certification for Munitions (Sample)

INERT CERTIFICATION
MARINE CORPS EXPLOSIVE ORDNANCE DISPOSAL

a. **Item description:** 3 Inch, Hotchkiss, Case Shot, Type 1, Union	
b. **Assigned serial number:** M30004-21373	
c. **Certifying official's name:** Sgt Ord, Dan	d. **Verifier official's name:** GySgt Kanon, Robert
12/22/2022 X Dan Ord Signed by: ORDDAN 999999999	12/22/2022 X Robert Kanon Signed by: KANONROBERT 999999999
g. **Date certified:** 20221222	i. **Item location:** PARK National Park
h. **Method to verify inert:** Visual	j. **Disposition:** Transferred

Notes/history: Encyclopedia of Black Powder Artillery Projectiles Found in North America; 1759-1865 - Volume IV - p - (1121). Catalogue Number PARK 1074

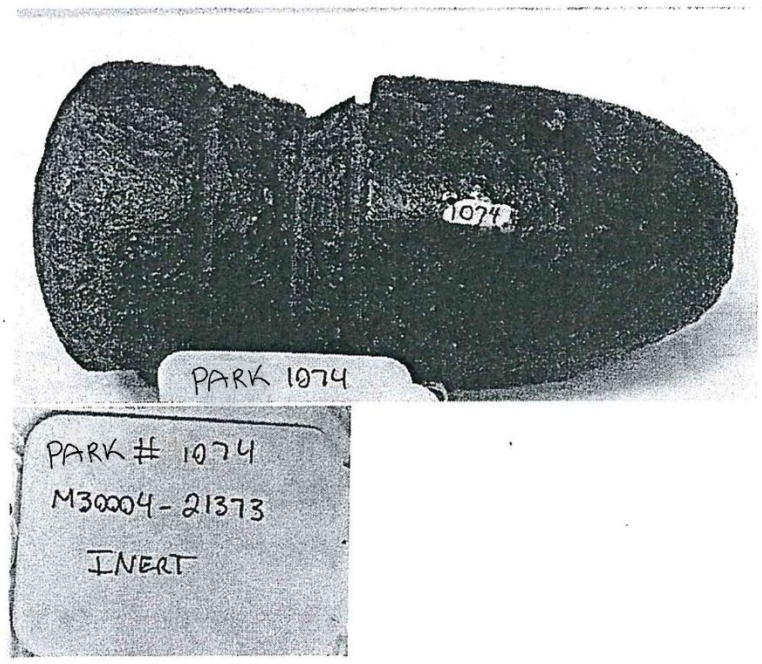

Figure G.12. Completed US Marine Corps Inert Certification for Munitions (Sample)

National Park Service
NPS Museum Munitions Verification Document

If Department of Defense Explosive Ordnance Disposal unit or accredited Public Safety Bomb Squad form is not available, use this document during evaluation. Place signed copy with photographs in the accession and/or catalog folder and with object in storage.

Park Name: _____

Section A: Object Information	
Catalog number	Object name:
Storage location:	
Serial or other number(s):	
Description:	

Section B: DOD EOD Unit or Accredited Public Safety Bomb Squad Information (Completed by EOD Unit or bomb squad)
Explosive Ordnance Disposal (EOD) Unit or Accredited Public Safety Bomb Squad Name (print):
Verifying official Name and Title (print):
_____ (Signature)

Section C: Verification of Munition as Inert or Solid Metal	
Verification Method:	
Date verified:	Date returned to park collection:

[Photograph(s)]

Notes:

Adapted from US Marine Corps Base Quantico Explosive Ordnance Disposal (EOD) Unit inert certification form.

Figure G.13. NPS Museum Munitions Verification Document

NATIONAL PARK SERVICE
EMERGENCY RESPONSE STEPS:
SUSPECTED LIVE MUNITIONS IN THE COLLECTION

Implement these Emergency Response Steps when observing a *change in condition** in a museum munition**.

Recognize:

- Assume the munition is live.
- ***Do not*** handle, touch, move, transport or ship, disturb, dispose, or attempt to deactivate suspected live munitions under any circumstance.
- Note type, size, and stability ***only*** if safe to do so.
- Photograph suspected live munition from a safe distance.

Retreat:

- Leave suspected live munition in place and note location.
- Stop all work.
- Cordon off cabinet and area.
- Vacate and secure the room.
- Evacuate building.
- Direct occupants to meet at designated assembly point.

Report:

- Call 911 and/or park dispatch to contact Department of Defense (DOD) Explosive Ordnance Disposal (EOD) unit (US Marine Corps or other) or accredited state or local bomb squad
  and
- Notify supervisor, law enforcement, and park safety manager.
- Superintendent issues Area Closed order.
- Building is secured and perimeter established.
- Meet at designated assembly point until cleared.

* *Changes in condition* include appearance of new cracks, bulges or dents; leaking fluid; new corrosion, smoking, odor, ticking; or noting a missing grenade pin or exposed fuse in a cannonball or shell.

** For *non-combat explosives*, if condition changes are noted then follow these steps and contact a trained and licensed certified blaster *or* accredited Public Safety Bomb Squad. ***Do not*** contact an EOD unit, as they do not respond to non-combat explosives.

Figure G.14. Emergency Response Steps: Suspected Live Munitions in the Collection

J. Index