

1.0. General.

During operations in the field, munitions can become unserviceable, posing a hazard to personnel and facilities. Planning for normal, routine disposal of unserviceable munitions generated at an ASP is one of the duties of ammunition personnel. This lesson discusses only the planning for destruction of relatively small amounts of unserviceable munitions. Upon completion of this lesson, you will be knowledgeable of what the requirements are for routine disposal. You can and should contact your supporting Explosive Ordnance Disposal (EOD) Detachment for technical advice and assistance.

1.1. General Procedures.

Before any destruction of unserviceable munitions, the surveillance section must fill out a DA Form 2415 (Ammunition Condition Report) (See Figure 1). The form must then be submitted to the proper authority in order to get disposition on the munitions. DA PAM 738-750 contains specific preparation and distribution details for completing the DA Form 2415. The only exception is when the munitions or explosives are an immediate danger to munitions storage personnel and property. In this case, the commanding officer of the ammunition company can order the destruction and submit a DA Form 2415 as a follow-up. Procedures to be followed must be included in the destruction SOP.

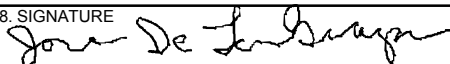
Local regulations concerning the destruction of munitions should be reviewed and adhered to by the surveillance section as well.

The ammunition inspector, to include civilian QASAS and/or military ammunition inspectors, is responsible for disposition instructions. The ammunition unit commander is in charge of the actual destruction of the material.

1.2. Training.

All ammunition unit commanders must ensure that all unit personnel are properly trained in the procedures and safety standards for the routine destruction of munitions and explosives. Such training must be routinely scheduled to maintain the soldier's proficiency. Training is performed in accordance with FM 5-25, TM 9-1300-206, and TM 9-1375-213-12. Local EOD teams can be contacted to provide technical assistance during hands-on training sessions. As a senior noncommissioned officer responsible for planning routine destruction of munitions, you must support the commander by implementing the training program as part of your planning process. The training program for routine destruction must include at least the following:

- Methods and procedures for priming and capping (nonelectric and electric).
- Methods and procedures for destruction by detonation and burning.
- Guidelines for selecting the site.
- General and specific safety procedures for destroying munitions.

AMMUNITION CONDITION REPORT <small>For use of this form, see DA PAM 738-750; the proponent agency is DCSLOG</small>				REQUIREMENT CONTROL SYMBOL CSGLD-1020	
1. THRU: <i>(Include ZIP Code)</i>		2. DATE OF REPORT	3. PAGE _____ OF _____ PAGES		
4. TO: <i>(Include ZIP Code)</i> Cdr, U.S. Army Armament Munitions & Chemical Command ATTN: AMSMS-DSM-MA Rock Island, IL 61299-6000		5. UNIT IDENTIFICATION CODE W390AA-15-87			
6. FROM: <i>(Include ZIP Code)</i> Cdr, McAlester Army Ammunition Plant ATTN: SMCMC-QAS McAlester, OK 74501-5000		7. COMMODITY <input type="checkbox"/> CHEM <input type="checkbox"/> GM <input checked="" type="checkbox"/> CONV			
8. NOMEN-MODEL ITEM REPORTED Projectile, 155mm, HE, M483A1	a. PART/NSN NO. 1320-00-126-7339-D563	b. SN/LOT NO. MA-85A003-042	c. DATE OF MFG Jan 85	d. QTY IN LOT 2,251	
9. NOMEN-MODEL EQUIP INSTALLED/USED ON	a. PART/NSN NO.	b. SN/LOT NO.	c. DATE OF MFG	d. QTY IN LOT	
10. QTY INSPECTED 20	11. QUANTITY DEFECTIVE 20	12. PRESENT COND CODE F		13. ECON REPAIRABLE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
14. USE <input checked="" type="checkbox"/> WR <input type="checkbox"/> TNG	15. ESTIMATED REPAIR/MAINT/DISPOSAL UNIT COST DIRECT LABOR \$ GAS \$ OTHER \$				
16. DETAILS <i>(Description, cause, action, disposition)</i> a. Description: (1) Reason for ACR Initiation: Defects noted during performance of periodic inspection. (2) Defects encountered: (SASIP 742-1320-94-250) (a) outer pack: 10 percent pallet bases damaged (minor) (b) inner pack: N/A (c) Item: 100 percent with diamond marking mission (major). 30 percent with corrosion on fuze well threads (major). 5 percent with loose ogive/body joint (major). (3) Owner account: Army/B14 b. Cause: Corrosion defectives are deteriorative in nature. Other defectives are manufactured defects. c. Action: Lot retained in condition Code F. ACR W390AA-02085 previously reported unserviceable lot identified above in condition code F. d. Disposition: (1) Recommend renovation to condition code A. (2) MCAAP has the capability to perform recommended renovation. e. Originator: J. Henry Blossom, QASAS, AUTOVON 956-6557					
17. TYPED/PRINTED NAME, GRADE AND TITLE JOSE DeLaGUAPA GS 1910-12, C, Ammo Surv Div			18. SIGNATURE 		

DA FORM 2415
1 DEC 77

EDITION OF 1 JAN 64 IS OBSOLETE.

Figure 1. Completed DA Form 2415

2.0. Destruction Site.

Site selection involves different factors depending on whether destruction is to be by burning or by detonation.

2.1. Destruction By Burning.

The overriding consideration in selecting a burning site should be to get the greatest practical distance from all storage locations, inhabited buildings, public highways, etc. Make sure the site is not less than the inhabited building distance given in the QD tables for whatever type and quantity of munitions being destroyed from all structures and public roads. Ensure the area is cleared of all flammable material and vegetation. Always consider prevailing winds and the possibility of mass detonation during burning operations. Whenever possible, use natural barricades between the burning site and other buildings or storage locations.

2.2. Destruction By Detonation.

There is only one specification that is different from site selection for destruction by burning. It is that the site should be at least 2,400 feet from public highways, railways, inhabited buildings, storage locations, etc. Note that the 2,400 foot distance does not apply when a deactivation furnace is used to destroy small amounts of fuzes, primers, small arms cartridges, etc. If the minimum safety distance of 2,400 feet cannot be met, put the munitions in a pit or trench to limit fragmentation range. Make sure the pit is at least 4 feet deep and the munitions are covered with at least 2 feet of dirt. It is possible for an electric blasting cap circuit to be set off by a strong electric current. To minimize this danger, make sure the site is away from all electrical transmitters. Because it is possible that the proposed site will conflict with existing Army airspace, get clearance for the proposed site from the appropriate Army airspace representative. See AR 95-50 for more information.

2.3. Site Preparation.

Remove all dry vegetation and other flammable materials within a radius of 200 feet from the destruction point. If the unit is in combat service support operations at the forward ASP, it may not be practical to do this due to tactical or operational considerations. Keep firefighting equipment for combating grass fires readily available, and, if practical, the ground at the point of destruction should be wet down with water at the close of each day's operation. An area that was burned on less than 24 hours earlier cannot be burned on again, unless it has been soaked with water and has been inspected by surveillance section personnel or EOD personnel. Concrete pads may not be used for burning or detonation.

Keep at least 300 feet between the personnel shelter and the destruction pit or site. There may not be a demolition site at a forward storage location (CSA/ASP). If there is not, keep personnel behind barricades or in trenches that have overhead cover.

Make sure anyone who will be burning wears fire-resistant outer clothing, if it is available in the supply system. If it is not available, flameproof clothes by soaking them in one of the following solutions:

- A 15-percent solution of diammonium phosphate or ammonium sulfate.
- A solution of 2-pounds of ammonium sulfate and 4 pounds of ammonium chloride in 3 gallons of water.

Make sure at least two people perform the destruction, but keep the number involved to a minimum. Make sure there is two-way radio communications or a land-line telephone at the destruction site.

Some components of munitions, such as tracers containing mercury chloride, release toxic matter when burned. Propelling charges may contain lead or decoppering agents, which also release toxic fumes. It is critical to keep soldiers upwind from the burn and wearing adequate and proper respiratory protection devices (field protective mask). Nitroglycerin exuding from commercial dynamite can be absorbed through the skin. Make sure soldiers know how to protect themselves against these hazards.

2.4. Destruction Area Operation.

Make sure there is a munitions destruction SOP, either as an annex to the unit SOP or as a separate SOP. Make sure it includes all the following procedures:

- Allowable explosive weight authorized in an individual destruction operation or shot.
- Priming and capping method to be used.
- Responsibilities of destruction team personnel.
- What to do for range safety.
- What emergency procedures to take for misfires and emergencies.

Any demolition range used to conduct routine destruction will comply with the requirements of the munitions destruction SOP. TM 9-1300-206 has the specific procedures for specific munitions types, such as grenades, mines, and artillery munitions.

3.0. Routine Destruction of Munitions and Explosives Procedures.

As a senior NCO, you must be fully aware of all the steps involved with routine destruction of munitions in order to adequately plan the process. The following procedures are involved in a routine destruction of munitions and explosives.

- Upon receipt of authority from higher headquarters, the ammunition officer reviews the unit destruction SOP and alerts the appropriate unit personnel.

- The ammunition officer then ensures that the operations section contacts the unit motor pool to request the required number of vehicles to transport munitions and soldiers to the disposal area.
- The designated safety officer conducts a safety briefing for destruction team members including the procedures to be followed during conduct of the exercise. The safety officer also makes sure that all required equipment and emergency gear is available for use at the destruction site. Team leaders check equipment and make sure any problems are corrected.
- Items to be destroyed are loaded on unit vehicles according to proper transportation compatibility requirements, using prepared DA Form 3151-R (See Figure 2) to maintain a correct inventory and record of the munitions moved. This form should be filled out by the operations NCOIC or personnel designated by the operations NCOIC.
- Upon arrival at the destruction site, stage vehicles at individual shot locations. Designated team members should remove the munitions from their packaging and place them in the designated location for destruction. It is permissible to store empty boxes, pallets, and fiber containers at a designated holding area. They can also be returned to the inert salvage area at the ASP.
- The team primes each individual shot. If a nonelectric firing method is used, the safety officer sets off the firing train and inspects the primed shots. Upon command from the safety officer, the designated individual initiates the firing train. The individual who initiates it will make sure the fuse lighter is functional and that the safety fuse is burning properly and then immediately returns to the safety area. If there is a nonelectric misfire, wait 30 minutes before repriming the shot. When charges are to be “tamped,” make sure they are fitted with detonating-cord leads long enough to keep the caps from being covered.
- If an electric firing method is used, the individual designated to fire the shot rechecks the firing line, returns to the firing point, and hooks the electric wires up to the blasting machine when the safety officer says so. The designated individual then fires the shot on command from the safety officer. If there is an electric misfire, the individual responsible for firing the shot disconnects the firing line from the power source, shunts the wires, waits 30 minutes, visually rechecks the firing line, and if necessary, reprimed the shot.

AMMUNITION STORES SLIP FOR USE OF THIS FORM, SEE FM 9-38. THE PROPONENT IS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND.			AUTHORITY 0086-0001			DATE: 8079	
FROM: SURVEILLANCE SECTION			NAME OF ACTIVITY MIESAU ARMY DEPOT				
TO: CONTROL SECTION			VEHICLE NO. N/A				
RECEIPT <input type="checkbox"/>	ISSUE <input type="checkbox"/>	OTHER (SPECIFY) <input checked="" type="checkbox"/>	DRIVER N/A				
NSN-DODIC NOMENCLATURE	LOT NO.	ACC	LOCATION		PLTS BXS	TOTAL ROUNDS	INIT
			FROM	TO			
1320-00-529-7331-D544 PROJECTILE, 155 mm HE, M107 W/SUPPL CHG	LOW 32-61	N	E14	E14	91/PLT	728	
REMARKS: ITEM #1 CONDITION CODE CHANGE FROM ACC-A TO ACC-N; IAW; P202115Z MAR 80, MIF B-20-79, SUSPENDED FROM ISSUE AND USE; EXCEPT FOR EMERGENCY COMBAT. Matthew O Jones							
DATE	SIGNATURE OF ISSUING CHECKER		DATE	SIGNATURE OF RECEIVING CHECKER			

Figure 2. Completed DA Dorm 3151-R

- After the shot, make sure the area is searched for any items that may not have been completely destroyed. In the event of a kick-out, (munitions items not destroyed but thrown clear) have individual items reprimed and detonated in place.
- When demolition is finished, load all equipment aboard unit transportation and return it to the proper storage location. Before equipment is stored, team members clean all of it, and the destruction team NCOIC inspects all of it.
- Load pallets and all packing materials on unit vehicles and return them to the inert salvage area for reinspection and certification by salvage crew personnel. The salvage NCOIC uses DA Form 3151-R to record the receipt of salvage. The completed DA Form 3151-R is returned to the operations section so the information can be recorded on the stock records, and the form is filed. All other materials (e.g., banding, cardboard inserts) should be policed up and disposed of IAW local guidance.

4.0. Amounts and Kinds of Priming Explosives Used In Routine Destruction Operations.

Plastic explosives are preferred over such general demolition explosives such as TNT because the general explosives often produce either a low-order detonation or kick-outs. Furthermore, plastic explosives such as composition C-4 and FLEX-X allow for much better contact between the priming explosive and the munitions to be destroyed. See Table 1 for how much explosive to use.

Table 1. Explosive Weights for Destruction of Items by Detonation

Items To Be Destroyed	Explosive Weight (lbs) Per Individual Item		
	TNT	COMP-C	TETRYTOL
Grenades, Hand or Rifle, and Small Rockets	½ pound	½ pound	½ pound
75mm, 76mm, 90mm, and Mortar Cartridges	1 ½ pounds	1 pound	1 ¼ pounds
105mm, 152mm, and 155mm, Projectiles	2 ½ pounds	2 pounds	2 pounds
175mm and 8-inch Projectiles	3 pounds	2 ½ pounds	2 ½ pounds

4.1. Nontoxic Chemical Munitions.

When they are disposed of by burning or detonation, many nontoxic chemical agents, munitions, or their components produce hazards. Precautions must be taken to make sure the operation is safe. Make soldiers aware of the dangers of chemical munitions and fillers. The carelessness of one person may result in injury or death, not only of that person but of other soldiers at the disposal area. Do not let destruction team members take short cuts and deviations from the procedures in the SOP.

Restrict detonation of nontoxic munitions to the smoke and incendiary classes. The reason is that illumination and CS items contain low explosive ejection charges. Base-plates and payloads from these munitions may be ejected at high velocity and are hazardous to soldiers in the area.

When destroying munitions containing white phosphorus (WP) or plasticized white phosphorus (PWP), use a slightly larger amount of priming explosive than called for in Table 1 to rupture the case completely and disperse the filler. This will allow the WP to burnout more completely. Place priming explosives underneath the rounds to help ensure complete burn out. Do NOT destroy WP or PWP munitions in the same shot hole or area used for other kinds of munitions. WP/PWP particles may be driven into the ground and later uncovered and reignited. Table 2 provides data on time and weather conditions for the destruction of these agents and munitions.

Table 2. Conditions for the Destruction of Nontoxic Chemical Agents and Munitions

Factor	CONDITION		
	Excellent	Fair	Unsatisfactory
Temp	75°	55° to 75°F	Under 55°
Sky	Clear	Clear to partly cloudy	Cloudy
Wind	4-15 MPH	5-20 MPH	Under 3 MPH or over 20 MPH
Time (Hours)	1000-1600	Unsatisfactory at all other times	Unsatisfactory at all other times

Use Table 2 as follows:

1. Determine factors at the site.
2. Decide the condition based on the table.
3. Make the decision to destroy or not. Sometimes munitions have to be destroyed, even under less than excellent conditions. It becomes a judgment call then and considering safety, should still be done between 1000 and 1600 hours.

4.2. First Aid Procedures for Nontoxic Chemicals.

The following first aid procedures apply to nontoxic chemicals:

- **WP.** Make sure WP first aid kits are at the site. These kits contain copper sulfate pads that keep oxygen from the injury, which stops the reaction. Evacuate casualties immediately to the nearest medical facility.
- **Smokes (FM and FS).** These compositions probably will not produce a reaction that requires treatment. If soldiers without a protective mask are overcome by a very strong smoke concentration, move them to fresh air until they recover. The liquid from these agents, particularly from FS, is very corrosive, and any spilled on the body must be immediately washed away with large amounts of water followed by rewashing with soap and water.
- **Incendiaries.** Use standard first aid treatment for accidents that happen when soldiers handle this type of material. Treat burns like burns from flames. If TPA causes burns, they will be severe and will require prompt treatment from medical personnel. Do not put water on TPA burns; it will react with the incendiary particles and make the burn worse.

5.0. Summary.

This lesson has focused on the requirements for planning routine disposal of munitions. As senior NCOs, you must fully understand all the requirements in the disposal process to ensure the safety of your soldiers and the timely completion of the mission.

Student Check

This exercise will reinforce the information covered in this lesson. Answer the following questions. Cite the appropriate paragraph and table number (if applicable) in the lesson that supports your answer.

1. What form must be filled out before any destruction of unserviceable munitions can take place?

ANSWER: _____

REFERENCE: _____

2. What documents should be used to ensure all unit personnel are properly trained in the procedures and safety standards for the routine destruction of munitions or explosives?

ANSWER: _____

REFERENCE: _____

3. At a minimum, what must the training program for routine destruction of munitions include?

ANSWER: _____

REFERENCE: _____

4. What is the overriding consideration for selecting a burning site for unserviceable munitions?

ANSWER: _____

REFERENCE: _____

5. What is the minimum distance that a detonation site must be located away from railways?

ANSWER: _____

REFERENCE: _____

6. What distance must all dry vegetation and other flammable materials be removed from the destruction point?

ANSWER: _____

REFERENCE: _____

7. If flameproof clothing is not available, what is used to make clothing fire resistant?

ANSWER: _____

REFERENCE: _____

8. What procedures must be included in your munitions destruction SOP?

ANSWER: _____

REFERENCE: _____

9. What form is used to maintain a correct inventory and record of munitions moved to the destruction site?

ANSWER: _____

REFERENCE: _____

10. When using an electric firing method, who is responsible for hooking the electric wires up to the blasting machine?

ANSWER: _____

REFERENCE: _____

11. What is the Tetrytol explosive weight necessary for each rifle grenade to be destroyed?

ANSWER: _____

REFERENCE: _____

12. What are the four conditions considered when determining excellent, fair, and unsatisfactory conditions for destruction of munitions?

ANSWER: _____

REFERENCE: _____

**Student Check
Solution**

1. Answer: DA Form 2415
Reference: Paragraph 1.1.
2. Answer: FM 5-25, TM 9-1300-206, and TM 9-1375-213-12.
Reference: Paragraph 1.2.
3. Answer: The training program for routine destruction must include at least the following:
 - Methods and procedures for priming and capping (nonelectric and electric).
 - Methods and procedures for destruction by detonation and burning.
 - Guidelines for selecting the site.
 - General and specific safety procedures for destroying munitions.

Reference: Paragraph 1.2.

4. Answer: The overriding consideration in selecting a burning site should be to get the greatest practical distance from all storage locations, inhabited buildings, public highways, etc.
Reference: Paragraph, 2.1.
5. Answer: 2,400 feet.
Reference: Paragraph 2.2.
6. Answer: A radius of 200 feet from the destruction point.
Reference: Paragraph 2.3.
7. Answer: If it is not available, flameproof clothes by soaking them in one of the following solutions:
 - A 15-percent solution of diammonium phosphate or ammonium sulfate.
 - A solution of 2 pounds of ammonium sulfate and 4 pounds of ammonium chloride in 3 gallons of water.

Reference: Paragraph 2.3.

8. Answer: Make sure it includes all the following procedures:
- Allowable explosive weight authorized in an individual destruction operation or shot.
 - Priming and capping method to be used.
 - Responsibilities of detraction team personnel.
 - What to do for range safety.
 - What emergency procedures to take for misfires and emergencies.

Reference: Paragraph 2.4.

9. Answer: DA Form 3151-R.
Reference: Paragraph 3.0.

10. Answer: The individual designated to fire the shot.
Reference: Paragraph 3.0.

11. Answer: ½ pound.
Reference: Paragraph 4.0, Table 1.

12. Answer: Temperature, Sky, Wind, and Time (Hours).
Reference: Paragraph 4.1, Table 2.