

Department of the Army, DoD

§ 650.140

§ 650.138 Reports.

Installation commanders will provide reports on disposition of pharmaceutical drugs as required.

RADIOACTIVE MATERIALS, EXPLOSIVES, AND CHEMICAL WARFARE AGENTS

§ 650.139 Radioactive materials and nuclear accidents and incidents.

(a) Policies and procedures applicable to nuclear accidents and incidents are given in AR 40-13, AR 50-5, AR 360-5, AR 385-40, and AR 755-15. The handling, use, and disposal of radioactive materials will be in accordance with applicable Army regulations and will be in such a manner so as not to contribute to pollution of the environment; within imminent safety and health considerations. Procedures may be found in Army guidance dealing with medical services, nuclear weapons and material, transportation and travel, explosives, safety, logistics, and disposal of supplies and equipment directives.

(b) The handling and control of radioactive material and other sources of ionizing radiation will be in accordance with AR 40-37 and AR 700-52. The temporary storage of radioactive materials, prior to shipment for transfer or disposal, will be in accordance with AR 40-5, AR 40-37, AR 700-52, AR 755-15, TM 3-261 and 10 CFR part 20.

(c) The shipment and disposal of radioactive materials will be in accordance with AR 55-55, AR 755-15, and DOT and Nuclear Regulatory Commission regulations.

(d) For existing activities, the local disposal of radioactive materials by release to the sanitary sewerage systems and other radioactive effluents to the environment will be as low as readily achievable and in accordance with AR 755-15 and rules, regulations and the requirements of the Nuclear Regulatory Commission and the Environmental Protection Agency.

(e) Special problems on radioactive waste disposal will be referred through command channels to Commander, U.S. Army Materiel Development and Readiness Command (ATTN: AM CSF-P), 5001 Eisenhower Avenue, Alexandria, Va 22333.

(f) All nuclear reactor facilities will be monitored for discharges of gaseous,

liquid or particulate effluents to prevent contamination of the environment in accordance with chapter 4, AR 385-80.

(g) Installation commanders will provide reports on handling, use, inventory or disposal of radioactive materials and monitoring as requested by DA, EPA, Nuclear Regulatory Commission or other Federal agencies, and on nuclear accidents/incidents as required by AR 385-40.

(h) The Environmental Protection Control Report—Radiation Pollution, Category 4, (RCS (DD-I&L(SA) 1383). The Radiation section of the semi-annual Environmental Pollution Control report is designed to provide information to HQDA on phased or coordinated plans for prevention or control of radiation pollution for submission to Office of the Secretary of Defense and Office of Management and Budget. See subpart J of this part for reporting procedures and guidance.

(i) All new activities and modification of existing facilities which involve the continuous release of radioactive materials in effluents to air, water or sanitary sewerage systems will not exceed 1 percent of the activity concentration as specified in National Council on Radiation Protection and Measurement Report No. 22 (National Bureau of Standards Handbook No. 69) and 10 CFR part 20 when averaged over 1 month. Batch releases will be averaged over the actual time of release and will not exceed the levels/concentrations as stated above.

§ 650.140 Explosive ordnance.

(a) Policies and procedures applicable to explosive ordnance materials are contained in AR 75-1, AR 75-14, AR 75-15, AR 385-60, AR 385-64, and AR 755-15 series regulations dealing with disposal of supplies & equipment. The disposal of deteriorated ammunitions and explosives will be in accordance with Army regulations in the 75, 385 and 755 series. Every effort will be made to dispose of these wastes so as not to contribute to the pollution of the environment within personnel safety considerations for Explosive Ordnance Disposal and Technical Escort Emergency Operations.

(b) Deteriorated or unused explosives, munitions and rocket propellants may only be open-burned in non-urban areas and under conditions acceptable to Regional EPA and appropriate State Air Pollution Control authorities. Where there is an official prohibition against burning of such wastes, notification of restrictions and/or requests for assistance will be submitted through command channels to DAEN-ZCE.

(c) Installation commanders will provide reports to DA, as requested, on the handling, use, inventory or disposal of explosive materials and on explosive accidents/incidents as required in AR 385-40.

§ 650.141 Chemical warfare agents.

(a) The handling, use, and disposal of chemical warfare agents, ammunition, and explosive materials will be in accordance with Army regulations and will be in such a manner so as not to contribute to the pollution of the environment. Procedures may be found in Army directives dealing with transportation and travel, explosives, safety, and disposal of supplies and equipment. The safety program for chemical agents and associated weapon systems is prescribed in AR 385-61. Further, disposal of chemical warfare agents will be planned in accordance with the National Environmental Policy Act of 1969, Pub. L. 91-190 (42 U.S.C. 4321 *et seq.*), Military Appropriation Acts Pub. L. 91-121, section 409 and Pub. L. 91-441, section 506.

(b) Installation Commanders will provide reports through command channels to DA as requested on handling, use, inventory, or disposal of chemical warfare agents and as required on chemical accidents/incidents as outlined in AR 385-40. Disposal guidance can be obtained from the Commander, U.S. Army Edgewood Arsenal who, in conjunction with the Commander, U.S. Army Environmental Hygiene Agency, Aberdeen Proving Ground, Md. 21010, will provide data.

TABLE 6-2—RELATED PUBLICATIONS

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended by the Federal Environmental Pesticide Control Act of 1972, Pub. L. 92-516. (title 7 U.S.C. 135-135K, 136-136Y (1972)).

Federal Water Pollution Control Act Amendments of 1972 (title 33 U.S.C. 1151 *et seq.*).

Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052).

Solid Waste Disposal Act as amended (title 42 U.S.C. 3251 *et seq.*).

AR 40-5 Health and Environment.

AR 40-7 Use of Investigational Drugs in Humans and the Use of Schedule I Controlled Drug Substances.

AR 40-13 Radiological Emergency Medical Teams (REMT).

AR 40-37 Licensing and Control of Radioactive Materials for Medical Purposes.

AR 40-61 Medical Logistics Policies and Procedures.

AR 40-574 Real Property Dispersal of Pesticides.

AR 50-5 Nuclear Surety.

AR 50-6 Chemical Surety.

AR 55-55 Transportation of Radioactive and Fissile Material Other Than Weapons.

AR 55-56 Transportation of Dangerous or Hazardous Chemical Materials.

AR 55-228 Transportation by Water of Explosives and Hazardous Cargo.

AR 55-355 Military Traffic Management Regulation.

AR 75-1 Malfunctions Involving Ammunition and Explosives.

AR 75-14 Interservice Responsibilities for Explosive Ordnance Disposal.

AR 75-15 Responsibilities and Procedures for Explosive Ordnance Disposal.

AR 360-5 General Policies.

AR 360-43 Information Guidance—Nuclear Accidents and Nuclear Incidents.

AR 385-10 Army Safety Program.

AR 385-16 System Safety.

AR 385-30 Safety Color Code Markings and Signs.

AR 385-32 Protective Clothing and Equipment.

AR 385-40 Accident Reporting and Records.

AR 385-60 Coordination with Armed Services Explosives Safety Board.

AR 385-61 Safety Program for Chemical Agents and Associated Weapon Systems.

AR 385-64 Ammunition and Explosives Safety Standards.

AR 385-80 Nuclear Reactor Health and Safety Program.

AR 420-74 Natural Resources—Land, Forest, and Wildlife Management.

AR 420-76 Pest Control Services.

AR 420-77 Restrictions on Use of Herbicide 2,4,5-T.

AR 700-52 Licensing and Control of Sources of Ionizing Radiation.

AR 750-20 Prevention, Control, and Abatement of Pollution from Mobile Equipment.

AR 755-15 Disposal of Unwanted Radioactive Material.

TM 3-261 Handling and Disposal of Unwanted Radioactive Material.

- TM 5-629 Herbicide Manual for Noncropland Weeds.
- TM 5-630 Ground Maintenance and Land Management.
- TM 5-632 Military Entomology Operational Handbook.
- TM 38-250 Packaging and Materials Handling: Preparation of Hazardous Materials for Military Air Shipment.

TABLE 6-3—PESTICIDE CONTAINER DISPOSAL GUIDELINES

RECOMMENDED INTERIM GUIDELINES FOR DISPOSAL OF EMULSIFIABLE CONCENTRATE METAL CONTAINERS

- Step 1. Empty containers in the normal manner and allow to drain for one minute into the spray or mix tank.
- Step 2. First Rinse.
 - a. Add the correct amount of water rinse solution:

	Minimum water rinse solution
Container size:	
Less than one gal.	One-fourth container volume.
One gal	One quart.
Five gal	Two quarts.
Fifteen gal	1.5 gallons.
Thirty gal	Three gallons.
Fifty-five gal ..	Five gallons.

- b. Replace closure.
- c. Rotate and up end container to get rinse over all interior surfaces.
- d. Drain rinse into the spray or mix tank.
- Step 3. Second Rinse.
 - a. Repeat step 2 a thru c.
 - b. Puncture head of the metal container near the edge adjacent to the pour spout and drain the rinse into the spray or mix tank.

NOTE: If 15-55 gallon containers are to be recycled through a registered drum reconditioner, DO NOT PUNCTURE the containers.

- Step 4. Third Rinse.
 - a. Repeat Step 2, but gently rotate the drum to rinse interior of the container being careful not to spill rinse through the puncture area.
 - b. Metal containers up to and including five gallon size:
 - (1) Allow rinsed container to drain for one minute into the spray or mix tank.
 - (2) Crush the rinsed container and bury in sanitary landfill in conformance with State and local standards, or recycle through a properly equipped metal reclaiming firm, if applicable.
 - c. Metal containers, 15-55 gallon capacity:
 - (1) Allow the rinsed container to drain for one minute into the spray or mix tank.
 - (2) Replace all closures, accumulate rinsed drums in a secure area, and:

- (a) Recycle through a registered drum reconditioner; or¹
 - (b) Return to a pesticide manufacturer or formulator for refilling with the same chemical class of pesticide providing such return and reuse is legal under currently applicable U.S. Department of Transportation regulations;¹ or
 - (c) Recycle as scrap metal through a metal reclaiming firm.
 - (3) If drums are not recycled, they should be rinsed and punctured as outlined in Step 3, crushed and buried in a sanitary landfill in conformance with State and local standards.
- NOTE: Never re-use emptied pesticide containers.

RECOMMENDED INTERIM GUIDELINES FOR DISPOSAL OF TECHNICAL GRADE METAL CONTAINERS

- Step 1. Empty container should be allowed to drain for one minute into the spray tank.
- Step 2. Replace closure.
- Step 3. Accumulate unrinsed empty drums in a secure area, and:
 - a. Store pending receipt of DOD disposal instructions; or
 - b. Return empty drums to a registered drum reconditioner¹ or a pesticide manufacturer or formulator for refilling with the same chemical class of pesticide as previously contained provided such return and refilling is legal under current applicable U.S. Department of Transportation regulations;¹ or
 - c. Recycle as scrap metal through a metal reclaiming firm having EPA and/or State approved burning equipment suitable for incineration of pesticides.

RECOMMENDED INTERIM GUIDELINES FOR DISPOSAL OF SPECIFIED CONTAINERS (BAIT, DUST, AEROSOL AND GRANULE)

- Step 1. Empty container in the normal manner.
 - a. Residue should be completely removed from bait, dust and granule containers.
 - b. Aerosol containers should be completely expended.²

¹Information on registered drum reconditioners "Reuse of Specification 17 Series Steel Drums" and the reuse of empty pesticide containers may be obtained from:

Department of Transportation, Office of Hazardous Materials, Operations Division, 400 Sixth Street, SW., Washington, DC 20590.

² In expending aerosol containers, some propellant usually remains. This propellant can be ignited if a large quantity of aerosol cans are crushed while being disposed in sanitary landfill operations. The vapors of propellant (in sufficient volume) can be sucked over the hot bulldozer engine by its fan and

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Step 2. Crush container with the exception of aerosol containers.

Step 3. Dispose container in the sanitary landfill in conformance with State and local standards, or accumulate and recycle the crushed metal containers through a properly equipped metal reclaiming firm, if applicable.

NOTE: Never re-use emptied pesticide containers.

RECOMMENDED INTERIM GUIDELINES FOR DISPOSAL OF WATER WETTABLE POWDER CONTAINERS (METAL AND PAPER)

Step 1. Empty container in the normal manner.

Step 2. Rinse container three times, each time using a volume of water equal to approximately 10 percent of the container capacity and adding the rinse water to the spray tank. This rinse water should be calculated as part of the required diluent.

Step 3. Rinsed metal containers can be crushed and sold as scrap metal, if applicable. Unsalvaged containers should be rendered unuseable and buried in an approved sanitary landfill in conformance with State and local standards.

NOTE: Never re-use emptied pesticide containers.

RECOMMENDED INTERIM GUIDELINES FOR DISPOSAL OF ONE GALLON OIL SOLUTION READY-MIX METAL CONTAINERS (6840-844-7355 DIAZINON 0.5 PERCENT; 6840-180-6069 BAYGON HOUSEHOLD SPRAY 1 PERCENT)

Step 1. Empty container in the normal manner.

Step 2. Puncture top of metal container near the edge adjacent to the pour spout and allow to drain for 5 minutes into the spray tank.

Step 3. The empty container should be crushed and buried in an approved sanitary landfill in conformance with State and local standards.

NOTE: Never re-use emptied pesticide containers.

TABLE 6-4—RECOMMENDED PROCEDURES FOR REPACKAGING LIQUID PESTICIDES AND DISPOSITION OF EMPTY CONTAINERS

1. Observe prescribed safety procedures during all operations to prevent spilling of, or exposure of personnel to the pesticides, and:

- a. Stay up wind while pouring pesticides.
- b. Do not drink, eat, smoke, or use tobacco in pesticide handling areas.

such vapors can ignite, consuming the equipment and operators in flames. Therefore, never store spent aerosol cans for disposal at one time; rather dispose them either singly or in quantities of no more than six cans.

c. Wear neoprene or neoprene coated gloves and a neoprene or Buna-N rubber apron while repackaging.

d. Wear face shields or chemical goggles during repackaging.

e. Do not put fingers in mouth or rub eyes while repackaging.

f. Wash hands before eating, smoking, or using the toilet and immediately after repackaging.

g. Wear protective clothing; remove contaminated clothing immediately and launder before wearing again.

h. Work clothes and street clothes should not be stored in the same locker.

i. Workers should shower at the end of each shift or upon completion of repackaging operations.

j. Respirators or gas masks with proper canisters approved for the particular type of exposure by the U.S. Bureau of Mines or the National Institute for Occupational Safety and Health should be available. Combat masks (M17, M17A1) should not be used.

k. Leaking containers should be repackaged under the supervision of the Installation Facilities Engineer's pest management personnel.

2. Approved containers for repackaging liquid pesticides are:

Five gallon-FSN 8110-282-2520, Drum Metal: New; 22 USS sheet metal gage steel; enamel exterior; nonremovable ends, 13¹/₁₆ in. outside H, 11¹/₄ in. OD; five gal. normal filled capacity; bail attached to top; spout; FED PPP-P-704, Type 1, Class 8, push-pull spout.

Fifty-five gallon-FSN 8110-597-2353, Drum, Shipping and Storage: 16 USS sheet metal gage steel; enamel exterior; nonremoval cover, 35¹/₁₆ in. outside H, 23³/₁₆ in. OD; 55 gal. capacity; two expanded outward rolling hoops; bung and vent located in end; reusable; FED PPP-D-729, Type 1.

3. When repackaging liquid pesticides, the interior surface of each metal drum FSN 8110-282-2520 and FSN 8110-597-2353, shall be completely lined with two coats, .0015 inch total thickness, of bisphenol epoxide and phenol-formaldehyde resins mixture conforming to MIL-V-12276D, Type III, class optional.

4. Empty the leaking container into one of the above approved containers and mark as shown in paragraph 8 or 9.

NOTE: Do Not Combine Pesticides During Repackaging.

5. After emptying the contents of a container, puncture the top of the container near the edge adjacent to the pour spout and allow one gallon containers one additional minute and larger containers 3 to 5 additional minutes to drain.

6. With storage some pesticides develop sludges or crystals that solidify and adhere to the bottom of the container. Should this occur, dissolve with a solvent and add the

dissolved sludge to the new container being used to repackage the contents of the leaking container. Pesticides containing sludges are considered unserviceable.

7. Container Rinse Procedures.

a. Rinse the empty container three times, each time using a volume of the normal diluent equal to approximately 10 percent of the container's capacity. The diluent for 5 percent DDT, FSN 6840-253-3892, is kerosene; diluents for other pesticides are indicated on the pesticide container labels.

Container size:	Minimum diluent required for each rinse
One gallon (qt.)	1.0
Five gallon (qts.)	2.0
Fifteen gallon (gal)	1.5
Thirty gallon (do)	3.0
Fifty-five gallon (do)	5.0

b. Add the correct amount of rinse solution and GENTLY ROTATE the container for one minute to get the rinse over interior surfaces avoiding spillage of the rinse through the leaking areas.

c. Drain the rinse into an approved container. Note: Never re-use emptied pesticide containers.

(1) For a pesticide declared SERVICEABLE, drain the rinse into a separate container. DO NOT RINSE INTO THE CONTAINER BEING USED TO REPACKAGE THE CONTENTS OF THE LEAKING CONTAINER. (Serviceability must be verified by a quality assurance test.)

(2) For a pesticide declared UNSERVICEABLE, drain the rinse into the container being used to repackage the contents of the leaking container.

d. Repeat paragraphs 7b and c (second rinse).

e. Repeat paragraphs 7b and c (third rinse), and:

(1) Allow to drain for 5 minutes into one of the above approved containers.

(2) Crush and bury empty containers in a sanitary landfill in conformance with Federal, State and local standards or recycle rinsed containers to a commercial metal reclaiming firm having EPA and/or State approval burning equipment suitable for incineration of pesticides.

8. Labeling containers of UNSERVICEABLE pesticides (diluted or undiluted) and rinse solutions.

a. Marking shown on one side of drum will not occupy more than the upper one-third of the side:

(1) WASTE MATERIAL NOT APPROVED FOR USE.

(2) FSN—Repackaged.

(3) Nomenclature and percentage.

(4) Type and quantity of rinse solution added to repackaged container.

(5) Total quantity in gallons.

(6) Level of protection and date packaged (B-month/year).

(7) Gross weight and cube.

b. Marking shown on drum head or ends not removed in order to use contents (applies to 55 gallon drums only):

(1) WASTE MATERIAL NOT APPROVED FOR USE.

(2) FSN—Repackaged.

(3) Total quantity.

9. Labeling containers of SERVICEABLE pesticides.

a. Marking shown on one side of drum will not occupy more than the upper one-third of the side:

(1) FSN—Repackaged.

(2) Nomenclature and percentage.

(3) Total quantity in gallons.

(4) Level of protection and date packaged (B-month/year).

(5) Gross weight and cube.

b. Marking shown on drum head or ends not removed in order to use contents (applies to 55 gallon drums only):

(1) FSN.

(2) Nomenclature and percentage.

(3) Total quantity.

(4) Lot or batch numbers.

(5) Date of pack (earliest repackage date).

(6) Contract number(s).

(7) Name and address of the contractor(s).

c. Marking shown on the diametrically opposite side of the container from that containing the identification marking and will be located in the upper one-third of the side:

(1) Contract, purchase, or delivery order number(s).

(2) Name(s) and address(es) of prime contractor(s).

d. In order for repackaged pesticides to be considered serviceable, returned to the supply system, transferred or sold for use as originally intended, an additional label which conforms with the original EPA or USDA registered label to include the registration number must be attached. If the item does not have an EPA or USDA registered label, the additional label must then conform to the labeling instructions contained in the original military or Federal specification for each line item.

10. Storage.

a. Store UNSERVICEABLE repackaged pesticides with other UNSERVICEABLE pesticides and hold pending DOD disposal instructions.

b. Store SERVICEABLE repackaged pesticides with other SERVICEABLE pesticides and use for intended purpose.

11. Reference.

39 FR 15235-15241, May 1, 1974, Environmental Protection Agency, Pesticides and Pesticide Containers, Regulations for Acceptance and Recommended Procedures for Disposal and Storage.