

Chapter XX Empty Containers

A. GENERAL.

1. EPA Regulates Empty Containers.

a. EPA regulates containers and inner liners of containers that contain residues of hazardous waste (40 CFR 261.7). Their criteria to determine which empty containers and/or inner liner residues require management as a hazardous waste when discarded is found in this CFR section and is based on:

- the container or inner liner's previous contents.
- the amount of remaining residue.

b. Empty containers whose residues meet the definition of a hazardous waste and where the residue exceeds 1 inch are to be managed as a hazardous waste.

c. Empty containers whose previous contents meet the classification of an acutely hazardous waste (usually a P listed waste) are to be managed as a hazardous waste unless triple rinsed.

2. DOT Regulates Empty Containers.

a. DoT regulations in 49 CFR 173.29(a) requires that empty containers with a capacity of 110 gallons or less which previously contained a hazardous or acutely hazardous material must be offered for transportation in the same manner as when they contained a hazardous or acutely hazardous material unless:

- The package has been cleaned and purged of all residue, or
- The package has been filled with a non-hazardous material.

3. State Requirements.

a. DRMOs will follow state regulations where applicable.

b. Individual state regulations regarding empty hazardous waste containers may be more stringent. California, for example, does not recognize the “one inch” rule.

NOTE: Overseas – Manage empty containers in accordance with OEBGD/FGS and host nation laws.

4. DOD Manages Empty Containers.

a. For management purposes, empty containers are classified into one of the three groups described below.

Group I. Non-Hazardous Previous Contents. Criteria when empty containers are considered non-hazardous:

- Previous contents were non-hazardous,
- Liner has been removed
- The container previously contained a hazardous material but has been triple rinsed with an appropriate solvent or cleaned by an equivalent method;
- Previously contained an acute hazardous waste and have been triple rinsed with an appropriate solvent, or cleaned by an equivalent method approved by the EPA regional administrator as a substitute for triple rinsing.

Group II. Hazardous Previous Contents. Containers or inner liners that have previously contained materials that are hazardous by any Federal (DoT, RCRA, CERCLA, TSCA, FIFRA, OSHA) or state definition, or meets the criteria of hazardous property in DoD 4160.21-M and contain a remaining residue (vapor, liquid, semi-solid, or solid)

Group III. Acutely Hazardous Previous Contents. Containers or inner liners that contain any material identified as an acute hazardous waste in 40 CFR 261.31, 261.32, or 261.33(e).

B. TURN-IN PROCEDURES.

1. **General Guidance.** DRMOs shall review DD Form 1348-1/1As and containers upon initial receipt to assure correct classification and procedures are followed. DRMOs should work with generators to correct container problems first in lieu of rejection. The DRMO will attempt reconciliation of DD Form 1348-1/1A discrepancies with the generating activity before rejecting. DRMOs may reject in writing (DRMS Form 917) the turn-ins with improperly prepared DD Form 1348-1/1As of repeated violators.

2. **Receipt.** Generators will turn in empty containers under the procedures based on one of the three categories (non-hazardous, hazardous, or acutely hazardous). Turn-in will be in accordance with the requirements in DoD 4160.21-M, Chapter 10, Special Turn-in Requirements, Containers (Empty).

3. **Packaging Requirements.** Empty containers with residues must be non-leaking and safe to handle. Containers with residues must be able to withstand normal handling and if not, they must be overpacked.

4. Requirements for Containers that have previously held hazardous or acutely hazardous material:

a. Must have all bungs, gasket seals and covers in place, or, as a minimum, totally sealed to prevent leaks, spills of hazardous material, or the contamination of precipitation that could accumulate in an open container. Waivers to this requirement may be granted on a case-by-case basis by the DRMO under the following circumstances:

- The containers will only be transported on-site and,

- The generating activity is adversely impacted by compliance and provides the DRMO with details; i.e., location, description, quantity and extent of impact and,

- The DRMO has the necessary equipment; e.g., bungs, to seal the containers upon receipt.

- Containers will be stored in a manner that is prevents environmental contamination.

b. Empty containers that previously held hazardous or acutely hazardous material must retain any OSHA compliant labels, NFPA labels, and any other pertinent manufacturing labels must remain intact unless the container has been triple rinsed.

c. DoT required markings or labels that were required for transportation when the container was full must be retained on the container unless the container has been triple rinsed or sufficiently cleaned and purged of all residue. (29 CFR 1910.1201)

d. **Identification of Previous Contents.** Containers which previously contained hazardous or acutely hazardous materials and have not been triple-rinsed with an appropriate solvent, cleaned by an equivalent method, or had the liner removed must bear the NSN, LSN, noun name, or an identifying mark which reflects the container's previous contents. Upon receipt, any of the above containers not bearing one of the above markings or labels is to be indelibly marked or labeled in a contrasting color to reflect the container's previous contents.

5. **Triple Rinsing.** Triple rinsing of empty containers is not a turn-in requirement, but a management option for hazardous or acutely hazardous containers. DRMOs will not require triple rinsing as a condition for turn-in. If the generator elects to triple-rinse containers before they are turned in, the benefit is that these containers may be turned in under the non-hazardous procedures and do not require sealing. Containers must be labeled with the words "***Triple Rinsed***".

C. DISPOSAL PROCESSING RTDS/SCRAPPING/DISPOSAL.

1. **Non-Hazardous Containers.** Containers that meet this category will be offered for reuse consistent with DoD 4160.21-M (i.e., RTDS). If RTDS alternatives fail, a downgrade to scrap is permitted. Abandonment and destruction (A and D) actions will be permitted consistent with DoD 4160.21-M. If RTDS or sale as scrap is unsuccessful, these containers can be disposed of as non-hazardous solid waste.

2. Hazardous Containers.

a. Empty containers whose previous contents were hazardous but not acutely hazardous will be offered for reuse consistent with DoD 4160.21-M (i.e., RTDS).

b. If RTDS efforts as a container are unsuccessful, these containers can be offered for sale as hazardous items for scrap metal recovery responsible. These containers must be received and managed as a Hazardous Material item, not as a scrap metal. Should all RTDS alternatives fail, a downgrade to scrap is prohibited.

c. Empty hazardous containers that have not been triple rinsed but have been drained or emptied in accordance with section D2 of this chapter may be managed as a non-hazardous container when they will be sold as scrap.

d. Containers that meet the RCRA definition of "empty" may be disposed of as non-RCRA regulated. Empty containers holding more than one-inch of residue considered to be a HW when disposed will be managed as HW.

3. **Acutely Hazardous.** Empty containers that previously held an acutely hazardous waste and have not been triple rinsed must be managed as hazardous waste when disposed. Containers that RTDS are not hazardous waste. If RTDS fails, a downgrade to scrap is prohibited unless these containers have been triple rinsed or cleaned by an equivalent method approved by EPA.

D. SCRAPPING OF CONTAINERS.

1. Only empty containers that have no potential to be reconditioned and/or reused shall be scrapped. Empty containers with RTDS

potential as a container will not be managed as scrap until RTDS efforts have been exhausted.

2. The following empty containers may be managed as scrap metal:

- *Non-hazardous empty containers.* This can be either containers whose previous contents were non-hazardous, triple rinsed containers, or containers with their liners removed.

- *Alternately cleaned hazardous containers.* DRMOs may manage, as scrap metal only, hazardous empty containers that have been drained or cleaned by an alternative cleaning method described in paragraph 3 below which assures that the empty containers contains no pourable or scrapable residue.

3. As an alternative to the triple rinsing requirement DRMOs may accept an alternate cleaning procedure provided that the requirements of this paragraph are met. Containers that have been cleaned or drained by an alternative method can be managed as non-hazardous scrap provided that the cleaning method used results in no pourable or scrapable residue remaining in the container. To determine if an empty container cleaned by an alternate method is eligible for management as non-hazardous scrap, the container and cleaning process must meet the following requirements:

- If the previous contents were pourable, no hazardous material can be poured or drained from the container or liner when stored in any orientation.

- If the previous contents were not pourable, no hazardous material remains in or on the container that can be feasibly removed by physical methods (i.e., scraping). The container must not contain any adhered to or crusted materials resulting from the build up of solidified material.

4. To minimize environmental liability and protect scrap storage areas sites from contamination from possible residues, **DRMOs will work with the generating activity to understand the procedure and process being**

used to remove residues other than triple rinsing. Only if the DRMO is confident that the procedures to be used will result in no residues remaining in the container should an alternative method be accepted. DRMOs should formalize the alternate cleaning process with their generating activity in a MOU.

NOTE: DRMOs should check state laws.

5. Empty containers managed under an alternative cleaning method should be stored separately from other scrap metal accumulations unless co-mingling will not effect a current scrap sales contract or the scrap's potential for sale. If co-mingling will negatively effect scrap sales or if no information is known about the possible sale consequences, no alternately cleaned empty containers should be co-mingled with other scrap sources.

6. DRMOs will implement management practices for scrap containers that minimize the contact or accumulation of precipitation. This can be accomplished through covered storage, overpacking, replacing lids and/or bungs, container orientation, or other practices which will minimize possible storm water contamination. DRMOs will cooperate with host installation storm water pollution prevention programs.

E. CRUSHED CONTAINERS.

Empty containers in good condition with reuse, reconditioning, or sales potential should not be intentionally crushed. DRMOs should coordinate with their generating activities to determine RTDS potential prior to deciding if empty containers should be crushed. Crushed containers may be turned-in under the following conditions:

1. Crushed containers must be non-leaking, free of liquid residue, sludge, or peeling solid residue that can be scraped off the container. Crushed containers shall be collected and turned-in separately from other items and must be safe to handle and store.

2. Crushed containers shall be turned in under one of the three categories (non-hazardous, hazardous, acutely hazardous) based on previous contents.

3. Special attention should be given to crushed containers whose previous contents were hazardous to determine if residues are present. Crushed containers which previously held a hazardous material and have not been triple-rinsed with an appropriate solvent, cleaned by an alternative method or had the liner removed, must be sealed (i.e., overpacked) to ensure the prevention of residues leaking during handling. The generating activity must identify the previous contents of the crushed containers.

4. Empty containers whose previous contents are acutely hazardous must be triple rinsed prior to crushing or these containers must be received and managed as HW.

F. STORAGE.

1. Empty containers should be grouped and stored according to the category of previous contents (non-hazardous, hazardous, and acutely hazardous). Each category shall be stored separately. Within the hazardous and acutely hazardous categories, storage compatibility will be observed using the same hazard classes afforded to other types of hazardous materials to prevent incompatible reactions.

2. Physical custody will be taken if facilities permit. Outdoor storage is satisfactory for most containers. However, if the container can be readily broken down by exposure to the natural elements or if the container's previous contents were highly volatile, they should be stored in a covered area out of direct sunlight.

3. Empty containers should be stored either upright or on their side. If stored on their side, the bung openings will be placed in the 9 and 3 o'clock position. Empty, non-sealed containers whose previous contents were considered non-hazardous or if previously hazardous, have been triple rinsed or cleaned by an alternative method may be stored upside down.

4. Stacking is permitted but will depend on whether the empty containers are stored indoors or outdoors. Outdoor storage of empty containers (primarily 55 gallon containers) should be stacked no more than one tier high if stored upright, or two rows high if stored on their sides. If banded to pallets, empty containers may be stored two

tiers high provided that each tier is separated by a pallet. This to prevent containers from being blown down by winds or storms. If stored on their side, the empty containers should be braced at the ends of each row to prevent them from rolling.

5. Indoors, empty containers (stored upright) can be stored up to 3 tiers high provided that each tier is separated by pallets to increase stability. Empty containers that contain residues of Class 1A flammables should not be stacked no more than 1 tier high and Class 1B and 1C flammables not greater than 2 tiers high to stay consistent with National Fire Protection Association (NFPA) recommendations.

6. Empty containers whose contents were considered a hazardous material should be sealed to prevent the accumulation of precipitation. Exceptions to this requirement are allowed in areas where extreme heat and temperature may cause expansion inside the drum. In these cases, it is recommended that the bungs be loosely secured in their holes, to allow air to be released during expansion.

G. DISPOSITION.

1. Reutilization actions for requests for empty containers will be filled with non-hazardous previous content containers. When not possible, the request will be filled with triple rinsed hazardous containers only after the requester has been informed that the previous contents of the containers are hazardous or acutely hazardous and the noun name.

2. For containers that previously held hazardous or acutely hazardous materials and have not been triple-rinsed with an appropriate solvent, cleaned by an equivalent method, or had the liner removed, the transfer document will indicate hazardous/acutely hazardous and the noun name of previous contents. It will also indicate that the information must be perpetuated to the user and, if transferred, to the new owner.