

Hazardous Waste Generator Regulations Compendium

Volume 11: Empty Containers

September 2021

U.S. Environmental Protection Agency
Office of Resource Conservation and Recovery
Materials Recovery and Waste Management Division

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This document includes the following sections:

- Resource View – outlines the document types by which resources are organized.
- Resources by Document Category – lists resources for each document category outlined in the *Resource View*.
- CFR View – provides relevant Code of Federal Regulations (CFR) language reformatted for easy reading.

These three main sections are cross-referenced, i.e., each section includes hyperlinks to the other sections. In addition, each section and its accompanying index include a hyperlink to the Main Index that allows the user to easily navigate from one section to another.

Introduction

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About the Compendium

The Hazardous Waste Generator Regulations Compendium serves as a user-friendly reference to assist regulators, industrial facilities generating and managing solid and hazardous wastes, and the general public in locating resources relevant to specific regulatory topics within the federal hazardous waste generator program.

The objective of this document is to consolidate and streamline the various resources on a topic into a user-friendly format, including references to relevant CFR language, Federal Register (FR) notices, documents posted on RCRA Online (i.e., guidance in the form of memoranda issued by EPA, Q&As, and other publications), and other resources, such as Frequent Questions webpages. The Compendium has been divided into multiple volumes that are available here: www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-compedium.

This document does not change any of the existing solid or hazardous waste requirements, nor does it offer an exhaustive list of relevant resources, as new resources may come into being or older ones may be relevant to a specific issue, but not included. Certain available resources, such as superseded RCRA Online documents, have not been referenced. Rather than including or reproducing referenced resources, this document generally provides hyperlinks to individual resources. As an exception, the Compendium does include relevant sections of the most current CFR regulatory language (as of the date on the cover of the Compendium). The included CFR language has been reformatted to make it easier to read, but it is not a substitute for the official CFR itself, or for the requirements in the CFR. The Government Printing Office frequently updates the e-CFR website; where appropriate, hyperlinks to the respective CFR section at the e-CFR website are provided.

Most states are authorized to administer their own RCRA Subtitle C hazardous waste program. Therefore, states may have their own set of regulations that apply in lieu of federal regulations. State regulations must be at least as stringent as the federal standards, but they can be more stringent. Please visit the following website to determine if the state regulatory program is different from the federal program: <https://www.epa.gov/hwgenerators/links-hazardous-waste-programs-and-us-state-environmental-agencies>, and check with your state agency.

About the Empty Containers Volume

This volume of the Compendium lists resources pertaining to the empty container provisions that are found at 40 CFR 261.7. For more information regarding other topics that apply to facilities generating hazardous waste, refer to other volumes of the Compendium and [EPA's Hazardous Waste Generators Webpage](#).

Please note that the Hazardous Waste Generator Improvements rule of 2016 created new sections in Part 262, which contains the regulations pertaining to generators. Accordingly, some citations in the generator requirements in older resources in this Compendium are outdated, including references to § 261.5, § 262.34, and others. Please see the preamble to the final Hazardous Waste Generator Improvements rule for a discussion of the reorganization of the regulations (81 FR

85735–85740, November 28, 2016). For a specific crosswalk of the regulation citation changes, refer to www.epa.gov/hwgenerators/hazardous-waste-generator-regulations-crosswalk.

For more information on these regulations and any other questions or comments concerning this document, please contact EPA’s Office of Resource Conservation and Recovery:

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Resource View

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Empty Containers

Resource Index:

- Resource Type:
 - [EPA Memoranda](#)
 - [Questions and Answers \(Q&As\)](#)
 - [Federal Register Notices](#)

Resources by Document Category

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Document Category	RCRA Online/FR Number	Resource	Document Date	Keyword(s)	Notes
Memoranda	14760	Discarded Residual Gases in Compressed Gas Cylinders	11/3/1980	Compressed Gas Cylinders; Residue Handling; Point of Generation; Transportation; Decision to Discard	
	11004	Regulation of Rinsate from Triple Rinsing of Containers	11/18/1980	Triple Rinsing; Rinsate/Rinsewater; Acute Hazardous Waste	
	14759	Residues Removed from Compressed Gas Cylinders	11/6/1981	Compressed Gas Cylinders; Residue Handling	
	12161	Triple Rinsing of Empty Containers	12/13/1983	Solvents; Storage; Treatment; Acute Hazardous Waste; Triple Rinsing	
	12299	Types of Residue Handling Containers	9/10/1984	Mixture Rule; Residue Handling	
	12307	Definition of Empty Containers that Held Commercial Chemical Products	9/11/1984	Bags; U-Listed Wastes; "One Inch" Criterion; "3 Percent" Criterion	
	11048	Empty Container Rule	11/28/1984	Tank Cars; "Commonly Employed" Methods	
	12350	Gases Vented from Compressed Gas Cylinders – Treating of Fluorine and Others	12/17/1984	Compressed Gas Cylinders; Venting; Gaseous Residues; Scrubbing Gases	
	12407	Containers Cleaning Other Than Triple Rinsing-Paper Bags	5/20/1985	Triple Rinsing Alternative; Paper Bags; Equivalent Removal; Acute Hazardous Waste	

11089	Revised Definition of Solid Waste Pursuant to HSWA	7/10/1985	Shipping Containers; Container Storage; Drum Recyclers	
12512	Empty Tank Cars That Contained Commercial Chemical Product	12/12/1985	Rinsate/Rinsewaters; Tank Cars; "0.3 Percent" Criterion	
12534	Empty Container Rule Applied to Tanker or Vacuum Trucks	1/7/1986	Tanks; Tanker Vehicles/Trucks; "One Inch" Criterion	
12535	Burning of Residues Remaining in Empty Containers	1/7/1986	Burning; Combustion of Hazardous Waste; Incineration; Treatment; Residues; Ash	
11237	Empty Container Regulations	4/15/1987	"One Inch" Criterion; "3 Percent" Criterion; P-listed Products; Triple Rinsing; Acute Hazardous Waste	Note: The document indicates that there is a list enclosed, however, no actual file is attached or included.
11374	Pesticide Rinsate Treatment/Recycling System/	10/27/1988	Washing; Rinsate/Rinsewater; Wastewater Treatment	
11431	Regulatory Status of Residues Removed from Empty Containers	6/5/1989	Burning; Combustion of Hazardous Waste; Incineration; Treatment; Residues; Management	
11447	Acetone and Methanol Contaminated Washwaters	7/21/1989	Rinsate/Rinsewater; Washwater; P-listed Waste; U-listed Waste	
11559	Empty Container Regulatory Status	9/13/1990	Storage; "One Inch" Criterion	
13522	Third Land Disposal Restrictions Final Rule	12/20/1990	Hazardous Containers; Container Disposal; Incineration	This memo superseded RO 13435 which was removed

					from RCRA Online
	11761	Triple-Rinsing Requirement Applicable to Containers Holding Residues from the Incineration of Acute Hazardous Wastes	7/28/1993	Triple Rinsing; Incinerator Ash; Acute Hazardous Waste	
	11803	Requirements for Disposal of Discharged M-44 Cyanide Capsules That Originally Contained a Sodium Cyanide Pesticide	12/23/1993	Triple Rinsing Alternative; Acute Hazardous Waste	
	14125	Use of Emulsifiers When Rendering Hazardous Waste Containers Empty	11/13/1997	Cleaning; Emulsifier; Heels, Tanks Trucks; Vapors; Treatment; Rinsing	
	14708	Policy on the Management of Rinsate from Empty Containers	4/12/2004	Listing Hazardous Waste; Rinsate/Rinsewater; Residue; Solvents	
	14827	Containers that Once Held P-Listed Pharmaceuticals	11/4/2011	Triple Rinsing Alternative; Rinsate/Rinsewater; Pharmaceuticals; Acute Hazardous Waste	Partially superseded (triple rinsing of containers that held P-listed pharmaceuticals no longer allowed).
Questions and Answers (Q&As)	12138	When Is the Residue in an Empty Container No Longer Regulated?	9/1/1983	Compressed Gas; Container Pressure; Triple Rinsing; Acute Hazardous Waste; Solvents; "One Inch" Criterion; "0.3 Percent" Criterion	

	12243	Empty Container	6/1/1984	“One Inch” Criterion; RCRA 7003 imminent and substantial endangerment authority	
	12342	Empty Container Definition	12/1/1984	“One Inch” Criterion; Pouring; Pumping; Aspirating	
	14887	RCRA Regulatory Status of Permeation Device	2/9/2017	Gas; Inhalation Device; Nitrogen Dioxide	See question 1 regarding the status of NO ₂ when used and discarded.
Federal Register Notices	43 FR 58946	Hazardous Waste Guidelines and Regulations	12/18/1978	Rinsate/Rinsewater; Volume; Capacity	See proposed regulatory language on page 58955 . This proposed language was never finalized but has been used by industry as a rule of thumb, and was codified in the PCB regulations at 761.79(c)(1)
	45 FR 78524	Hazardous Waste Management System; General Hazardous Waste Management System; Identification and Listing of Hazardous	11/25/1980	Definition of Empty Container; Rinsewater; Residue; Listing Hazardous Waste; Regulation of Container Cleaning Operations	See preamble discussion on pages 78525– 78529

		Waste (Interim Final Rule)			
	47 FR 36092	Hazardous Waste Management System; Identification and Listing of Hazardous Waste	8/18/1982	Definition of Empty Container; Rinsewater; Residue; Listing Hazardous Waste; Regulation of Container Cleaning Operations	See preamble discussion on pages 36092–36096
	84 FR 5816	Management Standards for Hazardous Waste Pharmaceuticals and Amendment to the P075 Listing for Nicotine	2/22/2019	Pharmaceutical Containers; Definition of Empty Container; Residue, Hazardous Waste; Triple Rinsing; Syringe; IV Bag; Unit-dose Container	See preamble discussion on pages 5903–5908
	84 FR 67202	Increasing Recycling: Adding Aerosol Cans to the Universal Waste Regulations	12/09/2019	Aerosol Cans; Empty Container Standard; Exempt Scrap Metal; Hazardous Waste Determination	See preamble discussion on pages 67209–67211

CFR View Index

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CFR Location	Title/Topic
261.7	Residues of hazardous waste in empty containers.
266.507	Residues of hazardous waste pharmaceuticals in empty containers.

CFR View

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NOTE: The CFR language may have been excerpted, reformatted and appended with subheadings and explanations/terms in brackets.

§ 261.7 Residues of hazardous waste in empty containers.

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- (a)
- (1) Any hazardous waste remaining in either: an empty container; or an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under parts 261 through 268, 270, or 124 of this chapter or to the notification requirements of [section 3010 of RCRA](#).
 - (2) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in paragraph (b) of this section, is subject to regulation under parts 261 through 268, 270 and 124 of this chapter and to the notification requirements of section 3010 of RCRA.
- (b)
- (1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in §§ 261.31 or 261.33(e) of this chapter is empty if:
 - (i) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and
 - (ii) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or
 - (iii)
 - (A) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or
 - (B) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in §§261.31 or 261.33(e) is empty if:

(i) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(iii) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

(c) Containers of hazardous waste pharmaceuticals are subject to § 266.507 for determining when they are considered empty, in lieu of this section, except as provided by § 266.507(c) and (d).

§ 266.507 Residues of hazardous waste in empty containers.

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(a) Stock, dispensing and unit-dose containers. A stock bottle, dispensing bottle, vial, or ampule (not to exceed 1 liter or 10,000 pills); or a unit-dose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container.

(b) Syringes. A syringe is considered empty and the residues are not regulated as hazardous waste under this subpart provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subpart and any applicable federal, state, and local requirements for sharps containers and medical waste.

(c) Intravenous (IV) bags. An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subpart, unless

the IV bag held non-acute hazardous waste pharmaceuticals and is empty as defined in §261.7(b)(1).

(d) Other containers, including delivery devices. Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers must be managed as non-creditable hazardous waste pharmaceuticals under this subpart, unless the container held non-acute hazardous waste pharmaceuticals and is empty as defined in §261.7(b)(1) or (2). This includes, but is not limited to, residues in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.