



## RCRA Hazardous Waste Container Labeling, Marking, and Placarding Requirements

<b>BACKGROUND:</b>	As part of the general operating standards for hazardous waste management facilities, the regulations implementing RCRA Subtitle C established requirements for labeling, marking, and placarding of hazardous waste containers. These requirements are designed to ensure proper identification and handling of hazardous waste containers. Labels are intended to allow for quick identification of the hazardous wastes, and must be legible from a distance. Markings, in contrast, describe in detail the name, handling instructions, precautions, and amount of the hazardous waste in the container. Placards are signs placed on transport vehicles to convey information (e.g., "contains corrosive material") about the hazardous waste being transported.
<b>STATUTE:</b>	Resource Conservation and Recovery Act (RCRA) & Hazardous Materials Transportation Act.
<b>REGULATIONS:</b>	40 CFR 262.31 - 262.34 & 49 CFR Part 172.
<b>REFERENCES:</b>	<ol style="list-style-type: none"><li>1. <i>Resource Conservation and Recovery Act, Environmental Guidance Program (EH-23) Reference Book</i>, ORNL/M-1897, March 15, 1992.</li><li>2. <i>Hazardous Materials Transportation Act, Environmental Guidance Program (EH-23) Reference Book</i>, ORNL/M-1717, October 15, 1991.</li><li>3. "Marine Pollutants, Final Rule," 57 FR 52930, November 5, 1992.</li></ol>

### Who is subject to labeling, marking, and placarding requirements?

The regulations implementing RCRA Subtitle C stipulate that generators of hazardous waste must comply with RCRA and Department of Transportation (DOT) labeling, marking, and placarding requirements. These requirements include accumulation time and pre-transport requirements.

RCRA-permitted and interim status treatment and storage facilities which are owned/operated by DOE must comply with labeling and marking requirements if they intend to transport the waste off-site (i.e., outside the DOE facility) in a container (40 CFR 262.31 and 262.32).

Facilities generating less than 100 kg of hazardous or less than 1 kg of acutely hazardous waste per month are "conditionally exempt small quantity generators" and RCRA labeling and marking are not explicitly required [40 CFR 261.5(a) and 261.5(b)]. However, it is good management practice to comply with RCRA labeling and marking requirements, regardless of whether small quantity generator thresholds are exceeded.

### What are the accumulation marking requirements?

If a facility generates and accumulates more than 1 kg of acutely hazardous waste or more than 100 kg of hazardous waste per month, the containers of waste must be marked with the words *Hazardous Waste*, as well as the date waste was first placed in the container [40 CFR 262.34(a)(2) and 262.34(a)(3)].

Containers used to store waste at or near the point of waste generation (i.e., satellite accumulation areas) must also be marked *Hazardous Waste* [40 CFR 262.34(c)

(1)(ii)]. If stored waste in these areas exceeds 55 gallons of non-acutely hazardous waste or one quart of acutely hazardous waste, the containers holding the excess waste must be moved within three days to either a 90-day storage area [40 CFR 262.34(a)] or a permitted or interim status hazardous waste management unit and be marked with the date the excess amount began accumulating [40 CFR 262.34 (c)(2)].

### What are the pre-transport labeling requirements?

Prior to transporting hazardous waste off-site, containers must be labeled in accordance with applicable DOT requirements (40 CFR 262.31). These labeling requirements ensure that persons handling hazardous waste containers during transport can quickly identify both the waste and the potential hazards presented by the waste (e.g., explosive).

The specific pre-transport labels required by DOT regulations depend upon the type of waste being offered for transport. Waste management personnel should consult 49 CFR 172.101 and 172.102 and label the containers as directed. Additional labeling requirements (e.g., placement of labels and multiple labels) are located in 49 CFR 172.400-172.406. Pre-transport labeling requirements apply only to containers transported off-site (40 CFR 262.31).

Labels must be affixed to the surface of the container near the proper shipping name. However, labels may be affixed by other means (e.g., a tag) to:

- a container that is smaller than the required label, if it contains no radioactive waste;
- a compressed gas cylinder; or

- ❑ a container that has such an irregular surface that a label cannot be satisfactorily affixed [49 CFR 172.406(b)].

Labels must not be obscured by other markings or attachments and have a background of contrasting color or a dotted or solid line outer border. If two or more labels are required they must be displayed or affixed next to each other. If a container has a volume of 64 cubic feet or more (approximately 480 gallons) labels must be displayed on at least two sides of the container [49 CFR 172.406(c)-(f)].

### What are the pre-transport marking requirements?

Containers must also be marked in accordance with applicable DOT marking requirements (40 CFR 262.32). Markings are detailed information (e.g., shipping names, identification numbers) used to facilitate proper handling of hazardous waste containers. The marking requirements vary according to the specific type of waste to be transported. Waste management personnel should consult 49 CFR 172.300 and mark containers as directed.

All markings must be durable, in English, affixed to the surface of the container or on a tag or sign, displayed on a background of sharply contrasting color, unobscured by labels or attachments, and located away from other markings that could substantially reduce their effectiveness. In addition, containers of 110 gallons or

**HAZARDOUS WASTE — Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.**

Generator's Name and Address \_\_\_\_\_  
 Manifest Document Number \_\_\_\_\_

less must be marked with the following [40 CFR 262.32(b)]:

DOT regulations (40 CFR 172.322) require that the marine pollutant mark must appear on bulk and non-bulk packages containing materials identified as marine pollutants in 49 CFR 172.101 (Appendix B). Transport vehicles and freight containers that contain packages of marine pollutants also must be marked. This marking is required in addition to other warning labels and placards already in use.

### What special labeling and marking requirements apply to lab packs?

A lab pack is defined (40 CFR 264.316) as an overpacked drum that holds smaller containers of hazardous waste. In general, the outside of a lab pack must be marked and labeled to comply with the requirements for all the materials contained in the lab pack. For example, lab packs with multiple wastes must meet multiple marking and labeling requirements.

In addition, lab packs must be packed with closures upward and must be marked **THIS SIDE UP** or **THIS END UP**. They must also be marked with an arrow

symbol as specified in ANSI MH6.11968. Labeling requirements for lab packs are found in 49 CFR 172.406.

### Do additional requirements apply to radioactive mixed waste?

In addition to being subject to all labeling and marking requirements applicable to hazardous waste, containers holding radioactive waste must bear the appropriate radioactive material label, including the category, content, activity, and transport index (49 CFR 173.403). In addition, a container holding radioactive material must have labels displayed on at least two sides or ends of the container [49 CFR 172.406(e)(2)]. If the container holds more than 110 pounds of radioactive material, the gross weight must be marked plainly and durably on the outside of the container as specified in 49 CFR 172.310(a).

### When do placarding requirements apply?

Each transport vehicle or freight container transporting hazardous waste must be placarded on each end and on each side. If a commercial carrier is transporting hazardous waste, DOE or its agent must be able to provide the transporter with the appropriate placards.

The specific type(s) of placard(s) required varies according to the substance being transported. Waste management personnel should consult Tables 1 and 2 of Subpart F of 49 CFR Part 172 and placard the transport vehicle as specified. Placards must be readily visible and must be securely attached to the vehicle. Placards may not be placed next to any marking that may reduce their effectiveness and should not be placed in a position where water or dirt from the wheels of the vehicle are directed at them.

Placards must meet the specifications for proper construction, size, and wording (49 CFR 172.519-172.558). In addition, Appendix C of 49 CFR Part 172 provides specifications for placard holders. Placards are not required for the following:

- ❑ a transport vehicle or freight container holding less than 1,001 pounds aggregate gross weight of hazardous materials, as long as those materials are not required to meet the poison-inhalation hazard shipping paper requirements [49 CFR 172.504(c)(1) and 172.505(a)]; and
- ❑ a rail car loaded with transport vehicles or freight containers, none of which needs to be placarded [49 CFR 172.504(c)(2)].

**Questions of policy or questions requiring policy decisions will not be dealt with in EH-231 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to Jerry Coalgate, RCRA/CERCLA Division, EH-231, 202-586-6075.**

