

<u>SUBJECT</u>		<u>DATE</u>
1394. RCRA Empty vs. DOT Empty	ENCORE	JUL 30, 2020
1395. RCRA Empty vs. DOT Empty II	ENCORE	AUG 6, 2020
1396. Empty Containers and the "Empty" Label	ENCORE	AUG 13, 2020

**DISCLAIMER** - "Two Minute Training" ("2MT") is a peer-to-peer communication, presented to share the benefit of the author's work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author's past or current employers or the US Department of Energy. The author's employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

## TWO MINUTE TRAINING

**TO:** CH2M HILL PLATEAU REMEDIATION COMPANY

**FROM:** PAUL W. MARTIN, RCRA Subject Matter Expert  
CHPRC Environmental Protection, Hanford, WA

**SUBJECT:** EMPTY CONTAINERS AND THE "EMPTY" LABEL

**DATE:** AUGUST 13, 2020

<a href="#">CHPRC Projects</a>	<a href="#">CH PRC - Env. Protection</a>	<a href="#">MSA</a>	<a href="#">Hanford Laboratories</a>	<a href="#">Other Hanford Contractors</a>	<a href="#">Other Hanford Contractors</a>
Richard Austin Tania Bates Rene Catlow Richard Clinton Larry Cole Laura Cusack Stuart Hildreth Stephanie Johansen Sasa Kosjerina Melvin Lakes Richard Lipinski Stuart Mortensen Dave Richards Dave Shea Phil Sheely Connie Simiele Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Danielle Collins Bill Cox Jeanne Elkins Ryan Fisher Jonathan Fullmer Barry Lawrence Diane Leist Mitch Marrott Stewart McMahand Brian Mitcheltree Anthony Nagel Linda Petersen Sean Sexton Kat Thompson Wayne Toebe Daniel Turlington	Brett Barnes Michael Carlson Mike Demiter Kip George Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzalez Jr. Dashia Huff Mark Kamberg Jon McKibben Saul Martinez Matt Mills Carly Nelson Michelle Oates Eric Pennala Jon Perry Christina Robison Christian Seavoy David Shaw John Skogle Lana Strickling Greg Sullivan	(TBD)  <a href="#">DOE RL, ORP, WIPP</a>  Mary Beth Burandt Duane Carter Al Farabee Tony McKarns	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Rob Gregory James Hamilton Andy Hobbs Ryan Johnson Megan Lerchen Mike Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Kirk Peterson	Dan Saueressig Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Ted Wooley

**DISCLAIMER** - "Two Minute Training" ("2MT") is a peer-to-peer communication, presented to share the benefit of the author's work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author's past or current employers or the US Department of Energy. The author's employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

## TWO MINUTE TRAINING

**SUBJECT:** Empty Containers and the “Empty” Label

**Q:** A customer has an empty container that formerly held a radioactive waste classified as a DOT Hazard Class 7 hazardous material. Once emptied per DOT requirements, the customer compliantly placed an “EMPTY” label on the container. The customer also has a RCRA empty hazardous waste container that formerly held a non-radioactive waste. Can the customer place an “EMPTY” label on the RCRA empty, non-radioactive waste container, or is the DOT “EMPTY” label limited for use only on empty radioactive waste containers?

**A:** [49 CFR 173.428](#), “Empty Class 7 (radioactive) materials packaging”, does state that once a packaging which previously contained Class 7 radioactive materials is emptied, the packaging is excepted from shipping papers and markings except for the UN identification marking prescribed for the material.

There are also references related to 49 CFR 173.428 concerning:

- Limited quantities of Class 7 radioactive materials,
- Radiation levels,
- Non-fixed contamination,
- Fissile material,
- No leakage of Class 7 material,
- Uranium and Thorium, and,
- Internal contamination.



These terms are radioactive-specific in terms of the type of containers that can use the DOT “EMPTY” label.

However, a DOT interpretation dated August 20, 2001, ([Ref. No. 01-0169](#)), addressed the same issue of whether the “EMPTY” label can be applied to empty non-radioactive containers. DOT stated:

*“The answer is yes. A shipper may apply the empty label depicted in [§172.450](#) to an empty packaging that formerly contained a hazardous material of any hazard class.”*

Since DOT’s response was that a DOT empty package that formerly contained a hazardous material of any hazard class could be labeled as “EMPTY”, a RCRA empty container that formerly contained a waste with any combination of DOT hazard classes of 1 through 9, can also be labeled as “EMPTY”, once it meets the definition of DOT empty.

And DOT’s interpretation makes sense, since an “EMPTY” label on a compliantly emptied container is good information for workers, regulators, emergency responders and the public.

### SUMMARY:

- 49 CFR 173.428 details when an empty radioactive packaging can be labeled “EMPTY”.
- The “EMPTY” label requirement appears to be very specific and limited to radioactive material.
- However, DOT clarified that the “EMPTY” label may be used for an empty container that formerly contained any class of hazardous material.

Excerpts from 49 CFR 173.428, 172.450 and the DOT Interpretation letter are attached to the e-mail. If you have any questions, please contact me at [Paul W Martin@rl.gov](mailto:Paul_W_Martin@rl.gov) or at (509) 376-6620.

**FROM:** Paul W. Martin

**DATE:** 8/13/2020

**FILE:** 2MT\2020\081320.tif

**PG:** 1

**DISCLAIMER** - “Two Minute Training” (“2MT”) is a peer-to-peer communication, presented to share the benefit of the author’s work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author’s past or current employers or the US Department of Energy. The author’s employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

## TWO MINUTE TRAINING – ATTACHMENT

**SUBJECT:** Empty Containers and the “Empty” Label

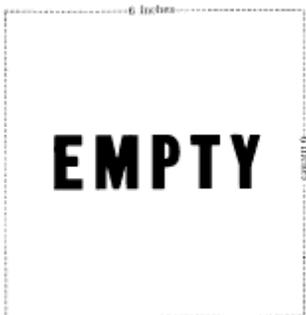
### 49 CFR §173.428 Empty Class 7 (radioactive) materials packaging

A packaging which previously contained Class 7 (radioactive) materials and has been emptied of contents as far as practical, is excepted from the shipping paper and marking (except for the UN identification number marking requirement described in [§173.422\(a\)](#)) requirements of this subchapter, provided that-

- (a) The packaging meets the requirements of [§173.421\(b\)](#), (c), and (e) of this subpart;
- (b) The packaging is in unimpaired condition and is securely closed so that there will be no leakage of Class 7 (radioactive) material under conditions normally incident to transportation;
- (c) The outer surface of any uranium or thorium in its structure is covered with an inactive sheath made of metal or some other substantial material;
- (d) Internal contamination does not exceed 100 times the limits in [§173.443\(a\)](#);
- (e) Any labels previously applied in conformance with [subpart E of part 172](#) of this subchapter are removed, obliterated, or covered and the “Empty” label prescribed in §172.450 of this subchapter is affixed to the packaging; and
- (f) The packaging is prepared for shipment as specified in §173.422.

### 49 CFR 172.450 EMPTY label

(a) Each EMPTY label, except for size, must be as follows:



[Editor's Note: The above graphic may appear sharper in this PDF version.]

- (1) Each side must be at least 6 inches (152 mm.) with each letter at least 1 inch (25.4 mm.) in height.
- (2) The label must be white with black printing.

(b) [Reserved]

**FROM:** Paul W. Martin

**DATE:** 8/13/2020

**FILE:** 2MT\2020\081320.rtf

**PG:** 2

**DISCLAIMER** - “Two Minute Training” (“2MT”) is a peer-to-peer communication, presented to share the benefit of the author’s work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author’s past or current employers or the US Department of Energy. The author’s employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

**TWO MINUTE TRAINING – ATTACHMENT**

**SUBJECT:** Empty Containers and the “Empty” Label

U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Research and  
Special Programs  
Administration**

AUG 20, 2001

Mr. Eugene Y. Ngai  
Vice President  
Corporate Development and Technology  
Solkatronic Chemicals  
351 Philadelphia Avenue  
Morrisville, PA 19067

Ref. No. 01-0169

Dear Mr. Ngai:

This is in response to your letter dated June 29, 2001, requesting clarification of labeling requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask if the empty label required under § 173.428 for an empty radioactive material package may be used for a cleaned and purged packaging that formerly contained a nonradioactive hazardous material.

The answer is yes. A shipper may apply the empty label depicted in § 172.450 to an empty packaging that formerly contained a hazardous material of any hazard class.

I hope this satisfies your request.

Sincerely,

John A. Gale  
Transportation Regulations Specialist  
Office of Hazardous Materials Standards

173.428

**FROM:** Paul W. Martin

**DATE:** 8/13/2020

**FILE:** 2MT\2020\081320.rtf

**PG:** 3

**DISCLAIMER** - “Two Minute Training” (“2MT”) is a peer-to-peer communication, presented to share the benefit of the author’s work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author’s past or current employers or the US Department of Energy. The author’s employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.