

<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
1397. Exceptions to Free Liquids in Landfills Prohibition	ENCORE	AUG 20, 2020
1398. Dust Suppression in Landfills with Nonhazardous Liquids	ENCORE	AUG 27, 2020
1399. Treated Hazardous Wastes Used as Dust Suppressant	ENCORE	SEP 3, 2020
1400. Regulatory Status of Used Oil Mixed with Diesel Fuel	ENCORE	SEP 10, 2020
1401. RCRA Liquids, Free Liquids, and Releasable Liquids	ENCORE	SEP 17, 2020
1402. Available Regulatory Relief from Underlying Hazardous Constituent (UHC) Requirements	ENCORE	SEP 24, 2020
1403. Smoke Detector Disposal and the NRC	ENCORE	OCT 1, 2020
1404. DOT Shipping of Damaged, Defective, or Recalled Lithium Batteries	ENCORE	OCT 8, 2020
1405. Conservative Declaration that Material is a Hazardous Waste	ENCORE	OCT 15, 2020
1406. Manifest Exception Report Submittal Timeframes – RCRA vs. TSCA	ENCORE	OCT 22, 2020
1407. Characteristic Ignitable, Corrosive or Reactive Debris and Macroencapsulation	ENCORE	OCT 29, 2020
1408. RCRA Satellite Accumulation Areas and Applicability of Personnel Training		NOV 5, 2020
1409. The Hazardous Waste Generator Improvements Rule and Designation of Nonhazardous Waste		NOV 12, 2020
1410. RCRA Aisle Space Requirements and Washington State vs., EPA		NOV 19, 2020
1411. The Definition of Good Housekeeping	ENCORE	NOV 24, 2020
1412. Absorbent Additions and Treatment	ENCORE	DEC 3, 2020
1413. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	DEC 10, 2020
1414. LDR Notifications and F001-F005 Constituents of Concern – Again!	ENCORE	DEC 17, 2020
1415. 'Twas the Night before Christmas – The Twenty-Seventh Edition		DEC 24, 2020
1416. LDR Notifications and F001-F005 Constituents of Concern - One Last Time!	ENCORE	DEC 31, 2020
1417. RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	JAN 7, 2021

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TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

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

SUBJECT: RCRA EMPTY CONTAINERS AND REMOVING AS MUCH WASTE AS POSSIBLE

DATE: JANUARY 7, 2021

<u>CHPRC Projects</u>	<u>CH PRC - Env. Protection</u>	<u>MSA</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Richard Austin Tania Bates Rene Catlow Richard Clinton Larry Cole Laura Cusack Stuart Hildreth Stephanie Johansen Sasa Kosjerina Richard Lipinski Stuart Mortensen Dave Richards Sean Sexton Dave Shea Phil Sheely Connie Simiele Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Danielle Collins Jennifer Copeland Jeanne Elkins Ryan Fisher Jonathan Fullmer Steve Heninger Julie Johanson Barry Lawrence Diane Leist Mitch Marrott Stewart McMahand Brian Mitcheltree Anthony Nagel Chris Plager Linda Petersen Brent Porter Dale Snyder Kat Thompson Wayne Toebe Daniel Turlington Britt Wilkins	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 Skoglie Lana Strickling Greg Sullivan	(TBD) <u>DOE RL, ORP, WIPP</u> 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 McCalmbert Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Kirk Peterson	Dan Saueressig Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: RCRA Empty Containers and Removing as Much Waste as Possible

Q: A customer has a 55-gallon drum containing a non-acutely dangerous waste. The customer wants to empty the drum to the point that the residues remaining in the container are no longer subject to the dangerous waste regulations of [WAC 173-303](#) or [40 CFR](#), i.e., RCRA empty. The customer has two options for rendering the drum RCRA empty: 1), using a hand pump to empty the drum to the point that no more than 1-inch of dangerous waste remains in the drum, or 2) inverting the drum to empty it to the point that almost no dangerous waste remains in the drum. Considering these two choices, is the customer obligated to use one method over the other?

A: Per an EPA memo dated November 28, 1984, entitled, "Empty Container Rule" ([RO 11048](#)), it states:

"...a 55-gallon drum should be emptied as completely as possible. If pouring from an inverted drum removes more residual than a hand pump does, then pouring is obligatory. Of course, removal must be performed to achieve maximum possible removal, not just to the one-inch level ... in order to produce an empty container according to [40 CFR 261.7\(b\)\(1\)](#)." [[WAC 173-303-160\(2\)\(a\)](#)]

The memo goes on to state:

"40 CFR §261.7(b)(1)(i), [[WAC 173-303-160\(2\)\(a\)](#)] sites in part: 'all wastes have been removed that can be removed using the practices commonly employed..., e.g., pouring, pumping, and aspirating...' The August 18, 1982, preamble says that one inch of waste can be left in an empty container only if it remains after performing normal removal operations. Taken together, these citations support the interpretation that all commonly employed emptying methods have to be employed to empty a container. 'Commonly employed' refers to the normal practice of industry, not to what a given person does. Thus, containers that have not been subjected to all commonly employed methods of emptying are still subject to regulation."

Since inverting a container is a commonly employed practice and since inverting will remove all wastes that can be removed, the customer is obligated to use the inversion method for emptying the container as opposed to the hand pump. [Note that the customer could use the hand pump method first followed by inversion since this dual method would render the drum just as empty as the inversion method alone.]

SUMMARY:

- A drum is RCRA empty when all wastes have been removed that can be removed using practices commonly employed to remove wastes from that type of container.
- "Commonly employed" refers to the normal practice of industry and not what a given person does.
- If two methods of emptying are considered as commonly employed, the generator is obligated to use the method that empties the drum as completely as possible.

The November 28, 1984, EPA memo is 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: 1/7/2021

FILE: 2MT\2021\010721.rtf

PG: 1

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: RCRA Empty Containers and Removing as Much Waste as Possible

FAXBACK 11048

PPC 9441.1984(34)

EMPTY CONTAINER RULE

DATE: 28 NOV 1984

SUBJECT: Empty Container Rule

FROM: John H. Skinner,
Director, Office of Solid Waste (WH-562)

TO: Karl J. Klepitsch, Jr.,
Chief, Waste Management Branch

This is in response to your October 24, 1984, memorandum in which you requested a clarification of the Headquarters position on emptying tank cars. Let me reiterate the position Alan Corson took during his conversation with Gary Victorine and relate it to the information included in your memorandum. At that time, Gary did not emphasize that the tank cars had bottom valves.

Alan told Gary that if only top unloading is available, the tank car is empty only if as much has been removed as possible and no more than an inch or no more than 0.3% of the total capacity (weight) remains. However, the Agency expects bottom valves to be used, when present, if they provide maximum removal of waste.

Likewise, a 55-gallon drum should be emptied as completely as possible. If pouring from an inverted drum removes more residual than a hand pump does, then pouring is obligatory. Of course, removal must be performed to achieve maximum possible removal, not just to the one-inch level of 0.03% capacity, in order to produce an empty container according to 40 CFR §261.7(b)(1).

40 CFR §261.7(b)(1)(i) sites in part: "all wastes have been removed that can be removed using the practices commonly employed...e.g., pouring, pumping, and aspirating..." The August 18, 1982, preamble says that one inch of waste can be left in an empty container only if it remains after performing normal removal operations. Taken together, these citations support the interpretation that all commonly employed emptying methods have to be employed to empty a container. "Commonly employed" refers to the normal practice of industry, not to what a given person does. Thus, containers that have not been subjected to all commonly employed methods of emptying are still subject to regulation.

If you have any further questions on this issue, please do not hesitate to contact Alan Corson of my staff at FTS-382-4770.

cc: Hazardous Waste Branch Chiefs, Regions I-X