

<u>SUBJECT</u>		<u>DATE</u>
1448.	Definitions of Inactive Portion, Active Portion and Closed Portion of a RCRA TSDF	AUG 12, 2021
1449.	Dangerous Waste Designations and Dangerous Waste Code Determinations	AUG 19, 2021
1450.	Method Detection Limits and Hazardous Waste Determinations	ENCORE AUG 26, 2021
1451.	Method Detection Limits and Hazardous Waste Determinations II	ENCORE SEP 2, 2021
1452.	Totals Analysis vs. TCLP and Dividing by 20	ENCORE SEP 9, 2021
1453.	Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE SEP 16, 2021
1454.	Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE SEP 23, 2021
1455.	Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE SEP 30, 2021
1456.	The "Derived from Rule", the "Mixtures Rule", and the "Contained-In Policy"	ENCORE OCT 7, 2021
1457.	Hazardous Debris and Options to Exclude as a Dangerous Waste	OCT 14, 2021
1458.	Regulatory Status of Characteristic Baghouse Dust Destined for Reclamation	OCT 21, 2021
1459.	RCRA Point of Generation and Baghouse Dust Collection Systems	OCT 28, 2021
1460.	Pumps Containing Liquid Hazardous Wastes and Liquids in Landfill Prohibition	ENCORE NOV 4, 2021
1461.	Pumps Containing Liquid Hazardous Waste and Land Disposal Restrictions	ENCORE NOV 11, 2021
1462.	Pumps Containing Liquid Hazardous Wastes and RCRA Empty Containers	NOV 18, 2021
1463.	Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents	ENCORE NOV 23, 2021
1464.	LDR Notifications/Certifications and Generator Permitted Treatment, Storage, or Disposal Facility	ENCORE DEC 2, 2021
1465.	Multiple Characteristic and Listed Hazardous Waste Codes and the "in lieu of" LDR Principle	ENCORE DEC 9, 2021
1466.	Universal Wastes - Recycling versus Disposal	ENCORE DEC 16, 2021
1467.	'Twas the Night Before Christmas – The Twenty-Eighth Edition	DEC 24, 2021
1468.	Spent Lead Acid Batteries vs., Universal Wastes	ENCORE DEC 30, 2021
1469.	Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE JAN 6, 2022
1470.	Hazardous Debris and Radioactively Contaminated Lead-Acid Batteries	ENCORE JAN 13, 2022
1471.	Mercury Wet Cell Batteries - Debris or Not Debris?	ENCORE JAN 20, 2022

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## TWO MINUTE TRAINING

**TO:** CENTRAL PLATEAU CLEANUP COMPANY

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

**SUBJECT:** MERCURY WET CELL BATTERIES - DEBRIS OR NOT DEBRIS?

**DATE:** JANUARY 20, 2022

<u>CPCCo Projects</u>	<u>CPCCo Functionals</u>	<u>HMIS</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Tania Bates Theresa Boles Justin Bolles Rene Catlow Peter Ceton Richard Clinton Patty Drago Paul Fernandez Ryan Fisher Randal Fox Andrew Getz Cory Grabeel Lawanda Grow Char Hall Stuart Hildreth Sarah Horn Aprill Jivelekas Sasa Kosjerina William Krueger Richard Lipinski Stuart Mortensen Edward Myers Trey Reppe Dave Richards Melissa Sahn-dame Sean Sexton Dave Shea Seth Slater Phil Sheely Jeff Westcott Richard Willson Nick Wood Jon Wright	Jeff Bramson Bob Bullock Frank Carleo Bob Cathel Danielle Collins Stacy Cutter Jeanne Elkins Jonathan Fullmer Bailey Hardy Steve Heninger Julie Johanson Mitch Marrott Stewart McMahand Carlie Michaelis Brian Mitcheltree Anthony Nagel Chris Plager Linda Petersen Brent Porter Deborah Singleton Dale Snyder Dave St. John Kat Thompson Daniel Turlington Britt Wilkins Jennifer Williams	Brett Barnes Mike Demiter Kip George Jerry Cammann Garin Erickson Dashia Huff Mark Kamberg Jon McKibben Saul Martinez Matt Mills John Hultman Carly Nelson Eric Pennala Jon Perry Christina Robison Christian Seavoy David Shaw John Skoglie Greg Sullivan	(TBD)  <u>DOE RL, ORP, WIPP</u>  Duane Carter Tony McKarns	Bill Bachmann Dean Baker Scott Baker Michael Carlson Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Rob Gregory James Hamilton Leah Hare Andy Hobbs Stephanie Johansen Ryan Johnson Megan Lerchen Mike Lowery Michael Madison Terri Mars Cary Martin Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Michelle Oates Kirk Peterson	Dan Saueressig Lana Strickling Joelle Moss Glen Triner Greg Varljen Robin Varljen Julie Waddoups Jay Warwick Ted Wooley

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## TWO MINUTE TRAINING

**SUBJECT:** Mercury Wet Cell Batteries - Debris or Not Debris?

**Q:** A customer has accumulated batteries for disposal that contain mercury liquids. The customer would like to manage the mercury wet cell batteries (D009 high mercury/inorganic) as hazardous debris under the alternate land disposal restrictions (LDR) treatment standards at [40 CFR 268.45](#), e.g., macroencapsulation. If not managed as debris, the batteries would require treatment via the LDR treatment standards at [40 CFR 268.40](#) of RMERC (retorting or roasting of mercury for recovery). The customer's concern is whether the mercury wet cell batteries are considered "intact containers" which would make the batteries ineligible for the debris alternate treatment standard. Are batteries that contain free liquids considered debris or are these batteries considered "intact containers" and therefore not considered debris?

**A:** Debris as defined at [40 CFR 268.2\(g\)](#) includes manufactured objects over 60 mm in size. Materials with specific treatment standards, such as cadmium batteries or lead acid batteries, process residuals, and intact, unruptured, containers that retain at least 75% of their original volume are not debris.

The customer's mercury wet cell batteries are manufactured objects over 60 mm in size; have no specific treatment standard, e.g., no specific treatment standard for "Mercury containing batteries"; and consist of intact casings.

Per an [EPA Guidance Memo dated November 10, 1993](#), it states:

*"... in previous rulemakings EPA has stated that battery casings designed to hold free liquids for use other than storage are containers. I refer you specifically to 40 CFR 264.314(d)(3)[[now 264.314\(c\)\(3\)](#)]; 265.314(c)(3)[[now 265.314\(b\)\(3\)](#)]; and [55 FR 22637 / 2 \(6/1/1990\)](#) [see page, 22637, 2<sup>nd</sup> column, 2<sup>nd</sup> full paragraph]. Thus, such intact battery casings are not debris."*

Therefore, intact mercury wet cell batteries are considered intact containers and cannot meet the debris definition. The batteries would require treatment via the specified technology of RMERC and would not be eligible for the alternate treatment standard of debris. If the mercury wet cell batteries were not intact containers, due to being ruptured or crushed, those batteries could meet the definition of debris and would be eligible for the alternate treatment standards for debris.

### SUMMARY:

- Intact containers are not considered debris.
- Mercury wet cell batteries designed to hold free liquids are considered intact containers.
- Mercury wet cell batteries that are intact containers cannot meet the definition of debris.

Excerpts from 40 CFR 268.40, 40 CFR 268.2(g) and the November 10, 1993, EPA letter are attached to the e-mail. If you have any questions, please contact me at "Paul\_W\_Martin@rl.gov" or at (509) 376-6620.

**FROM:** Paul W. Martin

**DATE:** 1/20/2022

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**TWO MINUTE TRAINING - ATTACHMENT**

**SUBJECT:** Mercury Wet Cell Batteries - Debris or Not Debris?

**40 CFR 268.40**      **Applicability of treatment standards.**

**Treatment Standards for Hazardous Wastes**

Regulated hazardous constituent				Wastewaters	Nonwastewaters
Waste Code	Waste Description and treatment/Regulatory Subcategory	Common Name	CAS#	Concentration in mg/L; or Technology Code	Concentration in mg/kg unless noted as "mg/L TCLP" or Technology Code
D009	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)	Mercury	7439-97-6	NA	RMERC

**40 CFR §268.2 Definitions applicable in this part**

When used in this part the following terms have the meanings given below:

(g) *Debris* means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D, Part 268, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and **intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume.** A mixture of debris that has not been treated to the standards provided by §268.45 and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

## TWO MINUTE TRAINING - ATTACHMENT

**SUBJECT:** Mercury Wet Cell Batteries - Debris or Not Debris?

### REGULATORY STATUS OF BATTERY CARCASSES

United States Environmental Protection Agency  
Washington, D.C. 20460  
Office of Solid Waste and Emergency Response

Mr. Christopher L. Freed  
Chemical Waste Management, Inc.  
Manager - Environmental Regulations  
3001 Butterfield Road  
Oak Brook, Illinois 60521

November 10, 1993

9441.1993(23)

Dear Mr. Freed:

Thank you for your letter of April 30, 1993, summarizing your meeting of April 29, 1993 with Richard Kinch of my staff. Upon further investigation of this issue since the receipt of your letter, however, it is clear that battery carcasses do not qualify as debris. They are considered to be containers, as explained below.

As discussed in detail in the preamble to the final rule establishing alternate treatment standards for hazardous debris, intact containers are not debris, and hence are not subject to the treatment standards for debris. 57 FR 37225 (August 18, 1992). In addition, in previous rulemakings EPA has stated that battery casings designed to hold free liquids for use other than storage are containers. I refer you specifically to 40 CFR 264.314(d)(3); 265.314(c)(3); and 55 FR 22637/2 (June 1, 1990). Thus, such intact battery casings are not debris.

In your letter, you state that EPA suggested, elsewhere in the preamble to the final debris rule, that batteries could be debris unless they are subject to a specific treatment standard. I believe you have based this statement on the discussion at 57 FR 37222 and footnote 10, which gives "lead acid or cadmium batteries" as an example of a debris subject to a specific treatment standard. Unfortunately, you then draw the inference that because mercury batteries are not mentioned in this footnote, they are therefore debris.

This is an incorrect conclusion. First, please note that the actual regulatory language does not contain the example of the lead acid battery. 57 FR at 37270. More important, as explained above, intact containers are never classified as debris. Consequently, the example in footnote 10 refers only to lead acid or cadmium batteries that are not intact. Such batteries would still not be subject to the treatment standards for debris because there is a more specific treatment standard for lead acid or cadmium batteries. The footnote does not, however, in any way vitiate the general principle that intact containers are not debris and that batteries are types of containers.

I hope this response, based on a thorough examination of the issue of concern, is helpful. If you need further information, please contact Richard Kinch, Chief of the Waste Treatment Branch in our Waste Management Division at (703) 308-8434.

Sincerely,

Bruce R. Weddle  
Acting Director  
Office of Solid Waste

RO 13638

FROM: Paul W. Martin

DATE: 1/20/2022

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