

<u>SUBJECT</u>		<u>DATE</u>
1320.	Treated Hazardous Waste Used as Dust Suppressant	FEB 28, 2019
1321.	Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE MAR 7, 2019
1322.	Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE MAR 14, 2019
1323.	Decharacterized Wastes, ≤90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE MAR 21, 2019
1324.	Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE MAR 28, 2019
1325.	PCB Decontamination Standard with No Decontamination Performed	ENCORE APR 4, 2019
1326.	PCB Manifest Relief a.k.a., When is a PCB Manifest Not Required?	ENCORE APR 11, 2019
1327.	PCB Manifest Relief a.k.a., When is a PCB Manifest Not Required? – The Sequel	ENCORE APR 18, 2019
1328.	PCB Concentrations and Micrograms per Centimeters Squared (µg/cm ²)	ENCORE APR 25, 2019
1329.	Operating Record vs. Operating Log	ENCORE MAY 2, 2019
1330.	Operating Records Not Referenced in the “Operating Record” Regulations	ENCORE MAY 9, 2019
1331.	Washington State Used Oil and Mixtures with Other Materials	ENCORE MAY 16, 2019
1332.	Used Oil Filter Regulation – The Feds vs. Washington State	ENCORE MAY 23, 2019
1333.	Printed Circuit Board Recycling – Shredded vs. Whole	ENCORE MAY 30, 2019
1334.	Universal Waste Alkaline Batteries and Self-Transportation	ENCORE JUN 6, 2019
1335.	Universal Waste Lithium Batteries and Self-Transportation	ENCORE JUN 13, 2019

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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: UNIVERSAL WASTE LITHIUM BATTERIES AND SELF-TRANSPORTATION

DATE: JUNE 13, 2019

<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 John Dent Lorna Dittmer Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Sasa Kosjerina Melvin Lakes Richard Lipinski Stuart Mortensen Dave Richards Phil Sheely Connie Simiele Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Bill Cox Noah Cruz Jeanne Elkins Jonathan Fullmer Ted Hopkins Tad Karschnia Barry Lawrence Jim Leary Diane Leist Mitch Marrott Stewart McMahan Brian Mitcheltree Anthony Nagel Linda Petersen Fred Ruck Sean Sexton Dave Shea Ray Swenson Kat Thompson Wayne Toebe Eric Trotta Daniel Turlington Dave Watson	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 Tom Gilmore Rob Gregory James Hamilton Andy Hobbs Ryan Johnson Megan Lerchen Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Kirk Peterson	Jean Quigley Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: Universal Waste Lithium Batteries and Self-Transportation

Q: In last week's "Two Minute Training" (2MT), we learned that our customer could easily self-transport spent alkaline batteries to a universal waste recycler since spent alkaline batteries are not subject to the Department of Transportation (DOT) regulations. But what if the customer has a 5-gallon bucket of spent lithium batteries (various voltages and federally regulated as a reactive characteristic hazardous waste [D003]) that has been accumulating for almost one year. As opposed to hiring a transporter to take one bucket of lithium batteries to the recycler, the customer would like to deliver the universal waste lithium batteries to the recycler via a company or personal vehicle – same process as the spent alkaline batteries last week. Can the customer self-transport universal waste lithium batteries to the recycler?

A: Per [WAC 173-303-573\(25\)\(b\)](#) [[40 CFR 273.38\(b\)](#)], if a large quantity handler of universal waste self-transport universal waste off site, the handler becomes a universal waste transporter and must comply with the universal waste transporter requirements at [WAC 173-303-573\(28\) – \(34\)](#) [[40 CFR 273.50 - .56](#)]. This means the customer must comply with the applicable DOT regulations.

A review of DOT [49 CFR 172.101](#), Hazardous Materials Table (HMT), indicates that the most appropriate shipping description for these lithium batteries is "Lithium ion batteries including lithium ion polymer batteries". Then according to the HMT packaging exceptions in column 8, [49 CFR 173.185](#) and paragraph (d), "*Lithium cells or batteries shipped for disposal or recycling*" states:

"A lithium cell or battery, including a lithium cell or battery contained in equipment, that is transported by motor vehicle to a permitted storage facility or disposal site, or for purposes of recycling, is excepted from the testing and record keeping requirements of paragraph (a) and the specification packaging requirements of paragraph (b)(3) of this section, when packed in a strong outer packaging conforming to the requirements of §§[173.24](#) and [173.24a](#). A lithium cell or battery that meets the size, packaging, and hazard communication conditions in paragraph (c)(1)-(3) of this section is excepted from subparts C through H of part 172 of this subchapter.

Since the customer's universal waste lithium batteries are subject to DOT, self-transportation to the recycler will be more onerous than self-transporting alkaline batteries. The lithium batteries must be in a strong tight container per [49 CFR 173.24/173.24a](#); meet size, packaging and hazard communication requirements; and have safety and security plans. So if the customer is willing to meet all applicable DOT requirements, spent lithium batteries can be self-transported.

SUMMARY:

- A universal waste handler may self-transport universal waste as a universal waste transporter.
- A universal waste self-transporter is subject to applicable DOT requirements.
- Universal waste lithium batteries are DOT regulated and self-transport may be too onerous.

Excerpts from [WAC 173-303-573](#), [49 CFR 172.101](#) and a link to [49 CFR 173](#) are attached to the e-mail. If you have any questions, contact me at Paul_W_Martin@rl.gov or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 6/13/19

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Universal Waste Lithium Batteries and Self-Transportation

WAC 173-303-573 Standards for universal waste management.

(25) Off-site shipments.

- (b) If a large quantity handler of universal waste self-transport universal waste off site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of subsections (28) through (34) of this section while transporting the universal waste.

(28) Applicability -- Universal waste transporters.

Subsections (28) through (34) of this section apply to universal waste transporters (as defined in WAC 173-303-040).

(29) Prohibitions.

A universal waste transporter is:

- (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in subsection (32) of this section.

(30) Waste management.

- (a) A universal waste transporter must comply with all applicable U.S. Department of Transportation regulations in 49 C.F.R. Part 171 through 180 for transport of any universal waste that meets the definition of hazardous material in 49 C.F.R. 171.8. For purposes of the Department of Transportation regulations, a material is considered a dangerous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in WAC 173-303-180. Because universal waste does not require a dangerous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.
- (b) Some universal waste materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 C.F.R. 173.2. As universal waste shipments do not require a manifest under WAC 173-303-180, they may not be described by the DOT proper shipping name "hazardous waste, (l) [*liquid*] or (s) [*solid*], n.o.s.," nor may the hazardous material's proper shipping name be modified by adding the word "waste."

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Universal Waste Lithium Batteries and Self-Transportation

(31) Storage time limits.

- (a) A universal waste transporter may only store the universal waste at a universal waste transfer facility for ten days or less.
- (b) If a universal waste transporter stores universal waste for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements for small or large quantity handlers (subsections (6) through (27) of this section) while storing the universal waste.

(32) Response to releases.

- (a) A universal waste transporter must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) A universal waste transporter must determine whether any material resulting from the release is dangerous waste, and if so, it is subject to all applicable requirements of this chapter. If the waste is determined to be a dangerous waste, the transporter is subject to WAC 173-303-145 and 173-303-170 through 173-303-230.

(33) Off-site shipments.

- (a) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility, or a foreign destination.
- (b) If the universal waste being shipped off site meets the Department of Transportation's definition of hazardous materials under 49 C.F.R. 171.8, the shipment must be properly described on a shipping paper in accordance with the applicable Department of Transportation regulations under 49 C.F.R. Part 172.

(34) Exports.

A universal waste transporter transporting a shipment of universal waste to a foreign destination is subject to the requirements of 40 C.F.R. Part 262, Subpart H which is incorporated by reference at WAC 173-303-230.

TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Universal Waste Lithium Batteries and Self-Transportation

49 CFR §172.101 Hazardous Materials Table (*Excerpt*)

Symbols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	ID Numbers	PG	Label Codes	Special provisions (§172.102)	(8)		
							Packaging (§173.***)		
							Exceptions	Non-bulk	
1	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	
	Lithium ion batteries including lithium ion polymer batteries	9	UN3480	II	9	422, A54*, A100*	185	185	185

*“A” codes apply only to aircraft transportation so not applicable to this 2MT concerning self-transportation of batteries via highway.

49 CFR §173.185 Lithium cells and batteries

(d) *Lithium cells or batteries shipped for disposal or recycling.* A lithium cell or battery, including a lithium cell or battery contained in equipment, that is transported by motor vehicle to a permitted storage facility or disposal site, or for purposes of recycling, is excepted from the testing and record keeping requirements of paragraph (a) and the specification packaging requirements of paragraph (b)(3) of this section, when packed in a strong outer packaging conforming to the requirements of §§173.24 and 173.24a. A lithium cell or battery that meets the size, packaging, and hazard communication conditions in paragraph (c)(1)-(3) of this section is excepted from subparts C through H of part 172 of this subchapter.

49 CFR Part 172 - Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans

Subpart A (§§ 1 - 3) - General

Subpart B (§§ 101 - 102) - Table of Hazardous Materials and Special Provisions

~~Subpart C (§§ 200 - 205) - Shipping Papers~~

~~Subpart D (§§ 300 - 338) - Marking~~

~~Subpart E (§§ 400 - 450) - Labeling~~

~~Subpart F (§§ 500 - 560) - Placarding~~

~~Subpart G (§§ 600 - 606) - Emergency Response Information~~

~~Subpart H (§§ 700 - 704) - Training~~

Subpart I (§§ 800 - 822) - Safety and Security Plans

Appendix A - Office of Hazardous Materials Transportation Color Tolerance Charts and Tables

Appendix B - Trefoil Symbol

Appendix C - Dimensional Specifications for Recommended Placard Holder

Appendix D - Rail Risk Analysis Factors

49 CFR 173.24 General requirements for packagings and packages

49 CFR 173.24a Additional general requirements for non-bulk packagings and packages

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