

<u>SUBJECT</u>		<u>DATE</u>
1056. PCB Reporting and Recordkeeping Relief	ENCORE	JAN 12, 2014
1057. Commercial Chemical Products and Unused Batteries	ENCORE	JAN 16, 2014
1058. PCB Annual Records Retention Timeframes		JAN 31, 2014
1059. Satellite Accumulation within a ≤90-day Accumulation Area		FEB 7, 2014
1060. PCB Certificate of Disposal Relief	ENCORE	FEB 13, 2014
1061. Used Oil and Weekly Inspections		FEB 20, 2014
1062. Bags and RCRA Container Definition		FEB 27, 2014
1063. Product Storage Tank Residues and Hazardous Waste Regulations	ENCORE	MAR 6, 2014
1064. Spent Lead-Acid Batteries and Accumulation Time Limits		MAR 13, 2014
1065. Land Disposal Restrictions and Dates of Accumulation		MAR 23, 2014
1066. Universal Waste Accumulation Time Limits and the One Year Rule		MAR 29, 2014
1067. PCB Manifest Discrepancy Reports and Estimated Waste Weights		APR 6, 2014
1068. PCB Wastes, Independent Transporters and Confirmation of Receipt		APR 10, 2014
1069. Paint Wastes and The Applicability of the F001-F005 Listings to Ingredients	ENCORE	APR 20, 2014
1070. Other Paint Wastes and the Applicability of the F001-F005 Listings	ENCORE	APR 24, 2014
1071. Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents		MAY 1, 2014
1072. TSCA "No PCBs" versus "Non-PCBs" versus "Nondetectable PCBs"	ENCORE	MAY 8, 2014
1073. Purpose of Keeping a Hazardous Waste Container Closed	ENCORE	MAY 15, 2014
1074. PCB Containers and Multiple Removed From Service Dates		MAY 22, 2014
1075. Satellite Accumulation and RCRA Personnel Training		MAY 29, 2014
1076. Transporter Signatures on Hazardous Waste Manifest and Multiple Drivers		JUN 5, 2014
1077. Universal Waste and Nonhazardous Batteries		JUN 12, 2014
1078. Universal Waste and Incandescent Bulbs		JUN 19, 2014
1079. The PCB Mark and the Fields "Also Contact" and "Tel No"	ENCORE	JUN 29, 2014
1080. Halon Fire Extinguishers - Banned or Not Banned?	ENCORE	JUL 5, 2014
1081. Cabinets as RCRA Containers	ENCORE	JUL 13, 2014
1082. LDR Storage Prohibitions and Treated Wastes	ENCORE	JUL 17, 2014
1083. LDR Treatment Standards and F001 "Chlorinated Fluorocarbons"	ENCORE	JUL 24, 2014
1084. RCRA Regulatory Status of Chlorinated Fluorocarbons Used as Refrigerants	ENCORE	JUL 31, 2014
1085. Universal Wastes, Manifesting and DOT Shipping Names		AUG 7, 2014
1086. CERCLA Hazardous Substances – A Brief Definition		AUG 14, 2014
1087. CERCLA Hazardous Substances – The Petroleum Exclusion		AUG 21, 2014
1088. PCB Concentration Assumptions for Use vs. PCB Disposal	ENCORE	AUG 28, 2014
1089. Universal Waste and Basis for the One Year Accumulation Time Limit		SEP 4, 2014
1090. Product Spills and Waste Determinations	ENCORE	SEP 11, 2014
1091. PCB Concentrations and 10,000 PPM		SEP 18, 2014
1092. PCB Concentrations and 1,000 PPM		SEP 25, 2014
1093. Universal Waste Alkaline Batteries and Self-Transportation		OCT 2, 2014
1094. Universal Waste Lithium Batteries and Self-Transportation		OCT 9, 2014

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, Senior Environmental Compliance Officer
CHPRC Environmental Protection, Hanford, WA

SUBJECT: UNIVERSAL WASTE LITHIUM BATTERIES AND SELF-TRANSPORTATION

DATE: OCTOBER 9, 2014

<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 Ty Blackford Bob Cathel Rene Catlow Richard Clinton Larry Cole John Dent Brian Dixon Eric Erpenbeck Tom Gilmore Stuart Hildreth Mike Jennings Stephanie Johansen Dan Kimball Jeanne Kisielnicki Melvin Lakes Jim McGrogan Stuart Mortensen Dean Nester Dave Richards Phil Sheely Connie Simiele Roni Swan Michael Waters Jeff Westcott Jeff Widney	Brett Barnes Ron Brunke Bill Cox Lorna Dittmer Rick Engelmann Jim Leary Dale McKenney Rick Oldham Linda Petersen Fred Ruck Jennie Seaver Wayne Toebe Lee Tuott Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehlis Garin Erickson Lori Fritz Panfilo Gonzales Jr. Darlene Hagel Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Matt Mills Anthony Nagel Jennifer Ollero Jon Perry Thomas Pysto Phillip Rogers Don Rokkan Lana Strickling Lou Upton Christina Zerby	Alan Campbell Grant McCalmant <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Cliff Clark Mike Collins Tony McKarns Ellen Mattlin Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Greta Davis Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Megan Lerchen Richard Lipinski Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Judith Nielsen Mandy Pascual Kirk Peterson Jean Quigley Mark Rollison Dan Saueressig Merrie Schilperoort Joelle Stamm	Glen Triner Greg Varljen Julie Waddoups Kyle Webster 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: Universal Waste Lithium Batteries and Self-Transportation

Q: In last week's "Two Minute Training" (2MT) we learned that spent alkaline batteries can easily be self-transported to a universal waste recycler since spent alkaline batteries are not subject to the Department of Transportation (DOT) regulations. So what if a customer has a 5-gallon bucket of spent lithium batteries (various voltages and Federally regulated as characteristic hazardous waste for reactivity [D003]) that has been managed as universal waste for almost one year. Again, as opposed to hiring a transporter to take one bucket of lithium batteries to the recycler, the customer would like to just deliver the universal waste lithium batteries to the recycler via a company or personal vehicle - just as done for the spent alkaline batteries last week. Is the customer allowed to 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]. For the customer, this basically means the self-transportation 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 could be slightly onerous, i.e., strong tight containers per 49 CFR 173.24/173.24a; size, packaging and hazard communication requirements; and safety and security plans. However, if the customer is willing to meet all applicable DOT requirements, self-transportation of spent lithium batteries is allowed.

SUMMARY:

- A universal waste handler may self-transport universal waste to an approved destination.
- 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, please contact me at "Paul_W_Martin@rl.gov" or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 10/09/14

FILE: c:\...\2MT\2014\100914.rtf

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: 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-transportes 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, (I) or (s), n.o.s.," nor may the hazardous material's proper shipping name be modified by adding the word "waste."

FROM: Paul W. Martin

DATE: 10/09/14

FILE: c:\...\2MT\2014\100914.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: 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 other than to those OECD countries specified in 40 C.F.R. 262.58 (a)(1) (in which case the handler is subject to the requirements of 40 C.F.R. part 262, subpart H which is incorporated by reference at WAC 173-303-230) may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter must ensure that:

- (a) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and
- (b) The shipment is delivered to the facility designated by the person initiating the shipment.

FROM: Paul W. Martin

DATE: 10/09/14

FILE: c:\...\2MT\2014\100914.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.

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	*A51, A54	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](#)

FROM: Paul W. Martin **DATE:** 10/09/14 **FILE:** c:\...\2MT\2014\100914.rtf **PG:** 4

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.