

<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
1095. Universal Waste Batteries and Closed Containers	ENCORE	OCT 16, 2014
1096. PCB Containers and Concentration of PCBs		OCT 23, 2014
1097. Recyclable Chemicals and Zombie Destruction		OCT 31, 2014
1098. Satellite Accumulation Requirements in Washington State	ENCORE	NOV 6, 2014
1099. Satellite Accumulation and "At or Near"		NOV 13, 2014
1100. Regulatory Status of Chromated, Copper, Arsenate, (CCA) Wood as Wood Mulch	ENCORE	NOV 20, 2014
1101. Defining Criteria for Household Waste Exclusion	ENCORE	NOV 26, 2014
1102. The Household Waste Exclusion and Renovation Debris		DEC 4, 2014
1103. The Household Waste Exclusion and Renovation Debris – Part II		DEC 11, 2014
1104. PCB Ballasts and Disposal Options	ENCORE	DEC 18, 2014
1105. 'Twas the Night Before Christmas – The Twenty-Second Edition		DEC 24, 2014
1106. Printed Circuit Board Recycling – Shredded vs. Whole	ENCORE	JAN 1, 2015
1107. Satellite Accumulation and Product Vessel Cleanouts		JAN 8, 2015
1108. Date of Accumulation for Hazardous Waste and Receipt of Analytical Information	ENCORE	JAN 15, 2015
1109. Conservative Declarations that Material is a Hazardous Waste		JAN 22, 2015
1110. Hazardous Waste Generator Tanks and the Date of Accumulation Marking	ENCORE	JAN 29, 2015
1111. Universal Waste, Satellite Accumulation and Centralized Collection Areas		FEB 4, 2015
1112. The PCB Mark and PCB Storage for Disposal Areas	ENCORE	FEB 12, 2015
1113. EPA Hazardous Waste Markings - Accumulation vs. Pre-Transport	ENCORE	FEB 19, 2015
1114. Used Oil Filter Regulation – The Feds vs. Washington State	ENCORE	FEB 26, 2015
1115. Spent Lead-Acid Batteries and Secondary Containment		MAR 5, 2015

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: SPENT LEAD-ACID BATTERIES AND SECONDARY CONTAINMENT

DATE: MARCH 5, 2015

<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 Stuart Hildreth Mike Jennings Stephanie Johansen Jeanne Kisielnicki Melvin Lakes Jim McGrogan Stuart Mortensen Anthony Nagel 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 Ted Hopkins Jim Leary Dale McKenney Jon McKibben 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. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Thomas Pysto 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 Tom Gilmore Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Dan Kimball Megan Lerchen Richard Lipinski Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Steve Metzger Tony Miskho Matt Mills 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: Spent Lead-Acid Batteries and Secondary Containment

Q: A customer is collecting spent lead-acid batteries (SLABs) which will eventually be shipped offsite to a reclaiming facility, i.e., a battery cracker, who recovers the acid, lead plates and plastic housing. The SLABs are being collected per the spent lead-acid battery exemption at [WAC 173-303-520 \[40 CFR Part 266 Subpart G\]](#). The customer's SLABs are placed in a plywood box that is suitable for shipping; however, the customer is concerned that the SLAB collection box must be in secondary containment due to the SLABs containing liquid electrolyte, i.e., sulfuric acid and distilled water. Is the customer required to collect SLABs containing free liquids in an area with secondary containment?

A: According to WAC 173-303-520, "Special Requirements for reclaiming spent lead acid battery wastes", persons who generate, transport or collect spent batteries are not subject to generator, transporter, interim status, permitted status, land disposal restrictions, or permitting requirements. The primary requirements applicable to SLAB generators, transporters and collectors are to determine if the SLABs are solid waste (yes since spent) and then, if dangerous/hazardous wastes (yes for lead – D008, and acid – D002). Washington State also requires notification for spills to the environment that threaten human health or the environment. As for secondary containment, there are no references to "containment" or references to [WAC 173-303-630\(7\) \[40 CFR Part 264.175\]](#) which includes the secondary containment requirements for containers.

EPA's goal was to encourage recycling of SLABs and, as stated in the April 4, 1983 Federal register, "because excessive (and unnecessary) regulatory burden is likely to result if Subtitle C [*RCRA Hazardous Waste*] standards are extended back to cover activities before storage by reclaimers". Hence about the only requirements applicable to generators and collectors of SLABs is to designate the batteries as dangerous/ hazardous waste and this relief encourages recycling.

On the other hand, the use of secondary containment could be a best management practice to avoid potential spills to the environment.

SUMMARY:

- Generators, transporters and collectors of SLABs are not subject to the majority of requirements in [WAC 173-303 \[40 CFR 260 - 265 and 266 - 279\]](#).
- The primary requirements applicable to these SLABs are dangerous/hazardous waste designation and notification of spills that threaten human health and the environment.
- Secondary containment is not required but could be applied as a best management practice.

Excerpts from WAC 173-303-520 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: 3/5/15

FILE: c:\...\2MT\2015\030515.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: Spent Lead-Acid Batteries and Secondary Containment

WAC 173-303-520 Special requirements for reclaiming spent lead acid battery wastes.

This section applies to persons who reclaim (including regeneration) spent lead-acid batteries that are recyclable materials ("spent batteries"). (Also, see WAC 173-303-120(3).)

(1) Persons who generate, transport, or collect spent batteries, who regenerate spent batteries, or who store spent batteries but do not reclaim them (other than spent batteries that are to be regenerated) are subject only to the requirements of WAC 173-303-016 through 173-303-161 except for 173-303-060, and WAC 173-303-960 if such spent batteries are going to a battery reclaimer. Persons who reclaim spent batteries through regeneration (such as by electrolyte replacement) are not subject to 40 C.F.R. Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a).

(2) Owners and operators of battery reclaiming facilities that store spent lead acid batteries prior to reclaiming (other than spent batteries that are to be regenerated) them are subject to the following requirements:

(a) For all reclaimers, the applicable storage provisions of:

- (i) WAC 173-303-280 (2) and (3);
- (ii) WAC 173-303-282;
- (iii) WAC 173-303-283;
- (iv) WAC 173-303-290;
- (v) WAC 173-303-310 through 173-303-360;
- (vi) WAC 173-303-380;
- (vii) WAC 173-303-390 (2) and (3);
- (viii) WAC 173-303-395; and
- (ix) WAC 173-303-800 through 173-303-840.

(b) For reclaimers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 C.F.R. Part 265;

(c) For reclaimers with final facility permits, the applicable storage provisions of:

- (i) WAC 173-303-600 through 173-303-650; and
- (ii) WAC 173-303-660.

TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: Spent Lead-Acid Batteries and Secondary Containment

WAC 173-303 – Dangerous Waste Regulations (Specific excerpts applicable to spent lead-acid batteries)

- Section 016. Identifying solid waste.
 - Section 017. Recycling processes involving solid waste.
 - Section 020. Applicability.
 - Section 030. Abbreviations.
 - Section 040. Definitions.
 - Section 045. References to EPA's hazardous waste and permit regulations.
 - Section 050. Department of ecology cleanup authority.
 - ~~Section 060. Notification and identification numbers.~~ (Not applicable to SLABs)
 - Section 070. Designation of dangerous waste.
 - Section 071. Excluded categories of waste.
 - Section 072. Procedures and bases for exempting and excluding wastes.
 - Section 073. Conditional exclusion of special wastes.
 - Section 075. Certification of designation.
 - Section 077. Requirements for universal waste.
 - Section 080. Dangerous waste lists.
 - Section 081. Discarded chemical products.
 - Section 082. Dangerous waste sources.
 - Section 083. Deletion of certain dangerous waste codes following equipment cleaning and ...
 - Section 090. Dangerous waste characteristics.
 - Section 100. Dangerous waste criteria.
 - Section 102. Reserved.
 - Section 104. State-specific dangerous waste numbers.
 - Section 110. Sampling, testing methods, and analytes.
 - Section 120. Recycled, reclaimed, and recovered wastes.
 - Section 140. Land disposal restrictions.
 - Section 141. Treatment, storage, or disposal of dangerous waste.
 - Section 145. Spills and discharges into the environment.
 - Section 150. Division, dilution, and accumulation.
 - Section 160. Containers.
 - Section 161. Overpacked containers (labpacks).
- Section 960. Special powers and authorities of the department. (*Applicable to reclaimers only.*)

FROM: Paul W. Martin

DATE: 3/5/15

FILE: c:\...\2MT\2015\030515.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.