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1056. Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
1057. Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	APR 30, 2015
1058. Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	MAY 7, 2015
1059. Decharacterized Wastes, <90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE	MAY 14, 2015
1060. Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	MAY 21, 2015
1061. Hazardous Debris Macroencapsulation and Size Reduction	ENCORE	MAY 28, 2015
1062. Universal Waste Lamps and Prohibition on Crushing		JUN 4, 2015
1063. F003 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 11, 2015
1064. F001 - F005 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 18, 2015
1065. Macroencapsulation of Hazardous Debris and Presence of Free Liquids	ENCORE	JUN 25, 2015
1066. DOT Shipping of Damaged, Defective or Recalled Lithium Batteries		JUL 1, 2015
1067. Used Oil Eligibility for Animal and Vegetable Oils	ENCORE	JUL 9, 2015
1068. Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils		JUL 16, 2015
1069. Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 23, 2015
1070. Conditioned Exclusion for Characteristic Debris Treated via Immobilization		JUL 30, 2015
1071. RCRA Personnel Training and Classroom Training vs. Online Training		AUG 6, 2015
1072. PCB Decontamination Standards with No Decontamination Performed		AUG 13, 2015
1073. PCB Manifest Exceptions a.k.a. When is a PCB Manifest Not Required	ENCORE	AUG 19, 2015
1074. PCB Manifest Relief a.k.a. When is a PCB Manifest Not Required – The Sequel		AUG 27, 2015
1075. Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE	SEP 3, 2015
1076. Hazardous Debris and Radioactively Contaminated Lead Acid Batteries	ENCORE	SEP 10, 2015
1077. Mercury Wet Cell Batteries - Debris or Not Debris	ENCORE	SEP 17, 2015
1078. Hazardous Debris and Non-Radioactive Lead Acid Batteries		SEP 24, 2015
1079. Unused Paraformaldehyde - U Listed Hazardous Waste or Not?	ENCORE	OCT 1, 2015
1080. CAS Numbers and the Hazardous Waste "U" and "P" Listings	ENCORE	OCT 8, 2015
1081. Universal Waste One Year Accumulation and Multiple Handlers	ENCORE	OCT 15, 2015
1082. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	OCT 29, 2015
1083. LDR Notifications and F001-F005 Constituents of Concern – Again	ENCORE	NOV 5, 2015
1084. LDR Notifications and F001-F005 Constituents of Concern - One Last Time	ENCORE	NOV 12, 2015
1085. DOT and Terminal Protection of Alkaline Batteries	ENCORE	NOV 19, 2015
1086. Used Oil and Keeping Containers Closed – WAC 173-303 vs. 40 CFR 279		NOV 24, 2015
1087. PCB Weight Determinations	ENCORE	DEC 3, 2015
1088. Satellite Accumulation Requirements and Container Inspections	ENCORE	DEC 10, 2015
1089. 'Twas The Night Before Christmas - The Twenty-Third Annual Edition	ENCORE	DEC 24, 2015
1090. Satellite Accumulation and 85-Gallon Containers	ENCORE	DEC 31, 2015
1091. PCB Date Removed From Service Notations – On the Item or In a Log	ENCORE	JAN 7, 2016
1092. The Date Removed From Service Marking on the PCB Mark	ENCORE	JAN 14, 2016
1093. Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 21, 2016
1094. Used Oil and Weekly Inspections	ENCORE	JAN 28, 2016
1095. TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE	FEB 4, 2016
1096. PCB Containers and Multiple Removed From Service Dates	ENCORE	FEB 11, 2016
1097. Generator Inspection Logs and Corrective Action Documentation	ENCORE	FEB 18, 2016
1098. PCB Concentrations and Micrograms per Centimeters Squared ( $\mu\text{g}/\text{cm}^2$ )		FEB 25, 2016
1099. RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	MAR 3, 2016
1100. PCB Incineration and "Six Nines" Destruction Removal Efficiency Criteria	ENCORE	MAR 10, 2016
1101. RCRA Treatment and The Two-Part Definition		MAR 17, 2016
1102. D002 Waste and Dilution as Adequate LDR Treatment	ENCORE	MAR 24, 2016
1103. Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit		MAR 31, 2016
1104. Satellite Accumulation and Process Location Changes	ENCORE	APR 7, 2016
1105. Satellite Accumulation Prior to and After Recycling		APR 14, 2016
1106. Method Detection Limits and Hazardous Waste Determinations	ENCORE	APR 21, 2016
1107. Method Detection Limits and Hazardous Waste Determinations II	ENCORE	APR 28, 2016
1108. Radioactive Lead Solids vs. Non-radioactive Lead Contaminated Debris	ENCORE	MAY 5, 2016
1109. PCB Bulk Product Wastes and the One Year Disposal Requirement		MAY 12, 2016
1110. PCB Waste Storage Limitations and the One-Year Extension		MAY 19, 2016
1111. PCB Waste Storage Limitations and the PCB Radioactive Waste Exemption		MAY 26, 2016
1112. Separating Hazardous Debris and Hazardous Nondebris	ENCORE	JUN 2, 2016
1113. Product Expiration Dates and Solid Waste Determinations (Reverse Distribution)	ENCORE	JUN 9, 2016
1114. Satellite Accumulation Areas and Incompatible Wastes		JUN 16, 2016
1115. Satellite Accumulation Areas and Ignitable Wastes		JUN 22, 2016
1116. Universal Waste, Incandescent Bulbs and Nonhazardous Bulbs	ENCORE	JUN 30, 2016
1117. The Domestic Sewage Exclusion and Sewer Sludge Removal		JUL 7, 2016
1118. The Domestic Sewage Exclusion and Sewer Sludge Transport		JUL 14, 2016
1119. RCRA Empty Acutely Hazardous Waste Containers	ENCORE	JUL 20, 2016
1120. RCRA Manifest Discrepancies and Physical State	ENCORE	JUL 28, 2016
1121. RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario I	ENCORE	AUG 4, 2016

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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 VS. TSCA PCB DECONTAMINATED CONTAINERS - SCENARIO I

**DATE:** AUGUST 4, 2016

<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 Roni Ashley Tania Bates Bob Cathel Rene Catlow Richard Clinton Larry Cole John Dent Brian Dixon Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Jeanne Kisielnicki Melvin Lakes Marty Martin Jim McGrogan Stuart Mortensen Dean Nester Dave Richards Phil Sheely Connie Simiele Jennie Stults Michael Waters Jeff Westcott Jeff Widney	Brett Barnes Mitch Boyd Ron Brunke Bill Cox Laura Cusack Lorna Dittmer Rick Engelmann Ted Hopkins Sasa Kosjerina Jim Leary Dale McKenney Jon McKibben Rick Oldham Anthony Nagel Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Christina Robison Lana Strickling Lou Upton	(TBD)  <u>DOE RL, ORP, WIPP</u>  Mary Beth Burandt Duane Carter Cliff Clark Mike Collins Tony McKarns Ellen Mattlin Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Lori Fritz 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 Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Mandy Pascual Kirk Peterson Jean Quigley	Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Kyle Webster Ted Wooley

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## TWO MINUTE TRAINING

**SUBJECT:** RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario I

**Q:** A customer has a drained 55-gallon waste drum that had contained a material regulated as a RCRA "F" listed non-acutely hazardous waste, and also as a TSCA PCB contaminated waste (PCB concentration  $\geq 50$  ppm and  $< 500$  ppm). The customer wants to render this container RCRA empty and PCB decontaminated and then reuse the container for other wastes. The customer does not want to be concerned with "carry through" to subsequent wastestreams of any previous RCRA listed waste codes or PCB contamination. What must the customer do in order to render this drum reusable in terms of RCRA and TSCA PCB requirements?

**A:** In terms of RCRA, the customer must render the drum RCRA empty for a non-acutely hazardous waste. Per [WAC 173-303-160\(2\)](#) [[40 CFR 261.7](#)] the container must be emptied as much as possible and contain no more than 1 inch, or no more than 3% by volume of residues. Once this criteria is achieved for a non-acutely hazardous waste, the residues remaining in the RCRA empty container are no longer subject to RCRA [[WAC 173-303-160\(3\)](#)].

In terms of TSCA PCB, the customer must decontaminate the drum for PCBs. Per [40 CFR 761.79\(c\)\(1\)](#) the container must be triple rinsed with an appropriate solvent, as defined in [761.79\(d\)\(1\) - \(3\)](#). Each rinse volume must equal 10% of the PCB container's capacity. Once this criteria is achieved for a PCB container, the container can be used or reused as authorized at [40 CFR 761.30\(u\)](#). Note that both RCRA and TSCA PCB "empty" criteria apply to liquids and nonliquids, and confirmation analyses is not required.

Since the customer has a container that formerly contained a RCRA "F" listed hazardous waste (non-acute), and a TSCA PCB contaminated waste, the customer must meet both the RCRA and TSCA requirements concerning rendering a drum RCRA empty and PCB decontaminated. In this specific case, if the customer decontaminated the drum for PCBs by triple rinsing the container, and completely emptying the rinsate, the drum would be empty/decontaminated and therefore reusable in terms of both RCRA and TSCA PCB.

### SUMMARY:

- A RCRA non-acutely hazardous waste container is RCRA empty when emptied as much as possible and contains no more than 1 inch or no more than 3% by volume of residues.
- A TSCA PCB contaminated container is TSCA decontaminated when triple rinsed with an appropriate solvent and each rinse equals 10% of the drum's capacity.
- A RCRA/TSCA container meeting both of the above criteria is suitable for reuse.

Excerpts from WAC 173-303-160 and 40 CFR 761 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:** 8/4/16

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## TWO MINUTE TRAINING - ATTACHMENT

**SUBJECT:** RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario I

**WAC 173-303-160 Containers.**

(2) A container or inner liner is "empty" when:

(a) All wastes in it have been taken out that can be removed using practices commonly employed to remove materials from that type of container or inner liner (for example, pouring, pumping, aspirating, etc.) and:

- (i) No more than one inch of waste remains at the bottom of the container or inner liner; or
- (ii) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size; or
- (iii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.

(3)

(a) Any residues remaining in containers or inner liners that are "empty" as described in subsection (2) of this section will not be subject to the requirements of this chapter, and will not be considered as accumulated wastes for the purposes of calculating waste quantities.

### **40 CFR 761.79 Decontamination standards and procedures.**

(a) *Applicability.* This section establishes decontamination standards and procedures for removing PCBs, which are regulated for disposal, from water, organic liquids, non-porous surfaces (including scrap metal from disassembled electrical equipment), concrete, and non-porous surfaces covered with a porous surface, such as paint or coating on metal.

(3) Materials from which PCBs have been removed by decontamination in accordance with this section may be used or reused in accordance with §761.30(u).

(c) *Self-implementing decontamination procedures.* The following self-implementing decontamination procedures are available as an alternative to the measurement-based decontamination methods specified in paragraph (b) of this section. Any person performing self-implementing decontamination must comply with one of the following procedures.

(1) Any person decontaminating a PCB Container must do so by flushing the internal surfaces of the container three times with a solvent containing <50 ppm PCBs. Each rinse shall use a volume of the flushing solvent equal to approximately 10 percent of the PCB Container capacity.

### **40 CFR 761.30 Authorizations.**

(u) *Use of decontaminated materials.*

(1) Any person may use equipment, structures, other non-liquid or liquid materials that were contaminated with PCBs during manufacture, use, servicing, or because of spills from, or proximity to, PCBs  $\geq 50$  ppm, including those not otherwise authorized for use under this part, provided:

(i) The materials were decontaminated in accordance with:

(B) Section 761.79; or...

**FROM:** Paul W. Martin

**DATE:** 8/4/16

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