

<u>SUBJECT</u>		<u>DATE</u>
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		JUL 23, 2015

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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:** CONDITIONED EXCLUSION FOR LISTED HAZARDOUS WASTE DEBRIS TREATED VIA EXTRACTION OR DESTRUCTION

**DATE:** JULY 23, 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 Widney	Brett Barnes Ron Brunke Bill Cox Laura Cusack Lorna Dittmer Rick Engelmann Ted Hopkins Jim Leary Dale McKenney Jon McKibben Rick Oldham Linda Petersen Fred Ruck Jennie Seaver Ray Swenson Wayne Toebe Lee Tuott Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehliis Garin Erickson Lori Fritz Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Thomas Pysto Christina Robison Don Rokkan Lana Strickling Lou Upton	(TBD)  <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 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 Kyle Webster Jeff Westcott Ted Wooley

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## TWO MINUTE TRAINING

**SUBJECT:** Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction or Destruction

**Q:** A customer has metal components contaminated with a listed hazardous waste. The metal components meet the definition of debris found at [40 CFR 268.2\(g\)](#). Therefore an alternative treatment standard for debris per 40 CFR 268.45 - high pressure steam and water spray - will be used to meet the land disposal restriction (LDR) requirements prior to landfilling. Following treatment the customer wants to dispose of the treated debris as non-RCRA material. Considering that the debris was contaminated with a listed hazardous waste, can this treated debris be disposed as nonhazardous waste?

**A:** Per [40 CFR 268.45\(c\)](#), “Conditioned exclusion of treated debris”, hazardous debris that has been treated using an extraction or destruction technology per [Table 1 of 268.45](#), “Alternative Treatment Standards For Hazardous Debris” and that does not exhibit a characteristic of hazardous waste (D001 - D043) [or a Washington State criteria if the generator is in Washington] after treatment is not a hazardous waste. Therefore management at a Subtitle C hazardous waste facility is not required. Note that hazardous debris contaminated with a listed waste and treated by an immobilization technology - macroencapsulation, microencapsulation or sealing - continues to be a hazardous waste and management at a Subtitle C hazardous waste facility is required.

Since the customer’s listed hazardous waste debris was treated using an extraction technology - high pressure steam and water spray - and did not exhibit any characteristics of hazardous waste following treatment, the treated debris meets the conditional exclusion at 268.45(c) and can be land disposed at a Subtitle D nonhazardous waste facility.

Note that per [40 CFR 268.45\(d\)\(1\)\(ii\)](#), any residues from the treatment of a listed hazardous waste debris are also listed hazardous wastes and must meet applicable LDR standards prior to land disposal at a hazardous waste facility. Therefore, any rinse waters from the treatment of the customer’s listed hazardous debris would continue to be listed hazardous wastes.

### SUMMARY:

- Listed hazardous waste debris may be managed at a nonhazardous facility if the debris:
  - ▶ Is treated by either an extraction or destruction technology per Table 1 of 268.45, and
  - ▶ Does not exhibit a characteristic of hazardous waste following treatment.
- Residues such as rinse waters from the treatment of listed hazardous debris continue to be listed hazardous wastes.
- Debris contaminated with listed hazardous wastes and treated by an immobilization technology must be managed at a hazardous waste facility.

Excerpts from 40 CFR 268.45 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:** 7/23/15

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**TWO MINUTE TRAINING - ATTACHMENT**

**SUBJECT:** Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction or Destruction

**40 CFR 268.45 Treatment standards for hazardous debris.**

(a) Treatment standards. Hazardous debris must be treated prior to land disposal as follows unless EPA determines under §261.3(f)(2) of this chapter that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this subpart for the waste contaminating the debris:

- (1) General. Hazardous debris must be treated for each "contaminant subject to treatment" defined by paragraph (b) of this section using the technology or technologies identified in Table 1 of this section.

(c) **Conditioned exclusion of treated debris.** Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table 1 of this section and that does not exhibit a characteristic of hazardous waste identified under subpart C, part 261, of this chapter after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table 1 is a hazardous waste and must be managed in a subtitle C facility.

(d) Treatment residuals—

- (1) General requirements. Except as provided by paragraphs (d)(2) and (d)(4) of this section:

- (i) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and
- (ii) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by subpart D of this part for the waste contaminating the debris.

**EXAMPLE: Table 1.--Alternative Treatment Standards for Hazardous Debris**

Technology description	Performance and/or design and operating standard	Contaminant restrictions
A. <b>Extraction</b> Technologies: 1. Physical Extraction e. <i>High Pressure Steam and Water Sprays:</i> Application of water or steam sprays of sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contamination from debris surfaces or to remove contaminated debris surface layers	<i>Glass, Metal, Plastic, Rubber:</i> Treatment to a clean debris surface. <sup>3</sup> <i>Brick, Cloth, Concrete, Paper Pavement, Rock, Wood:</i> Removal of at least 0.6 cm of the surface layer, treatment to a clean debris surface. <sup>3</sup>	<i>All Debris:</i> None.

**3 "Clean debris surface" means the surface, when viewed without magnification, shall be free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5% of each square inch of surface area.**

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