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1258. 'Twas the Night Before Christmas – The Twenty-Fifth Annual Edition		DEC 21, 2017
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1309. Disposal Relief for Listed Hazardous Debris Treated to LDR Standards	ENCORE	DEC 13, 2018

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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: DISPOSAL RELIEF FOR LISTED HAZARDOUS DEBRIS TREATED TO LDR STANDARDS

DATE: DECEMBER 13, 2018

<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 John Dent Lorna Dittmer Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Sasa Kosjerina Melvin Lakes Richard Lipinski Jim McGrogan Stuart Mortensen Dave Richards Phil Sheely Connie Simiele Jennie Stults Jeff Westcott Jeff Widney	Bob Bullock Bill Cox Laura Cusack Jim Leary Anthony Nagel Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Daniel Turlington Dave Watson	Brett Barnes Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzalez Jr. Dashia Huff Mark Kamberg Jon McKibben Saul Martinez Jon Perry Christina Robison Lana Strickling Lou Upton	(TBD) <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Duane Carter Cliff Clark Tony McKarns	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson 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 Matt Mills 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: Disposal Relief for Listed Hazardous Debris Treated to LDR Standards

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 listed hazardous waste and management at a Subtitle C hazardous waste facility is required.)

Since the customer’s listed debris waste 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 of 268.45(c) and can be land disposed at a Subtitle D nonhazardous waste facility.

Note that per 268.45(d)(1)(ii), any residues from the treatment of a listed hazardous debris are also listed hazardous wastes and must meet applicable LDR standards prior to management 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 immobilization 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: 12/13/18

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Disposal Relief for Listed Hazardous Debris Treated to LDR Standards

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. Extraction 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. ³ <i>Brick, Cloth, Concrete, Paper Pavement, Rock, Wood:</i> Removal of at least 0.6 cm of the surface layer, treatment to a debris surface. ³	All Debris: 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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