

<u>SUBJECT</u>		<u>DATE</u>
1320.	Treated Hazardous Waste Used as Dust Suppressant	FEB 28, 2019
1321.	Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE MAR 7, 2019
1322.	Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE MAR 14, 2019
1323.	Decharacterized Wastes, ≤90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE MAR 21, 2019
1324.	Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE MAR 28, 2019

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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:** DECHARACTERIZED WASTES AND THE LDR DILUTION PROHIBITION

**DATE:** MARCH 28, 2019

<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 Laura Cusack John Dent Lorna Dittmer Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Sasa Kosjerina Melvin Lakes Richard Lipinski Stuart Mortensen Dave Richards Phil Sheely Connie Simiele Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Bill Cox Noah Cruz Jeanne Elkins Jonathan Fullmer Ted Hopkins Tad Karschnia Barry Lawrence Jim Leary Diane Leist Mitch Marrott Stewart McMahan Brian Mitcheltree Anthony Nagel Linda Petersen Fred Ruck Sean Sexton Dave Shea Ray Swenson Kat Thompson Wayne Toebe Daniel Turlington Dave Watson	Brett Barnes Michael Carlson Mike Demiter Kip George Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzalez Jr. Dashia Huff Mark Kamberg Jon McKibben Saul Martinez Matt Mills Carly Nelson Michelle Oates Eric Pennala Jon Perry Christina Robison Christian Seavoy David Shaw John Skoglie Lana Strickling Greg Sullivan	(TBD)  <u>DOE RL, ORP, WIPP</u>  Mary Beth Burandt Duane Carter Tony McKarns	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Darrin Faulk 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 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:** Decharacterized Wastes and the LDR Dilution Prohibition

- Q:** The previous three weeks' Two Minute Trainings (March 7<sup>th</sup> to March 21<sup>st</sup>) discussed decharacterizing hazardous waste which rendered waste as nonhazardous but still subject to the applicable land disposal restrictions (LDR) standards. Concerning the LDR prohibition on impermissible dilution, if a generator decharacterizes hazardous waste via dilution, in general would that be permissible or impermissible dilution?
- A:** Per [40 CFR 268.3](#), "Dilution prohibited as a substitute for treatment", paragraph (a) basically states that no person shall in any way dilute a land disposal restricted (LDR) waste as a substitute for adequate treatment to achieve compliance with LDR treatment standards. The key phrase in this sentence is, "as a substitute for adequate treatment". This means is that if a person is using dilution "as a substitute" for adequate LDR treatment, that dilution is impermissible.

However, if a person is using dilution for purposes other than as a substitute for adequate LDR treatment, that dilution is permissible. If the dilution is to decharacterize a hazardous waste to render the waste as nonhazardous, 40 CFR 268 does not prohibit that dilution and it is therefore permissible. This dilution is not being used as a substitute for adequate LDR treatment and is only be used as a means to render a hazardous waste as nonhazardous. Following decharacterization, applicable LDR requirements concerning treatment standards will continue to apply, however, the dilution of the hazardous waste was permissible since the generator did not perform the dilution as a substitute for adequate LDR treatment.

As an example, if a customer has an F003 ignitable hazardous waste (acetone still bottoms) with an LDR treatment standard of 160 mg/l TCLP, the customer could dilute the waste to remove the ignitability hazard (permissible); however, the dilution could not apply towards the LDR treatment standard of the acetone constituent (impermissible). The generator would still have to treat the formerly hazardous, now nonhazardous waste by an adequate method in order to comply with the LDR treatment standard and to not violate the LDR dilution prohibition at 40 CFR 268.3.

As stated in an April 1988 EPA RCRA Hotline Monthly Summary ([RO 13164](#)),

*"... if the generator's purpose in mixing the stillbottoms with nonhazardous waste is to render the mixture nonhazardous she/he is not precluded from doing so by 268.3. However, if the generator's purpose in mixing the waste is to dilute the F003 waste as a substitute for adequate treatment to achieve compliance with Part 268, Subpart D, the action is prohibited."*

### SUMMARY:

- The impermissible dilution prohibition for LDR waste is at 40 CFR 268.3.
- Dilution in general, is impermissible as a substitute for adequate LDR treatment.
- Dilution is permissible to render a hazardous waste as nonhazardous (decharacterized); however, the nonhazardous waste must still comply with applicable LDR treatment standards.

Excerpts from 40 CFR 268.3(a) and the April 1988 EPA RCRA Hotline Monthly Summary are attached to the e-mail. If you have any questions, contact me at [Paul\\_W\\_Martin@rl.gov](mailto:Paul_W_Martin@rl.gov) or at (509) 376-6620.

**FROM:** Paul W. Martin

**DATE:** 3/28/19

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## TWO MINUTE TRAINING – ATTACHMENT

**SUBJECT:** Decharacterized Wastes and the LDR Dilution Prohibition

### **40 CFR 268.3 Dilution prohibited as a substitute for treatment.**

- (a) Except as provided in paragraph (b) of this section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with subpart D of this part, to circumvent the effective date of a prohibition in subpart C of this part, to otherwise avoid a prohibition in subpart C of this part, or to circumvent a land disposal prohibition imposed by RCRA section 3004.

**RCRA Online 13164**

**9551.1988(02)**

**RCRA/SUPERFUND HOTLINE MONTHLY SUMMARY**

**APRIL 88**

### **6. Dilution of Land Disposal Restricted Waste**

A generator of a spent solvent, which contained one hundred percent (100%) acetone before use, identified the waste as F003. She/he regenerates the spent solvent by distillation, and then treats the stillbottoms in an accumulation tank by mixing them with nonhazardous solid waste. The resulting mixture no longer exhibits the characteristic of ignitability. According to 40 CFR Section 261.3(a)(2)(iii), the material is no longer a hazardous waste. However, the enforcement agency considers the mixing with nonhazardous waste to be dilution, which is prohibited by Section 268.3. Would the dilution prohibition prevent the generator from being able to mix the F003 waste with nonhazardous solid waste?

The preamble to the November 7, 1986 Federal Register (51 FR 40592) specifies that the prohibition on dilution of wastes restricted from land disposal, found at Section 268.3, "does not affect provisions in other EPA regulations which may allow dilution for other purposes." Thus, if the generator's purpose in mixing the stillbottoms with nonhazardous waste is to render the mixture nonhazardous she/he is not precluded from doing so by Section 268.3. However, if the generator's purpose in mixing the waste is to dilute the F003 waste as a substitute for adequate treatment to achieve compliance with Part 268, Subpart D, the action is prohibited.

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