

	<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

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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:** MAY 21, 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 Ehlis 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:** Decharacterized Wastes and the LDR Dilution Prohibition

- Q:** The previous three weeks' Two Minute Trainings (April 30<sup>th</sup> – May 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, that dilution is not prohibited by 40 CFR and is 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 it was not done 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 formerly hazardous, now nonhazardous waste would still have to be treated 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](#):

*".. 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 dilution prohibition for LDR waste is found at 40 CFR 268.3.
- Dilution 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 please contact me at "Paul\_W\_Martin@rl.gov" or at (509) 376-6620.

**FROM:** Paul W. Martin

**DATE:** 5/21/15

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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.

**Faxback 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.

Source: Mike Petruska (202) 475-9888  
Mitch Kidwell (202) 382-4805

Research: Becky Cuthbertson  
Deborah McKie

**FROM:** Paul W. Martin

**DATE:** 5/21/15

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