

<u>SUBJECT</u>		<u>DATE</u>
1448. Definitions of Inactive Portion, Active Portion and Closed Portion of a RCRA TSDF		AUG 12, 2021
1449. Dangerous Waste Designations and Dangerous Waste Code Determinations		AUG 19, 2021
1450. Method Detection Limits and Hazardous Waste Determinations	ENCORE	AUG 26, 2021
1451. Method Detection Limits and Hazardous Waste Determinations II	ENCORE	SEP 2, 2021
1452. Totals Analysis vs. TCLP and Dividing by 20	ENCORE	SEP 9, 2021
1453. Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	SEP 16, 2021
1454. Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	SEP 23, 2021
1455. Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	SEP 30, 2021

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TWO MINUTE TRAINING

TO: CENTRAL PLATEAU CLEANUP COMPANY

FROM: PAUL W. MARTIN, RCRA Subject Matter Expert
CPCCo Environmental Protection, Hanford, WA

SUBJECT: DECHARACTERIZED WASTES AND THE LDR DILUTION PROHIBITION

DATE: SEPTEMBER 30, 2021

<u>CPCCo Projects</u>	<u>CPCCo Functionals</u>	<u>HMIS</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
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TWO MINUTE TRAINING

SUBJECT: Decharacterized Wastes and the LDR Dilution Prohibition

Q: The previous two weeks' Two Minute Trainings (September 16th and September 23rd) 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 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 stillbottoms) 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, please contact me at [Paul W Martin@rl.gov](mailto:Paul_W_Martin@rl.gov) or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 9/30/2021

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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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