

<u>SUBJECT</u>		<u>DATE</u>
1339. The Hazardous Waste Characteristic of Reactivity (D003)	ENCORE	JUL 11, 2019
1340. Central Accumulation Areas and Signage Requirements		JUL 18, 2019
1341. RCRA EPA Identification Numbers – Site Specifics	ENCORE	JUL 25, 2019
1342. RCRA EPA Identification Numbers – Transporters	ENCORE	AUG 1, 2019
1343. Paint Wastes and the Applicability of the F001-F005 Listings to Ingredients	ENCORE	AUG 8, 2019
1344. F Listings and Ingredients in Commercial Chemical Product Formulations	ENCORE	AUG 15, 2019
1345. PCB Containers and ≥ 50 ppm	ENCORE	AUG 22, 2019
1346. CERCLA Hazardous Substances – The Petroleum Exclusion	ENCORE	AUG 29, 2019
1347. PCB Concentration Assumptions for Use vs. PCB Disposal	ENCORE	SEP 5, 2019
1348. RCRA LR One-Year Storage Prohibition vs., PCB One-Year Disposal Time Limit		SEP 12, 2019
1349. Regulatory Status of PCB Remediation Wastes Disposed Prior to April 18, 1978	ENCORE	SEP 19, 2019
1350. Regulatory Status of PCB Remediation Wastes Disposed Prior to April 18, 1978 – A Follow-Up		SEP 26, 2019
1351. PCB Waste Regulation and April 18, 1978 vs. July 2, 1979		OCT 3, 2019
1352. PCB Waste Storage Limitations and the One-Year Extension	ENCORE	OCT 10, 2019
1353. PCB Waste Storage Limitations and the PCB Radioactive Waste Exemption	ENCORE	OCT 17, 2019
1354. LDR One-Year Storage Prohibition and Generator Permitted Storage	ENCORE	OCT 24, 2019
1355. LDR Notification/Certification and Generator Permitted Storage		OCT 31, 2019
1356. Disposing of PCB Ballasts with PCB Potting Material	ENCORE	NOV 7, 2019
1357. Fluorescent Light Ballasts and PCB Annual Reporting	ENCORE	NOV 14, 2019
1358. Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents	ENCORE	NOV 21, 2019
1359. Multiple Characteristic and Listed Hazardous Waste Codes and the “in lieu of” LDR Principle	ENCORE	NOV 26, 2019
1360. Universal Waste Lamps and Prohibition on Crushing	ENCORE	DEC 5, 2019
1361. Used Oil and Weekly Inspections	ENCORE	DEC 12, 2019
1362. Used Oil and Keeping Containers Closed – Washington State vs. the Feds	ENCORE	DEC 19, 2019
1363. ‘Twas the Night Before Christmas – The Twenty-Sixth Annual Edition		DEC 24, 2019
1364. Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 2, 2020
1365. PCB Reporting and Recordkeeping Relief	ENCORE	JAN 9, 2020
1366. Satellite Accumulation and Product Vessel Cleanouts	ENCORE	JAN 16, 2020
1367. TSDF Requirements When Shipping Dangerous Waste to another TSDF		JAN 23, 2020
1368. The Hazardous Waste Manifest Instructions – Where did they go?		JAN 30, 2020
1369. The Mixtures Rule – Washington State vs. The Feds	ENCORE	FEB 6, 2020
1370. Used Oil and the Rebuttable Presumption		FEB 13, 2020
1371. Used Oil, Secondary Containment and Response to Spills	ENCORE	FEB 20, 2020
1372. Used Oil Eligibility for Animal and Vegetable Oils	ENCORE	FEB 27, 2020
1373. Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils	ENCORE	MAR 5, 2020
1374. Mercury Wet Cell Batteries - Debris or Not Debris?	ENCORE	MAR 12, 2020
1375. Hazardous Debris and Non-Radioactive Lead-Acid Batteries	ENCORE	MAR 19, 2020
1376. Radioactively Contaminated Lead-Acid Batteries and Hazardous Debris	ENCORE	MAR 26, 2020
1377. MACRO encapsulation vs. macroencapsulation	ENCORE	APR 2, 2020
1378. PCB Storage for Disposal and RCRA ≤ 90 -Day Central Accumulation Areas	ENCORE	APR 9, 2020
1379. The PCB Mark and PCB Storage for Disposal Areas	ENCORE	APR 16, 2020
1380. PCB Containers and Multiple Removed From Service Dates	ENCORE	APR 23, 2020
1381. Contingency Plan Implementation and Small Spills of Hazardous Waste		APR 29, 2020
1382. Satellite Accumulation Areas and the Three-Day Time Limit for Excess Accumulation	ENCORE	MAY 7, 2020
1383. The RCRA Definition of “Regulated Unit”		MAY 14, 2020
1384. RCRA and New Point of Generation		MAY 21, 2020
1385. The Alcohol Exclusion for Ignitable Hazardous Wastes	ENCORE	MAY 28, 2020
1386. PCB Certificates of Disposal and Manifesting Between Related Facilities	ENCORE	JUN 4, 2020
1387. RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario I	ENCORE	JUN 11, 2020
1388. RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario II	ENCORE	JUN 18, 2020
1389. RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario III	ENCORE	JUN 25, 2020
1390. Aqueous Solutions and the Characteristic of Corrosivity	ENCORE	JUL 2, 2020
1391. Satellite Accumulation Containers and the Date of Accumulation Marking	ENCORE	JUL 9, 2020
1392. Satellite Accumulation Areas and Under the Control of the Operator	ENCORE	JUL 16, 2020
1393. RCRA Empty Tanker Trailers and Listed Waste Codes	ENCORE	JUL 23, 2020

DISCLAIMER - “Two Minute Training” (“2MT”) is a peer-to-peer communication, presented to share the benefit of the author’s work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author’s past or current employers or the US Department of Energy. The author’s employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

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

SUBJECT: RCRA EMPTY TANKER TRAILERS AND LISTED WASTE CODES

DATE: JULY 23, 2020

<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 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 Danielle Collins Bill Cox Jeanne Elkins Ryan Fisher Jonathan Fullmer Barry Lawrence Diane Leist Mitch Marrott Stewart McMahand Brian Mitcheltree Anthony Nagel Linda Petersen Sean Sexton Dave Shea Kat Thompson Wayne Toebe Eric Trotta 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 Skogle John Skogle Lana Strickling Greg Sullivan	(TBD) <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Duane Carter Al Farabee Tony McKarns	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Rob Gregory James Hamilton Andy Hobbs Ryan Johnson Megan Lerchen Mike Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Tom Moon Chuck Mulkey Kirk Peterson	Dan Saueressig Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Ted Wooley

DISCLAIMER - "Two Minute Training" ("2MT") is a peer-to-peer communication, presented to share the benefit of the author's work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author's past or current employers or the US Department of Energy. The author's employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

TWO MINUTE TRAINING

SUBJECT: RCRA Empty Tanker Trailers and Listed Waste Codes

Q: A customer has a 5,000-gallon tanker (RCRA container) containing a non-acutely listed hazardous waste (F, K, or U), which was later emptied to the point that the tanker contained just less than 15 gallons of the listed wastes. Per [WAC 173-303-160\(2\)](#) ([40 CFR 261.7](#)), the tanker is considered RCRA empty (5,000 gallons X 0.3% = 15 gallons) and the residues remaining in the tanker are not subject to dangerous waste regulations. However, the next day the tanker is cleaned with 85 gallons of diesel and a total of 100 gallons of waste diesel and the formerly listed hazardous waste residuals accumulate in the tanker. Since the tanker is no longer RCRA empty, must the generator managed the waste mixture per the original listed hazardous waste code?

A: WAC 173-303-160(3)(a) basically states that any residues remaining in containers that are "empty" will not be subject to the dangerous waste requirements. Therefore, it is clear that residues remaining in an empty container are not regulated as dangerous wastes.

Concerning listed residues removed from an empty container, an EPA memo ([RO 11447](#)) states:

"The answer to this question depends on whether the truck at the time of rinsing qualifies as an empty container, under 40 CFR 261.7. The wash waters generated after draining, assuming the commercial chemicals (listed hazardous wastes) have been removed by reasonable means and less than one inch or less than 0.3% of the tank volume remained (i.e., RCRA empty), would not be hazardous wastes. If these conditions [empty vs. not empty] are not satisfied, then the wastewater would be hazardous waste because they contain unused discarded commercial chemical products."

This means that even though the tanker held almost 15 gallons of a formerly listed hazardous waste, and was mixed with almost 85 gallons of diesel, the 100 gallons of waste is not a listed hazardous waste upon discard. Once the listed hazardous waste code is removed via emptying per WAC 173-303-160(2), the listing is not re-applied because material was added to the RCRA empty tanker. However, empty residues could still be regulated as dangerous waste if a dangerous waste characteristic (D001 through D043) is exhibited or if a Washington State Criteria (WT01, WT02, [toxics], or WP01, WP02 or WP03 [persistence]) is failed, which for this tanker was not the case.

SUMMARY:

- A 5,000-gallon tanker is "empty" if no more than 15 gallons of dangerous waste remains.
- A dangerous waste listing (F, K, or U) no longer applies once the tanker is "emptied".
- "Empty" residues would only be subject to characteristics and/or WA state criteria when discarded.

The July 21, 1989, EPA memo is 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: 7/23/2020

FILE: 2MT\2020\072320.rtf

PG: 1

DISCLAIMER - "Two Minute Training" ("2MT") is a peer-to-peer communication, presented to share the benefit of the author's work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author's past or current employers or the US Department of Energy. The author's employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: RCRA Empty Tanker Trailers and Listed Waste Codes

Faxback 11447

9444.1989(05)

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

JUL 21 1989

Shirlee Schiffman, Chief
Bureau of Hazardous Waste Regulation and Classification
New Jersey Department of Environmental Protection
401 East State Street, CN 028
Trenton, New Jersey 08625-0028

Dear Ms. Schiffman:

This is in response to your letter of April 5, 1989, and the subsequent conversation my staff had with you and your staff on April 20. Specifically, we are answering several questions on the applicability of hazardous waste regulations under 40 CFR 261.31 and 261.33 to situations enumerated in your letter.

In the first situation, you asked if the regulatory interpretation provided in a letter sent by the former Office of Solid Waste Director, Marcia Williams, dated October 26, 1987, is still valid in the case of acetone-contaminated water from the washout of a reactor vessel after removal of spent solvent. The Agency has not changed its interpretation.

In the second situation, you state that a company uses methanol and acetone to wash a product in order to remove water. From the telephone conversation, your staff indicated that the solvent mixture is 50% acetone and 50% methanol before use. To answer this question, two questions must be answered: 1) does use as a drying agent constitute use as a solvent? and 2) does the solvent mixture meet the listing description? First, use as a drying agent does meet the definition of solvent use because the material is used to extract water. Second, methanol and acetone are listed ignitable solvents under F003; therefore, the F003 listing applies because the solvent mixture consists solely of F003-listed solvents.

You asked during our telephone conversation whether the mixture rule under 40 CFR 261.3(a)(2)(iii) would apply to this situation. The mixture rule applies after the waste has been generated and this then mixed with a solid waste. The mixture rule specifies that if the mixture no longer exhibits the characteristic of ignitability, then the waste is no longer considered hazardous. In this situation, the spent F003 solvents collected after the washings are EPA hazardous waste F003 until they are subsequently mixed with solid waste and no longer exhibit any hazardous waste characteristic.

FROM: Paul W. Martin

DATE: 7/23/2020

FILE: 2MT\2020\072320.tif

PG: 2

DISCLAIMER - "Two Minute Training" ("2MT") is a peer-to-peer communication, presented to share the benefit of the author's work experience with other professionals, who can independently evaluate his analysis. 2MT does not necessarily reflect the opinions, conclusions or policies of the author's past or current employers or the US Department of Energy. The author's employers do not take any responsibility for the accuracy of its conclusions. 2MT is not intended to be used as authoritative guidance or direction by any person or entity. Anyone transmitting or reproducing it is prohibited from modifying its content, this disclaimer, or other text, or republishing it independent of its original source.

TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: RCRA Empty Tanker Trailers and Listed Waste Codes

In the third example, a transporter delivers P and U wastes in tanker trucks. The heels are drained, and the collected materials are drummed and manifested as hazardous waste. Once the tank trucks have been drained, subsequent washes may still contain small quantities of the original chemical. The answer to this question depends on whether the truck at the time of rinsing qualifies as an empty container, under 40 CFR 261.7. The wash waters generated after draining, assuming the commercial chemicals have been removed by reasonable means and less than one inch or less than 0.3% of the tank volume remained, would not be hazardous wastes. If these conditions are not satisfied, then the wastewater would be hazardous waste because they contain unused discarded commercial chemical products. (See [47 FR 36092 - 36097, August 18, 1982.](#))

The fourth situation involves a company that uses toluene as a solvent in a chemical production process. After the product is made, most of the toluene is recovered. However, the wash water is contaminated with traces of toluene, which then contaminates the plant's process wastewater and settling tank sludges. The wash water may be considered a process stream that is contaminated with a solvent constituent and not a listed spent solvent. The wastewater and settling tank sludges also are not listed spent solvent wastes.

Thank you for your inquiry. If you have any other questions, please contact Ron Josephson of my staff at (202) 382-4770.

Sincerely,

Original Document signed

Devereaux Barnes
Director
Characterization and
Assessment Division

cc: George Meyer, EPA Region II (2AWM-HWC)