	SUBJECT		DATE
1188.	RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario II	ENCORE	AUG 11, 2016
1189.	RCRA Empty Containers vs. TSCA PCB Decontaminated Containers - Scenario III	ENCORE	AUG 18, 2016
1190.	Product Spills and Waste Determinations	ENCORE	AUG 25, 2016
1191.	Product Spills, Waste Determinations, and LDR	ENCORE	SEP 1, 2016
1192.	Regulatory Status of Caustic Rinse Waters Contaminated with Trace Solvents	ENCORE	SEP 8, 2016
1193.	Regulatory Status of Sand Blast Grit Contaminated with Trace Listed Solvents	ENCORE	SEP 15, 2016
1194.	Hazardous Waste "F" Listings and Trace Contamination	ENCORE	SEP 22, 2016
1195.	Hazardous Waste "F" Listings and Trace Contamination – Again!	ENCORE	SEP 29, 2016
1196.	Hazardous Waste Determinations and Phase Separation		OCT 6, 2016
1197.	Asbestos and DOT Relief	ENCORE	OCT 13, 2016
1198.	PCB Containers and Concentration of PCBs	ENCORE	OCT 20, 2016
1199.	PCB Analytical Waste Disposal Requirements	ENCORE	OCT 27, 2016
1200.	PCB Analytical Waste Disposal Requirements – Water vs. Organic Liquids and Non-aqueou		NOV 3, 2016
1201.	Listed Waste Codes and Pre-RCRA Wastes	ENCORE	NOV 10, 2016
1202.	Purpose of the <90-day Hazardous Waste Accumulation Exemption		NOV 17, 2016
1203.	Used Oil Eligibility for Turkey and Ham Oils	ENCORE	NOV 23, 2016
1204.	PCB Reporting and Recordkeeping Relief	ENCORE	DEC 1, 2016
1205.	Defining Criteria for Household Waste Exclusion	ENCORE	DEC 8, 2016
1206.	The Household Waste Exclusion and Renovation Debris	ENCORE	DEC 15, 2016
1207.	'Twas the Night before Christmas – The Twenty-Fourth Annual Edition		DEC 24, 2016
1208.	The Household Waste Exclusion and Renovation Debris – Part II	ENCORE	DEC 29, 2016
1209.	Absorbent Additions and Treatment		JAN 5, 2017
1210.	Frozen RCRA Wastewater - DOT Liquid or Solid When Manifested?	ENCORE	JAN 12, 2017
1211.	DOT Marking Specifications for the "UN", "NA" and "ID" Markings		JAN 19, 2017
1212.	Satellite Accumulation within a ≤90-day Accumulation Area	ENCORE	JAN 26, 2017
1213.	Washington State-Only Dangerous Waste Markings – Accumulation vs. Pre-Transport	ENCORE	FEB 2, 2017
1214.	RCRA Empty Tanker Trailers and Listed Waste Codes	ENCORE	FEB 9, 2017

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: *FEBRUARY* 9, 2017

CYMP C P	GW DD G - E	1 3.504	1		0.1 ** 0.1
CHPRC Projects	CH PRC - Env.	<u>MSA</u>	Hanford Laboratories	Other Hanford	Other Hanford
	Protection			Contractors	Contractors
Richard Austin		Brett Barnes	(TBD)		
Roni Ashley	Ron Brunke	Jerry Cammann		Bill Bachmann	Jean Quigley
Tania Bates	Bob Bullock	Jeff Ehlis	DOE RL, ORP, WIPP	Dean Baker	Dan Saueressig
Rene Catlow	Bill Cox	Garin Erickson		Scott Baker	Merrie Schilperoort
Richard Clinton	Laura Cusack	Panfilo Gonzales Jr.	Mary Beth Burandt	Lucinda Borneman	Joelle Moss
Larry Cole	Lorna Dittmer	Dashia Huff	Duane Carter	Paul Crane	Glen Triner
John Dent	Ted Hopkins	Mark Kamberg	Cliff Clark	Tina Crane	Greg Varljen
Brian Dixon	Sasa Kosjerina	Edwin Lamm	Tony McKarns	Jeff DeLine	Julie Waddoups
Eric Erpenbeck	Jim Leary	Candice Marple	Ellen Mattlin	Ron Del Mar	Jay Warwick
Stuart Hildreth	Rick Oldham	Jon McKibben	Greg Sinton	John Dorian	Kyle Webster
Mike Jennings	Anthony Nagel	Saul Martinez	Scott Stubblebine	Mark Ellefson	Ted Wooley
Stephanie Johansen	Robert Nielson	Jon Perry		Darrin Faulk	
Jeanne Kisielnicki	Linda Petersen	Christina Robison		Joe Fritts	
Melvin Lakes	Fred Ruck	Lana Strickling		Lori Fritz	
Jim McGrogan	Ray Swenson	Lou Upton		Tom Gilmore	
Stuart Mortensen	Wayne Toebe			Rob Gregory	
Dean Nester	Daniel Turlington			Gene Grohs	
Dave Richards	Dave Watson			James Hamilton	
Phil Sheely	Joel Williams			Andy Hobbs	
Connie Simiele				Ryan Johnson	
Jennie Stults				Dan Kimball	
Jeff Westcott				Megan Lerchen	
Jeff Widney				Richard Lipinski	
				Charles (Mike) Lowery	
				Michael Madison	
				Terri Mars	
				Cary Martin	
				Marty Martin	
				Grant McCalmant	
				Steve Metzger	
				Tony Miskho	
				Matt Mills	
				Tom Moon	
				Chuck Mulkey	
				Mandy Pascual	
				Kirk Peterson	

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 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 X 0.3% = 15) and the residues remaining in the tanker are not subject to dangerous waste regulations. However, the very next day the tanker is cleaned with a diesel spray, and accumulates 100 gallons of waste diesel and formerly listed hazardous waste residuals. Since the tanker is no longer RCRA empty and assuming the diesel component is nonregulated must this waste mixture be managed per the original listed hazardous waste code upon discard?
- **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. So it is clear that residues <u>remaining in</u> an empty container are not regulated as dangerous wastes.

Concerning listed residues <u>removed from</u> 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 just because material was added to the RCRA empty tanker. However, empty residues could still be regulated as a 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 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 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 or at (509) 376-6620.

FROM: Paul W. Martin **DATE:** 2/9/17 **FILE:** 2MT\2017\020917.rtf **PG:** 1

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:** 2/9/17 **FILE:** 2MT\2017\020917.rtf **PG:** 2

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)

FROM: Paul W. Martin **DATE:** 2/9/17 **FILE:** 2MT\2017\020917.rtf **PG:** 3