

<u>SUBJECT</u>		<u>DATE</u>
1056. PCB Reporting and Recordkeeping Relief	ENCORE	JAN 12, 2014
1057. Commercial Chemical Products and Unused Batteries	ENCORE	JAN 16, 2014
1058. PCB Annual Records Retention Timeframes		JAN 31, 2014
1059. Satellite Accumulation within a ≤90-day Accumulation Area		FEB 7, 2014
1060. PCB Certificate of Disposal Relief	ENCORE	FEB 13, 2014
1061. Used Oil and Weekly Inspections		FEB 20, 2014
1062. Bags and RCRA Container Definition		FEB 27, 2014
1063. Product Storage Tank Residues and Hazardous Waste Regulations	ENCORE	MAR 6, 2014
1064. Spent Lead-Acid Batteries and Accumulation Time Limits		MAR 13, 2014
1065. Land Disposal Restrictions and Dates of Accumulation		MAR 23, 2014
1066. Universal Waste Accumulation Time Limits and the One Year Rule		MAR 29, 2014
1067. PCB Manifest Discrepancy Reports and Estimated Waste Weights		APR 6, 2014
1068. PCB Wastes, Independent Transporters and Confirmation of Receipt		APR 10, 2014
1069. Paint Wastes and The Applicability of the F001-F005 Listings to Ingredients	ENCORE	APR 20, 2014
1070. Other Paint Wastes and the Applicability of the F001-F005 Listings	ENCORE	APR 24, 2014
1071. Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents		MAY 1, 2014
1072. TSCA "No PCBs" versus "Non-PCBs" versus "Nondetectable PCBs"	ENCORE	MAY 8, 2014
1073. Purpose of Keeping a Hazardous Waste Container Closed	ENCORE	MAY 15, 2014
1074. PCB Containers and Multiple Removed From Service Dates		MAY 22, 2014
1075. Satellite Accumulation and RCRA Personnel Training		MAY 29, 2014
1076. Transporter Signatures on Hazardous Waste Manifest and Multiple Drivers		JUN 5, 2014
1077. Universal Waste and Nonhazardous Batteries		JUN 12, 2014
1078. Universal Waste and Incandescent Bulbs		JUN 19, 2014
1079. The PCB Mark and the Fields "Also Contact" and "Tel No"	ENCORE	JUN 29, 2014
1080. Halon Fire Extinguishers - Banned or Not Banned?	ENCORE	JUL 5, 2014
1081. Cabinets as RCRA Containers	ENCORE	JUL 13, 2014
1082. LDR Storage Prohibitions and Treated Wastes	ENCORE	JUL 17, 2014
1083. LDR Treatment Standards and F001 "Chlorinated Fluorocarbons"	ENCORE	JUL 24, 2014
1084. RCRA Regulatory Status of Chlorinated Fluorocarbons Used as Refrigerants	ENCORE	JUL 31, 2014
1085. Universal Wastes, Manifesting and DOT Shipping Names		AUG 7, 2014
1086. CERCLA Hazardous Substances – A Brief Definition		AUG 14, 2014
1087. CERCLA Hazardous Substances – The Petroleum Exclusion		AUG 21, 2014
1088. PCB Concentration Assumptions for Use vs. PCB Disposal	ENCORE	AUG 28, 2014
1089. Universal Waste and Basis for the One Year Accumulation Time Limit		SEP 4, 2014
1090. Product Spills and Waste Determinations	ENCORE	SEP 11, 2014
1091. PCB Concentrations and 10,000 PPM		SEP 18, 2014
1092. PCB Concentrations and 1,000 PPM		SEP 25, 2014
1093. Universal Waste Alkaline Batteries and Self-Transportation		OCT 2, 2014
1094. Universal Waste Lithium Batteries and Self-Transportation		OCT 9, 2014
1095. Universal Waste Batteries and Closed Containers	ENCORE	OCT 16, 2014
1096. PCB Containers and Concentration of PCBs		OCT 23, 2014
1097. Recyclable Chemicals and Zombie Destruction		OCT 31, 2014
1098. Satellite Accumulation Requirements in Washington State	ENCORE	NOV 6, 2014
1099. Satellite Accumulation and "At or Near"		NOV 13, 2014
1100. Regulatory Status of Chromated, Copper, Arsenate, (CCA) Wood as Wood Mulch	ENCORE	NOV 20, 2014
1101. Defining Criteria for Household Waste Exclusion	ENCORE	NOV 26, 2014
1102. The Household Waste Exclusion and Renovation Debris		DEC 4, 2014
1103. The Household Waste Exclusion and Renovation Debris – Part II		DEC 11, 2014
1104. PCB Ballasts and Disposal Options	ENCORE	DEC 18, 2014
1105. 'Twas the Night Before Christmas – The Twenty-Second Edition		DEC 24, 2014
1106. Printed Circuit Board Recycling – Shredded vs. Whole	ENCORE	JAN 1, 2015
1107. Satellite Accumulation and Product Vessel Cleanouts		JAN 8, 2015
1108. Date of Accumulation for Hazardous Waste and Receipt of Analytical Information	ENCORE	JAN 15, 2015
1109. Conservative Declarations that Material is a Hazardous Waste		JAN 22, 2015
1110. Hazardous Waste Generator Tanks and the Date of Accumulation Marking	ENCORE	JAN 29, 2015
1111. Universal Waste, Satellite Accumulation and Centralized Collection Areas		FEB 4, 2015
1112. The PCB Mark and PCB Storage for Disposal Areas	ENCORE	FEB 12, 2015
1113. EPA Hazardous Waste Markings - Accumulation vs. Pre-Transport	ENCORE	FEB 19, 2015
1114. Used Oil Filter Regulation – The Feds vs. Washington State	ENCORE	FEB 26, 2015
1115. Spent Lead-Acid Batteries and Secondary Containment		MAR 5, 2015
1116. The Mixtures Rule – Washington State vs. The Feds		MAR 12, 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:** THE MIXTURES RULE – WASHINGTON STATE VS. THE FEDS

**DATE:** MARCH 12, 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 Westcott Jeff Widney	Brett Barnes Ron Brunke Bill Cox Lorna Dittmer Rick Engelmann Ted Hopkins Jim Leary Dale McKenney Jon McKibben Rick Oldham Linda Petersen Fred Ruck Jennie Seaver 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 Don Rokkan Lana Strickling Lou Upton Christina Zerby	Alan Campbell Grant McCalmant  <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 Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Judith Nielsen Mandy Pascual Kirk Peterson Jean Quigley	Mark Rollison Dan Saueressig Merrie Schilperoort Joelle Stamm Glen Triner Greg Varljen Julie Waddoups Kyle Webster Ted Wooley

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## TWO MINUTE TRAINING

**SUBJECT:** The Mixtures Rule – Washington State vs. The Feds

**Q:** What is the basic definition of “The Mixtures Rule” and are there any differences in the mixtures rule between Washington State and the Federal regulations?

**A:** The mixtures rule at Washington Administrative Code (WAC) 173-303-070(2), “Designation of dangerous waste”, and at 40 CFR 261.3(a)(iv) and (g), “Definition of hazardous waste”, basically states that a mixture of a solid waste and a listed hazardous waste remains a listed hazardous waste. The primary difference between WAC 173-303-070(2) and 40 CFR 261.3(a)/(g) is that Washington State did not adopt all the language from 40 CFR 261.3(g) concerning additional mixture scenarios. According to 40 CFR 261.3(g)(1), a listed hazardous waste listed solely for one or more characteristics of ignitability, corrosivity, or reactivity (ICR) is not a hazardous waste, if the resulting mixture of waste no longer exhibits any characteristics of hazardous waste. An example would be an F003 hazardous waste such as waste acetone which is listed solely for ignitability. If the F003 hazardous waste is mixed with a solid waste and the ignitable characteristic is removed, the mixture is not a hazardous waste. [Note that the Land Disposal Restrictions (LDR) continue to apply until the LDR treatment standards are met.] However, WAC 173-303-070(2) did not adopt the “listed solely for...” language. Therefore if an F003 listed dangerous waste is mixed with a solid waste, the resulting mixture remains a Washington State listed dangerous waste even if the resultant mixture exhibits no characteristics or Washington State criteria for dangerous waste.

### SUMMARY:

- The Mixtures Rule basically states that a listed hazardous waste mixed with solid waste remains a listed hazardous waste.
- In addition, a Federal listed waste listed solely for the characteristics of ignitability, corrosivity or reactivity is not a hazardous waste if mixed with a solid waste and the resulting mixture exhibits no characteristics of hazardous waste.
- However, Washington State did not adopt the above Federal language and therefore a mixture of a listed dangerous waste and a solid waste remains a Washington State dangerous waste, even if the resulting mixture exhibits no characteristics or state criteria for dangerous waste.

Excerpts from WAC 173-303-070(2) and 40 CFR 261.3(a) and (g) 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:** 3/12/15

**FILE:** c:\...\2MT\2015\031215.rtf

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## TWO MINUTE TRAINING - ATTACHMENT

**SUBJECT:** The Mixtures Rule – Washington State vs. The Feds

### 40 CFR 261.3 Definition of hazardous waste.

(g)

(1) A hazardous waste that is listed in subpart D of this part solely because it exhibits one or more characteristics of ignitability as defined under §261.21, corrosivity as defined under §261.22, or reactivity as defined under §261.23 is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in subpart C of this part.

*[No mixing with a solid waste has occurred. PWMartin comment]*

(2) The exclusion described in paragraph (g)(1) of this section also pertains to:

(i) Any mixture of a solid waste and a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (a)(2)(iv) of this section; and

*[Note: The highlighted wording is not in the WA dangerous waste regulations. WA generators cannot mix solid waste with listed hazardous waste solely listed for ignitability, corrosivity or reactivity and then manage as nonregulated wastes. PWMartin comment]*

(ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in subpart D of this part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under paragraph (c)(2)(i) of this section.

(3) Wastes excluded under this section are subject to part 268 of this chapter (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

### WAC 173-303-070 Designation of dangerous waste.

(2)

(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until: ...

(c)

(i) A dangerous waste that is listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits one or more characteristics of ignitability as defined under WAC 173-303-090(5), corrosivity as defined under WAC 173-303-090(6), or reactivity as defined under WAC 173-303-090(7) is not a dangerous waste, if the waste no longer exhibits any characteristic of dangerous waste identified in WAC 173-303-090 or any criteria identified in WAC 173-303-100. *[Again, no mixing with a solid waste has occurred. PWMartin comment]*

(ii) The exclusion described in (c)(i) of this subsection also pertains to:

(A) Any solid waste generated from treating, storing, or disposing of a dangerous waste listed in WAC 173-303-081(1) or 173-303-082(1) solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under (a) and (b) of this section.

(B) Wastes excluded under this section are subject to 40 CFR Part 268, which is incorporated by reference at WAC 173-303-140 (2)(a) (as applicable), even if they no longer exhibit a characteristic at the point of land disposal

FROM: Paul W. Martin

DATE: 3/12/15

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