

<u>SUBJECT</u>		<u>DATE</u>
1253. Used Oil Filter Regulation – The Feds vs. Washington State	ENCORE	NOV 16, 2017
1254. PCB Radioactive Wastes and Exception Reporting	ENCORE	NOV 21, 2017
1255. Satellite Accumulation Requirements and Container Inspections	ENCORE	NOV 30, 2017
1256. Disposing of PCB Ballasts with PCB Potting Material	ENCORE	DEC 7, 2017
1257. Fluorescent Light Ballasts and PCB Annual Reporting		DEC 14, 2017
1258. 'Twas the Night Before Christmas – The Twenty-Fifth Annual Edition		DEC 21, 2017
1259. The Purpose of Keeping Containers Closed Except When Adding or Removing Wastes	ENCORE	DEC 28, 2017
1260. Satellite Accumulation and Product Vessel Cleanouts	ENCORE	JAN 4, 2018
1261. Conservative Declaration that Material is a Hazardous Waste	ENCORE	JAN 11, 2018
1262. Defining Criteria for Household Waste Exclusion	ENCORE	JAN 18, 2018
1263. The Household Waste Exclusion and Renovation Debris	ENCORE	JAN 25, 2018
1264. The Household Waste Exclusion and Renovation Debris – Part II	ENCORE	FEB 1, 2018
1265. The Mixtures Rule – Washington State vs. The Feds	ENCORE	FEB 8, 2018
1266. Spent Lead-Acid Batteries and Secondary Containment	ENCORE	FEB 15, 2018
1267. Spent Lead-Acid Batteries and Accumulation Time Limits	ENCORE	FEB 23, 2018
1268. CERCLA Hazardous Substances – A Brief Definition	ENCORE	MAR 1, 2018
1269. Radioactively Contaminated Lead-Acid Batteries and Hazardous Debris	ENCORE	MAR 8, 2018
1270. RCRA Treatment and the Two-Part Definition	ENCORE	MAR 15, 2018
1271. Who Wants to be a Generator!!!	ENCORE	MAR 22, 2018
1272. Who Wants to be a Generator Part 2!!!	ENCORE	MAR 29, 2018
1273. "No Smoking" Signs and Tobacco-Free Facilities		APR 5, 2018
1274. Aqueous Solutions and the Characteristic of Corrosivity	ENCORE	APR 12, 2018
1275. Aqueous Solutions and the Characteristic of Ignitability	ENCORE	APR 19, 2018
1276. PCB Bulk Product Wastes and the One Year Disposal Requirement	ENCORE	APR 26, 2018
1277. PCB Radioactive Wastes and Exception Reporting	ENCORE	MAY 3, 2018
1278. TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE	MAY 10, 2018
1279. RCRA Liquids, Free Liquids, and Releasable Liquids	ENCORE	MAY 17, 2018
1280. Satellite Accumulation Areas and the Three-Day Time Limit for Excess Accumulation		MAY 24, 2018
1281. Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit	ENCORE	MAY 31, 2018
1282. Universal Waste and Basis for the One Year Accumulation Time Limit	ENCORE	JUN 7, 2018
1283. F001 Degreaser versus F002 Solvent	ENCORE	JUN 14, 2018
1284. Hazardous Waste Determinations and Phase Separation	ENCORE	JUN 20, 2018
1285. PCB Certificates of Disposal and Manifesting Between Related Facilities		JUN 28, 2018
1286. PCB Concentrations and 10,000 PPM	ENCORE	JUL 5, 2018
1287. PCB Concentrations and 1,000 PPM	ENCORE	JUL 12, 2018
1288. Satellite Accumulation Containers and the Date of Accumulation Marking		JUL 19, 2018
1289. Satellite Accumulation Requirements in Washington State	ENCORE	JUL 26, 2018
1290. Satellite Accumulation Areas and Under the Control of the Operator		AUG 2, 2018
1291. Exceptions to Free Liquids in Landfills Prohibition	ENCORE	AUG 9, 2018
1292. Ampules and the Exception to Free Liquids in Landfills Prohibition		AUG 16, 2018

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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: AMPULES AND THE EXCEPTION TO FREE LIQUIDS IN LANDFILLS PROHIBITION

DATE: AUGUST 16, 2018

<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 John Dent Lorna Dittmer Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Sasa Kosjerina Melvin Lakes Richard Lipinski Jim McGrogan Stuart Mortensen Dave Richards Phil Sheely Connie Simiele Jennie Stults Jeff Westcott Jeff Widney	Bob Bullock Bill Cox Laura Cusack Jim Leary Anthony Nagel Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Daniel Turlington Dave Watson	Brett Barnes Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzalez Jr. Dashia Huff Mark Kamberg Jon McKibben Saul Martinez Jon Perry Christina Robison Lana Strickling Lou Upton	(TBD) <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Duane Carter Cliff Clark Tony McKarns Ellen Mattlin Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Tom Gilmore Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Megan Lerchen Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Kirk Peterson	Jean Quigley Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: Ampules and the Exception to Free Liquids in Landfills Prohibition

Q: Last week's Two Minute Training (2MT) about the free liquids in landfills prohibition, stated that very small containers such as ampules were an exception to the prohibition. A customer has 40 mL glass containers with screw-on caps. Would a 40 mL container meet the definition of an ampule? Also, if an ampule has relief from the liquids in landfill prohibition, does the ampule also have relief from the land disposal restrictions (LDR)?

A: [WAC 173-303-040](#), "Definitions", defines an ampule as an airtight vial made of glass, plastic, metal, or any combination of these materials. A search of medical supply websites adds that ampules are a special type of single use vial with a sealed neck. Ampules also typically have a volume of 20 mL or less, i.e., about ½ ounce. As clarified in the [December 24, 1986, Federal Register](#) on page 46826:

"The prohibition on landfilling containerized liquid hazardous waste applies to 55-gallon drums and other similar containers, but does not apply to devices that function as containers for hazardous materials during their useful lives, such as batteries or capacitors, or to very small containers, such as ampules. These types of containers are not likely to contribute substantial volumes of liquid to most landfills, and the difficulty of opening and emptying them appears to outweigh the small benefit gained by such action."

Based on the above, a 40 mL, screw-on cap container would not meet the definition of an ampule since ampules are typically 20 mL and have sealed, airtight necks for single use applications. Screw-on caps are relatively easy to open and empty whereas a sealed neck ampule could require training and personal protective equipment such as gloves and safety glasses; hence the "difficulty of opening and emptying".

Concerning ampules of liquid hazardous waste and LDR treatment standards, the relief from the liquids in landfills prohibition does not include relief from the LDR treatment standards. A search of [40 CFR 268](#), "Land Disposal Restrictions" revealed no references to ampules or other small containers having relief from LDR.

SUMMARY:

- Containers holding free liquids must not be placed in a landfill unless all free-standing liquid is removed, mixed with a non-biodegradable sorbent, or eliminated.
- Exceptions to the free liquids prohibition include lab packs, batteries and ampules.
- Ampules are typically 20 mL or less, with sealed, airtight necks for single use.
- Ampules have relief from the liquids in landfill prohibition but have no specific relief from LDR.

Nothing is attached. 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: 8/16/18

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