

<u>SUBJECT</u>		<u>DATE</u>
1394. RCRA Empty vs. DOT Empty	ENCORE	JUL 30, 2020
1395. RCRA Empty vs. DOT Empty II	ENCORE	AUG 6, 2020
1396. Empty Containers and the "Empty" Label	ENCORE	AUG 13, 2020
1397. Exceptions to Free Liquids in Landfills Prohibition	ENCORE	AUG 20, 2020
1398. Dust Suppression in Landfills with Nonhazardous Liquids	ENCORE	AUG 27, 2020
1399. Treated Hazardous Wastes Used as Dust Suppressant	ENCORE	SEP 3, 2020
1400. Regulatory Status of Used Oil Mixed with Diesel Fuel	ENCORE	SEP 10, 2020
1401. RCRA Liquids, Free Liquids, and Releasable Liquids	ENCORE	SEP 17, 2020
1402. Available Regulatory Relief from Underlying Hazardous Constituent (UHC) Requirements	ENCORE	SEP 24, 2020
1403. Smoke Detector Disposal and the NRC	ENCORE	OCT 1, 2020
1404. DOT Shipping of Damaged, Defective, or Recalled Lithium Batteries	ENCORE	OCT 8, 2020
1405. Conservative Declaration that Material is a Hazardous Waste	ENCORE	OCT 15, 2020
1406. Manifest Exception Report Submittal Timeframes – RCRA vs. TSCA	ENCORE	OCT 22, 2020
1407. Characteristic Ignitable, Corrosive or Reactive Debris and Macroencapsulation	ENCORE	OCT 29, 2020
1408. RCRA Satellite Accumulation Areas and Applicability of Personnel Training		NOV 5, 2020
1409. The Hazardous Waste Generator Improvements Rule and Designation of Nonhazardous Waste		NOV 12, 2020
1410. RCRA Aisle Space Requirements and Washington State vs., EPA		NOV 19, 2020
1411. The Definition of Good Housekeeping	ENCORE	NOV 24, 2020
1412. Absorbent Additions and Treatment	ENCORE	DEC 3, 2020
1413. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	DEC 10, 2020
1414. LDR Notifications and F001-F005 Constituents of Concern – Again!	ENCORE	DEC 17, 2020
1415. 'Twas the Night before Christmas – The Twenty-Seventh Edition		DEC 24, 2020
1416. LDR Notifications and F001-F005 Constituents of Concern - One Last Time!	ENCORE	DEC 31, 2020
1417. RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	JAN 7, 2021
1418. Universal Waste, Incandescent Bulbs and Nonhazardous Bulbs	ENCORE	JAN 14, 2021

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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: UNIVERSAL WASTE, INCANDESCENT BULBS AND NONHAZARDOUS BULBS

DATE: JANUARY 14, 2021

<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 Stuart Hildreth Stephanie Johansen Sasa Kosjerina Richard Lipinski Stuart Mortensen Dave Richards Sean Sexton Dave Shea Phil Sheely Connie Simiele Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Danielle Collins Jennifer Copeland Jeanne Elkins Ryan Fisher Jonathan Fullmer Steve Heninger Julie Johanson Barry Lawrence Diane Leist Mitch Marrott Stewart McMahand Brian Mitcheltree Anthony Nagel Chris Plager Linda Petersen Brent Porter Dale Snyder Kat Thompson Wayne Toebe Daniel Turlington Britt Wilkins	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 Skoglie 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

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TWO MINUTE TRAINING

SUBJECT: Universal Waste, Incandescent Bulbs and Nonhazardous Bulbs

Q: According to [WAC 173-303-573](#), “Standards for universal waste management” [[40 CFR 273](#)] and the definition of “lamp” at [WAC 173-303-040](#), “Definitions” [[40 CFR 273.9](#)], examples of universal waste lamps are fluorescent, mercury vapor, metal halide, high-pressure sodium and neon. Since incandescent bulbs were not provided as an example in the definition of lamps, are incandescent bulbs eligible for management as universal wastes? And what about nonhazardous bulbs; can they be managed as universal wastes along with the hazardous waste lamp bulbs?

A: The definition at WAC 173-303-040 states that lamps “include, but are not limited to...” the lamps as described. Therefore, the regulations imply that other types of bulbs could qualify for management as universal wastes.

Confirmatory information of the universal waste status of incandescent bulbs is present in the [Response to Comments Document/Final Rule for Hazardous Waste Lamps](#), which included several comments noting that EPA did not specifically reference incandescent bulbs in the universal waste regulations. In response to those comments, EPA stated on page 4 of 19:

“The Agency is clarifying that all waste lamps exhibiting a hazardous waste characteristic for mercury or any other hazardous constituent fit the definition of hazardous waste lamps.”

Therefore, any waste lamp that exhibits any characteristic of hazardous waste meets the definition of a hazardous waste lamp and can qualify for management as a universal waste. Incandescent bulbs have a lead button as the electrical contact and could exhibit the D008 hazardous waste characteristic of lead.

Concerning nonhazardous waste lamps, EPA did not impose hazardous waste determinations on universal waste since the purpose of universal waste regulations was to encourage, as opposed to discourage, recycling. EPA hoped that the universal waste regulations were simple and basic enough to allow persons to manage universal wastes without placing too much emphasis on whether they are hazardous or not. In the [May 11, 1995, Federal Register](#) on page 25504, bottom of 2nd column, addressing a similar situation with nonhazardous batteries, EPA stated:

“...the Agency continues to believe that the universal waste regulations are simple and basic enough that it will be easier and more efficient to manage all kinds of batteries, and particularly mixed batteries [recyclable and non-recyclable], under the universal waste system rather than making individual determinations about batteries or battery types.”

Therefore, even nonhazardous lamps (or batteries, or mercury-containing equipment) can be recycled as universal waste since this could divert another wastestream from disposal in a municipal landfill. As always, the recycling vendor should be consulted to ensure that the types of universal wastes being recycled are acceptable at their facility.

SUMMARY:

- Examples of universal waste lamps include but are not limited to, fluorescent, mercury vapor, metal halide, high-pressure sodium and neon.
- The universal waste regulations do not specifically reference incandescent bulbs or nonhazardous waste bulbs.
- EPA clarified that all waste lamps exhibiting a hazardous waste characteristic meet the definition of universal waste lamps and that nonhazardous lamps also can be managed as universal wastes.

An excerpt from EPA’s Response to Comments (page 4 of 19) 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: 1/14/2021

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Universal Waste, Incandescent Bulbs and Nonhazardous Bulbs

Response to Comments Document / Final Rule for Hazardous Waste Lamps

DCN SCSP-00077

COMMENTS U.S. Department of Energy

SUBJECT UNWAS2

COMMENT

Incandescent lamps are not listed in Subpart D of 40 CFR Part 261. Examples of incandescent lamps include standard light bulbs; vehicle dome lights, headlights, and tail lights; safety exit lights; and other types of emergency lights. Typically, all incandescent lamps are constructed of lead soldered bases (95 percent lead in solder) and flare glass (20 percent lead in glass). Incandescent lamps generally fail the toxicity characteristic test for lead by the TCLP method. This determination is based on TCLP data and information received from lighting manufacturers. Incandescent lamps generally meet the proposed criteria of 40 CFR 273.2(a)(1) (i.e., that the candidate waste stream exhibits one or more of the characteristics identified in 40 CFR Part 261).

RESPONSE

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the proposed universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. The Agency is clarifying that all waste lamps exhibiting a hazardous waste characteristic for mercury or any other hazardous constituent fit the definition of hazardous waste lamps. Spent lamps that do not exhibit any hazardous waste characteristic are not subject to Subtitle C regulation or universal waste management regulations. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than Subtitle C management standards). Incandescent lamps would be considered to fall under the category of hazardous waste lamps. However, it appears most of these lamps are generated by households or conditionally exempt small quantity generators which are already exempt or excluded from RCRA Subtitle C.

FROM: Paul W. Martin

DATE: 1/14/2021

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