

<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
1419. Listed Waste Codes and Pre-RCRA Wastes	ENCORE	JAN 21, 2021
1420. Commercial Chemical Products and Unused Batteries	ENCORE	JAN 28, 2021
1421. Recycling of Non-Listed Commercial Chemical Products	ENCORE	FEB 4, 2021
1422. RCRA Personnel Training and Classroom Training vs. Online Training	ENCORE	FEB 11, 2021
1423. EPA Definition of "Annual" Refresher Training	ENCORE	FEB 18, 2021
1424. Satellite Accumulation of Aerosol Cans and Determining the 55-Gallon Limit	ENCORE	FEB 25, 2021
1425. PCB Wastes and RCRA Hazardous Waste Characteristics D018 through D043	ENCORE	MAR 4, 2021
1426. PCB Containers and Empty Requirements	ENCORE	MAR 11, 2021
1427. PCB Containers and Empty Requirements II	ENCORE	MAR 18, 2021
1428. PCB Containers and Decontamination Requirements	ENCORE	MAR 25, 2021
1429. F002, Methylene Chloride and Coffee Decaffeination	APRIL FOOL'S	APR 1, 2021
1430. Central Accumulation Area – Location and Total Number		APR 8, 2021
1431. Satellite Accumulation Area Container and Temporary Central Accumulation		APR 15, 2021
1432. Satellite Accumulation and "At or Near"	ENCORE	APR 22, 2021
1433. Generators and Waste Analysis Plans		APR 29, 2021
1434. RCRA TSDFs Operating Record Requirements	ENCORE	MAY 6, 2021
1435. Operating Records Not Referenced in the "Operating Record" Regulations	ENCORE	MAY 13, 2021
1436. RCRA Generators Operating Record Requirements		MAY 20, 2021
1437. Operating Record vs. Operating Log		MAY 27, 2021
1438. RCRA Hazard Labeling – A Random Scenario	ENCORE	JUN 3, 2021
1439. RCRA Treatment and the Two-Part Definition	ENCORE	JUN 10, 2021
1440. D002 Waste and Dilution as Adequate LDR Treatment	ENCORE	JUN 17, 2021
1441. Hazard Label Marking Requirements for Permitted TSDFs		JUN 24, 2021
1442. Keeping Satellite Accumulation Area Containers Closed – New vs., Obsolete Requirements		JUL 1, 2021
1443. Central Accumulation Areas and Signage Requirements	ENCORE	JUL 8, 2021
1444. Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	JUL 15, 2021
1445. Product Storage Tank Residues and Hazardous Waste Regulations	ENCORE	JUL 22, 2021

Approved for Public Release;
Further Dissemination Unlimited

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: CENTRAL PLATEAU CLEANUP COMPANY

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

SUBJECT: PRODUCT STORAGE TANK RESIDUES AND HAZARDOUS WASTE REGULATIONS

DATE: JULY 22, 2021

<u>CPCCo Projects</u>	<u>CPCCo Functionals</u>	<u>HMIS</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Richard Austin Tania Bates Bob Cathel Rene Catlow Richard Clinton Randal Fox Bailey Hardy Stuart Hildreth Sarah Horn Sasa Kosjerina Richard Lipinski Carlie Michaelis Stuart Mortensen Dave Richards Deborah Singleton Sean Sexton Dave Shea Phil Sheely Kat Thompson Jeff Westcott	Jeff Bramson Bob Bullock Frank Carleo Danielle Collins Jennifer Copeland Jeanne Elkins Ryan Fisher Jonathan Fullmer Leah Hare Steve Heninger John Hultman Julie Johanson Barry Lawrence Diane Leist Mitch Marrott Stewart McMahan 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 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> Duane Carter Al Farabee Tony McKarns	Bill Bachmann Dean Baker Scott Baker Paul Crane Tina Crane Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Rob Gregory James Hamilton Andy Hobbs Stephanie Johansen 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 Robin 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: Product Storage Tank Residues and Hazardous Waste Designations

Q: A customer has a toluene product tank shut down for cleaning. The cleaning contractor has estimated 80 to 100 days to complete the cleanout. How long can the residues remain in this inactive product tank before the residues in the tank become subject to hazardous/dangerous waste regulation?

A: [WAC 173-303-071\(3\)\(n\)](#) [[40 CFR 261.4\(c\)](#)] basically states that dangerous wastes generated in a product or raw material storage tank are excluded from dangerous waste regulations until the waste exits the tank in which it was generated - unless the dangerous waste remains in the product tank for more than ninety days after the tank ceases to be operated for manufacturing or storage of the product.

As further clarification, an EPA memo dated December 19, 1986, ([RO 13790](#)), states:

"...if you are able to clean out your process tank within 90 days after production or product storage is stopped, that process tank would not be considered a waste accumulation tank and, therefore, would not be subject to secondary containment standards. The waste removed, however, is subject to the hazardous waste control system if it is determined to be a hazardous waste."

Another EPA memo dated April 20, 1995, ([RO 11903](#)) states that a generator's ≤ 90 -day accumulation time limit would begin when the waste exits the tank or when the waste has remained in the tank for more than 90 days, i.e., the ≤ 90 -day clock would start on the 91st day if the waste remained in the tank.

Therefore, the customer should ensure that the residues are removed from the product tank within 90 days after tank operations cease - whether temporarily or permanently. The residues would be subject to dangerous waste regulation upon exiting the tank or, if the residues remain in the tank, 90 days after ceasing tank operations. If the dangerous waste residues remain in the tank 90 days after ceasing tank operations, the tank becomes a dangerous waste accumulation tank and subject to the generator or permit standards for dangerous waste tanks as appropriate.

SUMMARY:

- Dangerous waste generated in a product tank is not subject to regulation until exiting the tank unless the waste remains in the tank for more than 90 days.
- The ≤ 90 -day accumulation time limit for a generator begins when the waste exits the product tank or when the waste has remained in the tank for more than 90 days.
- If waste remains in the tank on the 91st day, the product tank becomes an accumulation tank subject to generator or permitted dangerous waste tank standards.

WAC 173-303-071(3)(n), the December 19, 1986, and the April 20, 1995, EPA memos are 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: 7/22/2021

FILE: 2MT\2021\072221.tif

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: Product Storage Tank Residues and Hazardous Waste Regulations

WAC 173-303-071 Excluded categories of waste.

- (1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they generally are not dangerous waste, are regulated under other state and federal programs, or are recycled in ways, which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.
- (2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter must comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.
- (3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, 173-303-145, and 173-303-960, and as otherwise specified:
 - (n) Dangerous waste generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated. This exclusion does not apply to surface impoundments, nor does it apply if the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;

40 CFR 261.4 Exclusions.

- (c) Hazardous wastes which are exempted from certain regulations.

A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under parts 262 through 265, 268, 270, 271 and 124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: Product Storage Tank Residues and Hazardous Waste Regulations

Faxback 13790

9483.1986(11)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC 19 1986

Mr. Hadley Bedbury
Senior Environmental Engineer
Diamond Shamrock Chemicals Company
1149 Ellsworth Drive
Pasadena, Texas 77501

Dear Mr. Bedbury:

Thank you for your letter of August 8, 1986, in which you raised several questions related to the final hazardous waste tank systems rules (51 FR 25422).

Your first question concerned the applicability of the secondary containment requirements to production tanks during periodic cleanouts. 40 CFR 261.4(c) states that "a hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit is not subject to" the containment regulations "until it exits the unit in which it was generated, . . ., or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials." Thus, if you are able to clean out your process tank within 90 days after production or product storage is stopped, that process tank would not be considered a waste accumulation tank and, therefore, would not be subject to secondary containment standards. The waste removed, however, is subject to the hazardous waste control system if it is determined to be a hazardous waste.

A related question concerns the applicability of the hazardous waste tank system standards to process transfer equipment normally used for production purposes, but also used to transfer hazardous waste residue to either a NPDES wastewater treatment system or an onsite RCRA treatment/storage facility. Assuming it is removed within 90 days after production or product storage is stopped, the hazardous waste generated within product/raw material process tanks does not become subject to the hazardous waste tank system standards until it exits the unit in which it was generated. The tank system standards apply to ancillary equipment used to handle the hazardous waste during transfer from its point of origin to a hazardous waste storage/treatment tank. We consider the point of exit from the process tank to be the introductory point for the hazardous waste into a hazardous waste tank system. Therefore, any process transfer equipment, even if normally used for production purposes, that is also used to transfer hazardous waste residue during equipment washout/cleanout procedures to a hazardous waste storage/treatment tank, would be considered part of a hazardous waste tank system and thus subject to the standards for such. If the hazardous waste residue is transferred to a wastewater treatment

FROM: Paul W. Martin

DATE: 7/22/2021

FILE: 2MT\2021\072221.tif

PG: 3

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: Product Storage Tank Residues and Hazardous Waste Regulations

tank that is exempted from the regulations under 264.1(g)(6), the hazardous waste tank regulations now appear to apply to the ancillary equipment. The Agency is considering whether to address this issue in the near future.

Another related question concerns hose lines that are normally used in connection with product storage but are also used as loading/unloading equipment for hazardous waste. During any hazardous waste transfer operation, EPA intends that appropriate controls and practice be provided to prevent the release of hazardous waste to ground water, surface water, or soil should a leak, spill, or other incident occur during the loading/ unloading process. Prior to returning hose lines that were used for this purpose to their normal use in product storage, good practice would be to clean the hoses so that all hazardous waste residues are removed or decontaminated.

Another question addresses the applicability of the closed loop recycling exclusion under 40 CFR 261.4 to tanks that are used in the reuse of materials. Given your description of the process, these reused materials that result from the incomplete conversion of raw materials to final products, would not be defined as solid wastes and thus would not be hazardous wastes (see 40 CFR 261.2(e)(1)(iii)). Thus, such reused material would not be regulated under RCRA Subtitle C.

Finally, you questioned what effect future interpretation or guidance manuals would have on the acceptability of a certification made by an independent professional engineer prior to the availability of such guidance materials. EPA is developing a technical guidance manual to assist both permit applicants and permit writers in more fully understanding the revised tank system regulations. A notice of the availability of this guidance manual will be published, in the near future, in the Federal Register. A certifying engineer, in making an assessment of a tank system, must take into account all the factors listed in Sections 264.191 and 265.191 (for existing tank systems) and Sections 264.192 and 265.192 (for new tank systems). If a tank system is judged by an independent, qualified, register professional engineer to be appropriate for the storage or treatment of hazardous waste, in accordance with the regulations, that certification should not be affected by guidance materials made available subsequent to the assessment.

If you need further clarification of these responses, or if you have any additional questions, please call William Kline at (202) 382-7917.

Sincerely,

Joseph E. Carra
Acting Director
Waste Management Division

FROM: Paul W. Martin

DATE: 7/22/2021

FILE: 2MT\2021\072221.tif

PG: 4

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: Product Storage Tank Residues and Hazardous Waste Regulations

FAXBACK 11903

9441.1995(15)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 20, 1995

Mr. W. J. Sweeney
Manager, Environment Department
Alyeska Pipeline
1835 South Bragaw Street
Anchorage, Alaska 99512

Dear Mr. Sweeney:

I am writing in response to your letter of December 23, 1994 and the earlier May 9, 1994 letter from Jordan E. Johnson which, on behalf of Alyeska Pipeline, request an interpretation of a regulatory exemption provided at 40 CFR 261.4(c) for tanks, vehicles, vessels, process or manufacturing units, or pipelines if these units have been shut down for ninety days. The letters also request definition of when a material comes within the listing description for K050 listed hazardous waste.

Regulations at 40 CFR 261.4(c) state: "A hazardous waste which is generated in a raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under parts 262 through 265, 268, 270, 271, and 124 of this chapter or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials."

EPA provided further clarification on this provision in the October 30, 1980 preamble to this rulemaking: "The 90-day accumulation period (262.34) starts when the hazardous waste is removed from the tank, vessel, or unit, except when in the case where a tank vessel or unit ceases to be operated for its primary purpose in which case the period starts when operation ceases." 45 FR 72024 (emphasis added.) Thus, the preamble implies that for the owner/operator the accumulation period begins the day the manufacturing process unit is shut down.

FROM: Paul W. Martin

DATE: 7/22/2021

FILE: 2MT\2021\072221.tif

PG: 5

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: Product Storage Tank Residues and Hazardous Waste Regulations

It was not the Agency's intent to regulate wastes in these units unless the waste exits the unit or remains in the unit for more than 90 days after the unit is no longer in operation. Therefore, the accumulation period for a tank, vessel, or unit that ceases to be operated for its primary purpose would begin either when the waste exits the unit, or if the waste remains in the unit for more than 90 days, the accumulation period would begin on day 91. Because the regulations delay application of Part 262 until 90 days after operation ceases, the Agency believes that the availability of the 90-day accumulation period in 262.34 is more hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or associated non-waste-treatment-manufacturing unit, may remain in the unit for up to ninety days after the unit has been shut down, and may then be stored for an additional ninety days in a tank, container, drip pad, or containment building in the compliance with the requirements of 40 CFR 262.34, without a RCRA storage permit.

Please note that under section 3006 of RCRA, individual states can be authorized to administer and enforce their own hazardous waste programs in lieu of the Federal program. In addition, section 3009 of RCRA allows states to promulgate regulatory requirements that are more stringent than the Federal program. Therefore, you should contact the appropriate state environmental agency in your state for applicable laws and regulations that may exist.

Thank you for your interest in safe and effective management of hazardous waste.

Sincerely,

Michael Shapiro, Director
Office of Solid Waste