

<u>SUBJECT</u>		<u>DATE</u>
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-aqueous Inorganic Liquids		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
1215. RCRA Empty vs. DOT Empty	ENCORE	FEB 16, 2017
1216. RCRA Empty vs. DOT Empty II	ENCORE	FEB 23, 2017
1217. Multiple Characteristic Hazardous Waste Codes and Underlying Hazardous Constituents	ENCORE	MAR 2, 2017
1218. Multiple Characteristic and Listed Hazardous Waste Codes and the "in lieu of" LDR Principle	ENCORE	MAR 9, 2017
1219. LDR Storage Prohibitions and the One-Year Rule	ENCORE	MAR 16, 2017
1220. LDR Storage Prohibitions and Treated Wastes	ENCORE	MAR 23, 2017
1221. LDR Storage Prohibitions and Treated Hazardous Debris or Contaminated Soil		MAR 30, 2017
1222. LDR Requirements for Universal Wastes		APR 6, 2017
1223. LDR Requirements for Spent Lead-Acid Batteries Being Reclaimed		APR 13, 2017
1224. When is When Defined for the RCRA Phrase "When Reclaimed"?	ENCORE	APR 20, 2017
1225. RCRA Characteristic of Ignitability and DOT Oxidizers	ENCORE	APR 27, 2017
1226. Safety Data Sheets (SDSs) and Hazardous Wastes	ENCORE	MAY 4, 2017
1227. Containers and Tanks – RCRA Wastes vs. TSCA PCB Wastes	ENCORE	MAY 11, 2017
1228. Universal Waste Lamps and Prohibition on Crushing	ENCORE	MAY 18, 2017
1229. Operating Record vs. Operating Log		MAY 25, 2017
1230. Operating Records Not Referenced in "Facility Recordkeeping"		JUN 1, 2017
1231. Used Oil and Weekly Inspections	ENCORE	JUN 8, 2017
1232. Used Oil, Secondary Containment and Response to Spills	ENCORE	JUN 15, 2017
1233. Used Oil and Keeping Containers Closed – Washington State vs. The Feds	ENCORE	JUN 21, 2017
1234. DOT Shipping of Damaged, Defective or Recalled Lithium Batteries	ENCORE	JUN 29, 2017
1235. Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 6, 2017
1236. Conditioned Exclusion for Characteristic Debris Treated via Immobilization	ENCORE	JUL 13, 2017
1237. Office Waste and RCRA Regulatory Status	ENCORE	JUL 20, 2017
1238. Office Waste Management	ENCORE	JUL 27, 2017
1239. RCRA EPA Identification Numbers – Site Specifics	ENCORE	AUG 3, 2017
1240. RCRA EPA Identification Numbers – Transporters		AUG 9, 2017
1241. Laboratory Standards and Applicability of the "U" or "P" Hazardous Waste Listings	ENCORE	AUG 17, 2017
1242. Laboratory Standards and Applicability of the "F" Listings	ENCORE	AUG 24, 2017
1243. Paint Wastes and The Applicability of the F001-F005 Listings to Ingredients	ENCORE	AUG 31, 2017
1244. F Listings and Ingredients in Commercial Chemical Product Formulations		SEP 7, 2017

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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: F LISTINGS AND INGREDIENTS IN COMMERCIAL CHEMICAL PRODUCT FORMULATIONS

DATE: SEPTEMBER 7, 2017

<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 Roni Ashley Tania Bates 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 Dean Nester Dave Richards Phil Sheely Connie Simiele Jennie Stults Jeff Westcott Jeff Widney	Ron Brunke Bob Bullock Bill Cox Laura Cusack Lorna Dittmer Ted Hopkins Sasa Kosjerina Jim Leary Rick Oldham Anthony Nagel Robert Nielson Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Daniel Turlington Dave Watson Joel Williams	Brett Barnes Jerry Cammann Jeff Ehlis Garin Erickson Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple 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 Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Lori Fritz 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 Marty Martin Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Mandy Pascual Kirk Peterson	Jean Quigley Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Kyle Webster Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

Q: In last week's Two Minute Training (2MT), we learned that the hazardous waste F listings do not apply to solvents used as ingredients in commercial chemical product (CCP) formulations such as paint. Since CCP formulations are created by the original manufacturer, does that mean if a paint is later thinned by an end-user such as a painter, it could be F listed when discarded since the original CCP formulation has been altered by someone other than the manufacturer?

A: Per an EPA guidance memorandum ([RO 14005](#)) dated December 24, 1996, it stated:

“As you have correctly pointed out, chemicals that are reactants or ingredients in the formulation of commercial chemical products are not regulated as spent solvents, and the products themselves are not covered. This policy applies even to commercially-purchased products to which solvents have been added by the end user for viscosity adjustment, even if an unused portion of the adjusted product is later discarded.” [Emphasis added.]

Note that the above guidance was to correct guidance found in a Solvents Study and a Listing Determination Background Document that **incorrectly** stated:

“It is important to note, however, that solvents added as a thinner to product paints and coatings after purchase are being used for their solvent properties and, after use, will meet any applicable spent solvent listings”.

EPA clarified in the December 24, 1996, guidance memo that:

“Such use is an example of addition of a solvent to modify a commercial chemical product and is thus, according Agency policy, not a regulated solvent use.”

Therefore, solvents can be added to CCPs such as paint, by manufacturers or end-users and the paint would not be subject to the F listings since the solvents are ingredients in a CCP formulation.

SUMMARY:

- Solvents used for their solvent properties are subject to the F listings.
- Solvents used as ingredients in CCPs such as paints, are not subject to the F listings.
- Manufacturers or end users can add solvents to CCPs as ingredients and the F listings do not apply.

The December 24, 1996 EPA guidance letter 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: 9/7/17

FILE: 2MT\2017\090717.rtf

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

RO 14005

9441.1996(13)

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

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

December 24, 1996

Mr. Norman H. Nosenchuck, Director
Division of Solid and Hazardous Materials
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7250

Dear Mr. Nosenchuck:

Thank you for your letter of November 18, 1996 in which you asked about the Agency's recent Solvents Study. Specifically, you wanted to know if solvents added to a paint or similar product are to be classified as regulated spent solvents based on what is printed in the Solvents Study.

The Agency regulates chemicals as spent solvents based on "solvent use," such as the ability to dissolve, mobilize, or solubilize constituents, or to be a reaction or synthesis medium (See 50 FR 53316, December 31, 1985). As you have correctly pointed out, chemicals that are reactants or ingredients in the formulation of commercial chemical products are not regulated as spent solvents, and the products themselves are not covered. This policy applies even to commercially-purchased products to which solvents have been added by the end user for viscosity adjustment, even if an unused portion of the adjusted product is later discarded.

The sentence on page 3 of the Solvents Study that states, "It is important to note, however, that solvents added as a thinner to product paints and coatings after purchase are being used for their solvent properties and, after use, will meet any applicable spent solvent listings" is incorrect. Such use is an example of addition of a solvent to modify a commercial chemical product and is thus, according to Agency policy, not a regulated solvent use. Please note that this erroneous sentence also appears on page 4 of the Listing Determination Background Document that accompanied the Agency's August 14, 1996 spent solvents listing determination proposal (61 FR 42318 - 42354). The Agency will make the necessary changes in the documents in response to comments and when a final listing determination is published. In the meantime, our staff has added your letter and our response to the docket for both the listing determination proposal and for the Solvents Study.

FROM: Paul W. Martin

DATE: 9/7/17

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

You should be aware that addition of a spent solvent to a product should be monitored to make sure that the generator of the waste is not doing so to escape regulation. As an authorized state, you have the authority to make that determination.

Thank you for your letter. Should there be any additional questions, please have your staff contact Ron Josephson of my staff at (703)308-8890 or josephson.ron@epamail.epa.gov.

Sincerely,

David Bussard, Director
Hazardous Waste Identification Division

RO 14005

FROM: Paul W. Martin

DATE: 9/7/17

FILE: 2MT\2017\090717.rtf

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

ATTACHMENT

New York State Department of Environmental Conservation
Division of Solid & Hazardous Materials
50 Wolf Road, Albany, New York 12233-7250
(518) 457-6934 FAX (518) 457-0629

Michael D. Zagata
Commissioner

November 18, 1996

Mr. David Bussard
Director
Hazardous Waste Identification Branch
U. S. Environmental Protection Agency
401 M-Street, S.W. (5304-W)
Washington, D.C. 20160

Dear Mr. Bussard:

We wish to thank you for recently forwarding the Study of Selected Petroleum Refining Residuals and the Solvents Study developed by EPA's Office of Solid Waste.

As a point of clarification, please note that there is one item in the Solvents Study that conflicts with prior guidance given by EPA. On the enclosed page 3 of the study, it is stated that ". . . solvents added as a thinner to product paints and coatings after purchase are being used for their solvent properties and, after use, will meet any applicable spent solvent listings." This conflicts with enclosed OSWER document number 9441.1987 (09), where Mr. Straus made no distinction between paints that have been thinned by the original supplier and those thinned by the user, and concluded that neither paint, upon being discarded, would meet the appropriate F-listed solvent classification. (Please see both the enclosed January 8, 1987 letter of inquiry and Mr. Straus' February 19, 1987 response.)

Based on this prior guidance and the enclosed December 31, 1985 Federal Register that Mr. Straus' letter appears to be based upon, we have, for a number of years, advised the regulated community that paints legitimately thinned with F-listed solvents would not become F-listed when discarded even if the end user added the thinning solvent. Because this guidance remains in the RCRA Permit Compendium as policy, we are not expecting to revise our interpretation unless you advise us otherwise. This is an issue of some

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DATE: 9/7/17

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TWO MINUTE TRAINING – ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

significance since the "thinning" or "cutting" of certain products with solvents is a fairly common practice.

Your review of this matter and its clarification would be appreciated.

Please call me at (518)457-6934 if we may be of assistance.

Sincerely,

Norman H. Nosenchuck, P.E.
Director
Division of Solid & Hazardous Materials

Enclosures

FROM: Paul W. Martin

DATE: 9/7/17

FILE: 2MT\2017\090717.rtf

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

ATTACHMENT

QSOURCE ENGINEERING, INC.
Environmental, Mechanical and Process Engineers

January 8, 1987

Mr. Matthew Strauss
Branch Chief
Waste Characterization Branch
USEPA
401 M Street Southwest
Washington, D.C. 20460

Dear Mr. Strauss:

I am writing to request clarification on the proper classification of discarded inks, paints, and adhesives that contain listed chemicals. Much of this has been discussed with our Mr. Scarberry in a telephone conversation on December 16 1986. However, it is important for us to receive a written determination in this matter.

Several of our industrial clients use inks, paints, and adhesives that contain solvents that are listed in 40 CFR 261 Subpart D. These solvents are put into the inks, paints and adhesives by the original supplier and by the user before their use. Waste inks, paints, and adhesives are a by-product of these processes. Normally, cleaning-solvents are not mixed with their waste inks, paints, and adhesives.

Until recently we have confidently classified these waste inks, paints and adhesives as D001, ignitable hazardous waste. However, with the final rule promulgation on February 25, 1986 of revisions to 40 CFR 261 (51 FR 6537), this classification may be incorrect.

The new language in 40 CFR 261.33 suggests that any "solvent mixture/blend" that contains the listed solvents are "listed" as opposed to "characteristic" hazardous waste. Since these inks, paints, and adhesives contain such solvent mixtures/blends before use, it appears that are "listed" hazardous wastes.

However, in a review of the 51 FR 6537 background discussion it appears that waste inks, paints and adhesives could be considered "manufacturing process wastes". As we understand this narrative these wastes are not classified by 261.33 even though the listed solvents are in the mixture. Therefore, the D001 classification seems to be the correct determination at this time. This determination was supported by Mr. Scarberry in our telephone conversation.

FROM: Paul W. Martin

DATE: 9/7/17

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: F Listings and Ingredients in Commercial Chemical Product Formulations

To summarize this matter I have prepared and attached some case scenarios with waste classifications. Please review them and acknowledge whether our determination on waste classifications are correct. If our determination is incorrect please explain the correct determination and why. Your written acknowledgment is very important to the manufacturing facilities that we are supporting.

If you need to discuss this matter further, please call me at 1-513-866-4211. Thank you for your assistance.

Sincerely,

QSOURCE ENGINEERING, INC.

Gregory A. Hemker
Vice President
Environmental Engineering

Attachment

WASTE DETERMINATIONS

CASE 1: Paint is purchased from a supplier to coat the parts produced by our plant. This paint contains 60% solvent by volume on an as received basis. It is further reduced in our plant for a final as applied solvent content of 80% by volume. Most of the solvents in this paint are listed in 40 CFR 261.31. Because of quality assurance programs unused paint is discarded at the end of each shift and at color changes. This waste paint is accumulated separate from other solvent wastes. The waste paint has a flash point of 100°F.

Waste Classification: D001

NOTE: If inks or adhesives with similar solvent composition are used in a similar manor, I would classify the waste the same.

CASE 2: I have the same scenario as in Case 1, but now the waste paint is intermingled with cleaning solvent and clean-up residue. The cleaning solvent is an "F" listed material. Waste Classification: FXXX (Select the appropriate code(s) for the solvent(s)).

FROM: Paul W. Martin

DATE: 9/7/17

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