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TITLE: Summary of EPA's Regulations Concerning Disposal
of Dioxin - Contaminated Wastes by Incineration
or Landfilling

APPROVAL DATE: 1-14-85

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ORIGINATING OFFICE: Office of Solid Waste

☒ **FINAL**

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STATUS:

[]	A- Pending OMB approval
[]	B- Pending AA-OSWER approval
[]	C- For review &/or comment
[]	D- In development or circulating headquarters

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Key Words: Dioxin, Landfills, Incineration

Regulations: 40 CFR Toxic Substances Control Act (TSCA) Part 775,
40 CFR RCRA Part 264 or 265

Subject: Summary of EPA's Regulations Concerning Disposal of Dioxin-
Contaminated Wastes by Incineration or Landfilling

Addressee: Dioxin Generators

Originator: Howard M. Fribush, Dioxin Disposal Advisory Group

Source Doc: #9488.02(85)

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Summary:

40 CFR Part 775 under the Toxic Substances Control Act (TSCA) requires individuals who want to dispose of dioxin-contaminated wastes to submit a disposal plan to EPA to review and approve. This regulation serves as an interim rule until a formal regulation is promulgated.*

Generally, the Agency recommends that liquid wastes be disposed by incineration. Solid wastes, such as clothing, laboratory equipment, building parts, soils and sludges may be disposed by incineration or landfilling.

Landfills accepting dioxin-contaminated wastes must comply with 40 CFR Part 264 or 265 and be limited to solid materials. Incinerators that dispose of dioxin-contaminated wastes must have a permit under TSCA to incinerate PCBs and interim status under RCRA. Incinerators must be operated under conditions that are known to destroy 99.9999 percent of the PCBs that are present in the wastes.

* The January 14, 1985 dioxin ruling stated that as of July 15, 1986, all dioxin contaminated waste must be sent to facilities certified to handle dioxin contaminated wastes.



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

9488.02 (85)

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

Ms. Violet Iadirco
2292 River Road
Niagara Falls, NY 14304

Dear Ms. Iadirco:

Your request for information concerning EPA's dioxin disposal guidelines has been forwarded to my office. Although the Agency has not assembled a set of guidelines or recommendations into a single document, we have established certain policies as well as a regulation designed to guide persons who wish to dispose of dioxin-contaminated wastes.

The regulation, which I have enclosed, is contained in 40 CFR Part 775 under the Toxic Substances Control Act (TSCA). It requires persons wishing to dispose of dioxin-contaminated wastes to notify the Agency with a disposal plan. Disposal is thus subject to our review to ensure that adequate safety precautions are taken. I have also enclosed several of our responses to notifications received under 40 CFR Part 775. The regulation, however, is only an interim rule until a formal regulation is promulgated.* A proposal to list dioxin-contaminated wastes as hazardous wastes will soon be published in the Federal Register.

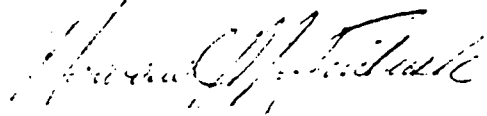
The Agency also has established several policies which outline its recommendations for the disposal of dioxin-contaminated wastes. We generally believe that liquid wastes can be most safely disposed by incineration. Solid wastes, such as clothing, laboratory equipment, building parts, soils, and sludges, may be disposed by incineration or landfilling.

Landfills accepting dioxin-contaminated wastes must comply with EPA's hazardous waste regulations (40 CFR Part 264 or 265) and be limited to solid materials. Incineration facilities that dispose of dioxin-contaminated wastes must have a permit under TSCA to incinerate PCBs and interim status under the Resource Conservation and Recovery Act (RCRA). In addition, the incinerator facilities are required to be operated under conditions that are known to destroy 99.9999 percent of the PCBs that are present in the wastes. The efficiency of incineration of dioxin is based on a chemical (i.e., PCBs) that is harder to burn than dioxin.

* The January 14, 1985 dioxin ruling stated that as of July 15, 1985, all dioxin contaminated waste must be sent to facilities certified to handle dioxin contaminated wastes.

I hope this information has been helpful to you. If I may be of any further assistance, please feel free to contact me at (202) 475-6678.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Howard M. Fribush".

Howard M. Fribush, Ph.D.
Dioxin Disposal Advisory Group

Enclosures

<u>Name & Address</u>	<u>Date</u>	<u>Waste Description</u>	<u>Disposal Site & Method</u>	<u>Action</u>
1. Airwick Industries Carlstadt, NJ	1/14/84	40 lbs hexachlorophene No reported TCDD con- centration	Incineration at any facility	Agency recommended continued storage until a disposal facility becomes permitted.
2. Amchem Products Inc. Ambler, PA	10/7/81	2,4,-D & 2,4,5-T TCDD concentration not reported	Chem Waste Mgmt. Emelle, AL Landfill	Notification submitted to OPP. Not con- sidered an adequate notice.
3. Calgon Corp. Hawthorne, NJ	10/12/83	700 lbs, 2,4,5-T (14 ppb) 7500 lbs TCP (<10 ppb)	Rollins, Envir. Services Bridgeport, NJ Incinerator	Recommended continued storage since Rollins, Bridgeport not permitted.
4. Chemical Waste Management, Inc. Oak Brook, IL	10/9/84	2,060 gal bulk liquids. (10.4 ppb)	Rollins, Deer Park TX Incinerator	Agency had no objec- tions.
5. Chevron Chemical Co. San Francisco, CA	8/25/83	230 lbs Silvex registered pesticides (0.1 ppm)	Chem Waste Mgmt. Emelle, AL Landfill	Agency had no objec- tion - materials are solid; thus, no leaching would occur.
6. Dow Chemical Midland, MI	7/9/84	687,000 lbs 2,4,5-T manufacturing and processing wastes (0.28 - 230 ppb)	Rollins, Deer Park, TX Incinerator	Agency had no objec- tions.
7. Emerg. Environmental Services, St. Louis, MO	3/12/84	clean-up debris from Minker site (≤ 2.5 ppb)	Rollins Envr. Services Baton Rouge, LA Incinerator	Agency recommended disposing at Rollins, Deer Park, TX
8. EPA Region II Edison, NJ	9/4/83	debris from clean-up at Newark, NJ site	CECOS International Niagara Falls, NY	Agency recommended plan be carried out. Region unable to dispose of materials.

SUMMARY OF NOTIFICATIONS RECEIVED PURSUANT TO
40 CFR 775 ("VERTAC RULE") AND AGENCY ACTIONS

January 14, 1985

<u>Name & Address</u>	<u>Date</u>	<u>Waste Description</u>	<u>Disposal Site & Method</u>	<u>Action</u>
9. EPA/ORD	6/13/84	lab wastes from analyses in the TROIKA (1-10ppb)	wanted advice on disposal	Advised them to follow the Vertac notification regulation.
10. EPA Region VII Kansas City, MO	3/21/84	contaminated clothing, soils, & debris from Minker site	Rollins, Baton Rouge, LA	Agency recommended only clothing be disposed at Rollins, Deer Park facility. Soils should be stored.
11. EPA Region VII Kansas City, MO	7/27/84	72 drums clothing (0.1 mg)	Rollins, Deer Park, TX Incinerator "	Agency had no objections.
12. EPA Region VII Kansas City, MO	4/27/84	wastes at two sites at Neosho, MO	Digester Site - cap wastes; provide for long-term groundwater monitoring Tank Spill Site- excavate soil; incinerate at Rollins, Deer Park, TX	Digester Site - Agency had no objections. Tank Spill Site - outlined its policy for incinerating soils.
13. EPA Region VII Agency had no objection Kansas City, MO	10/25/84	wastes at various sites in Missouri	incineration in the U.S. EPA Mobile Incinerator	Agency had no objections.
14. Ethyl Corp. Baton Rouge, LA	6/6/84	water from decontamination of equipment	filter water; send to Sauget, IL POTW	Agency recommended that filtered water be analyzed for dioxin. If dioxin is found, discharging not allowed.
15. Hydrosience Inc. Midland, MI	8/4/80	laboratory waste materials	Nuclear Engineering Corp, Sheffield, IL Landfill	Agency had no problems with disposal plan

<u>Name & Address</u>	<u>Date</u>	<u>Waste Description</u>	<u>Disposal Site & Method</u>	<u>Action</u>
16. J.M. Huber Corp. Borger, TX	9/17/84	200 lbs. soils from Times Beach, MO (100 ppb)	research tests using Huber's AER (pyrolysis device	Agency had no objec- tions.
17. IT Corp. Knoxville, TN	4/10/84	laboratory waste materials	Rollins, Deer Park, TX Incinerator	Agency had not objec- tions.
18. McLaughlin, Gormley, King Co. Minneapolis, MN	11/4/83	30 gal. Korlan 8 (a derivative of 2,4,5-TCP)	Ross Incineration, Grafton, OH	Agency recommended continued storage of material.
19. Mead Compo Chemical RTP, NC	9/24/83	laboratory wastes (<2 ppb)	Rollins, Deer Park, TX Incinerator	Agency has no objec- tion to disposal plan.
20. Midwest Research Institute Kansas City, MO	11/9/84	lab wastes (<1 ppm)	Rollins, Deer Park, TX Incinerator	Agency had no objec- tions.
21. Monsanto Industrial Chemicals Camden, NJ	4/10/82	contaminated pesticides (32 containers) (<2.5 ppb)	CECOS International Williamsburg, OH Landfill	Agency had no objec- tions to disposal plan.
22. Monsanto Agriculture Products EL Dorado, AR	9/8/83	(2) 55-gallon drums 2,4,5-TCP (<10 ppb)	Rollins, Baton Rouge, LA Incinerator	Agency recommends not to incinerate. EPA's ORD accepted waste.
23. Monsanto Polymer Products Co. Nitro, WV	8/28/84	24 drums of soil, water, clothing from drilling and purging wells. (375 ppb)	Rollins, Deer Park, TX Incinerator	Agency outlined its policy for inciner- ating soils.
24. Nalco Chemical Co. Chicago, IL	9/3/81	(17) 55-gallon drums 2,4,5-TCP - .099 ppm	Chem Waste Mgmt. Emelle, Al Landfill	Agency had no objec- tions to proposed disposal plan
25. Nalco Chemical Co. Chicago, IL	9/11/84	17 drums of old 2,4,5-T (100 ppb)	Trade Waste Incinera- tion Facility, Sauget, IL	Agency recommended permitted incinerator facilities.

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26. Neosho Wastewater Tmt. School Neosho, MO	10/25/84	wastes at various sites in Missouri	incineration in the U.S. EPA Mobile Incinerator	Agency had no object- tions.
27. N.Y. Dept. of Envir. Conservation	1/25/82	150 drums of soil borings, clothing, trash	CECOS International Niagara Falls, NY	Agency had no objec- tions to planned disposal.
28. N.Y. Dept. of Envir. Conservation	3/17/83 5/23/83	(400) 55-gallon drums waste materials from Love Canal	CECOS International Niagara Falls, NY	Agency recommended against disposal plan until analysis performed.
29. N.Y. Dept. of Envir. Conservation	6/24/83 9/27/83 10/6/83	same wastes as above TCDD range <1-50 ppb	CECOS International Niagara Falls, NY	Agency had no objec- tions to final dispo- sal plan.
30. Northwestern Univ. Chicago, IL	3/18/83	laboratory standards and wastes	Kettleman Hills Landfills, Kettleman City, CA	Not covered by TSCA rule because standards generated internally.
31. Occidental Chemical Corp. Houston, TX	11/11/82	80,000 gal. Hyde Park leachate up to 20.2 ppb TCDD	Chem Waste's Vulcanus Mobil, AL	Agency rejected the proposal under consent decree.
32. Overnight Trucking Co., St. Louis, MO	9/9/83	soils	paving	Agency had no objec- tions once approval from EPA Region VII was obtained.
33. Pueblo Chemical Supply Co. Garden City, Kansas	10/22/84	14,000 gal. washings of empty pesticide containers (0.7-7.5 ppt)	deep-well injections at Chemical Resources, Inc. Tulsa, OK	Agency rejected disposal plan. Asked for a more acceptable plan.

<u>Name & Address</u>	<u>Date</u>	<u>Waste Description</u>	<u>Disposal Site & Method</u>	<u>Action</u>
34. Rohm & Haas Delaware Valley Bristol, PA	7/25/83	(100) 55 gal. drums-- soil & decontamination material (24 ppb)	CECOS International Niagara Falls, NY or Williamsburg, OH	Agency had no objections to disposal plan. Rohm & Haas of material.
35. SCA Chemical Services Chicago, IL	9/7/82	Silvex (13.6 ppm TCDD) (-- 500 gallons)	SCA's, Chicago, IL Incinerator	Not covered by rule. SCA incinerated - 200 gallons.
36. SCA Chemical Services Sommerville, MA	4/26/83	40,000 gal. Hyde Park leachate up to 20.2 ppm	SCA's, Chicago, IL Incinerator	SCA withdrew proposal following discussion with Region V.
37. SCA Chemical Services Sommerville, MA	4/9/84	250 lbs. laboratory waste materials	SCA's, Chicago, IL Incinerator	Agency did not object to proposed plan.
38. Syntex Agribusiness Palo Alto, CA	3/81	still bottoms & cleanup Denny Farm Site	on-site destruction of still bottoms	Agency had no objections.
39. Syntex Agribusiness Springfield, MO	10/26/84	wastes at various sites in Missouri	incineration in the U.S. EPA Mobile incinerator	Agency had no objections.
40. Tenn Valley Auth. Knoxville, TN	7/18/83	1 drum 2,4,-D/2,4-5T (5700 ppb) 31 drums 2,4,5-T (1.26 ppb)	Rollins Deer Park, TX	Agency recommended continued storage. Part of ORD's FY 84 plan.
41. Thompson-Hayward Chemical Co. Kansas City, Kansas	4/18/84	soils	paving	Agency had no objections once it reviewed the remedial plan.

<u>Name & Address</u>	<u>Date</u>	<u>Waste Description</u>	<u>Disposal Site & Method</u>	<u>Action</u>
42. TH Agriculture & Nutrition Co. Kansas City, Kansas	11/16/84	10,000 cu yds. sludge sediment, soil, liner wastes from closure of their surface impoundments (<0.8 ppb)	SCA Chemical Services Landfill, Ft. Wayne, IN	Agency had no objec- tions since dioxin concentration was so low.
43. Union Carbide Co. RTP, NC	6/1/82	16 drums 2,4,5-T (0.1 ppm)	Chem Waste Mgmt. Emelle, AL Landfill	Agency had no objec- tions to disposal plan.
44. Union Carbide Agricultural Products Co. St. Joseph, MO	11/23/82	8,200 gal. water from triple rinsing containers with 2,4,5-T NOT DETECTED	St. Joseph, MO POTW	Agency granted waiver and indicated other regs may apply.
45. Union Carbide Agr. Products Co. St. Joseph, MO	7/23/83	wastes from rinsing equip. used to package 2,4,5-T	St. Joseph, MO POTW	Agency granted waiver and indicated other regs may apply.
46. Union Carbide Agr. Products Co., Inc. Research Triangle Park, NC	7/27/84	insides of buildings (up to 700 ppb) upon shipment, conc. expected to be 3 ppb.	Rollins, Deer Park, TX Incinerator	Agency had no objec- tions, but made several recommenda- tions on the disposal plan.
47. Veterans Administra- tion Albuquerque, NM	2/14/84	lab wastes	Rollins, Deer Park, TX Incinerator	Agency had no objec- tions.
48. Vetac Chemical Co. Jacksonville, AR	6/23/82	trash from cleanup -- 1 ppb	CECOS International Williamsburg, OH	Agency had no objec- tion. Vertac unable to dispose of wastes.
49. GAF Corp. Linden, NJ	9/83	2 drums 2,4,5-T -- 5 ppb TCDD	No specified method	EPA - ORD Cincinnati accepted the mate- rials.