



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

MAY 3 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: Guidance on Chlordane and Heptachlor Pesticide Wastes

FROM: Sylvia K. Lowrance, Director *Sylvia K. Lowrance*
Office of Solid Waste (WH-562B)

TO: Susan H. Wayland, Deputy Director,
Office of Pesticide Programs (TS-766C)

This is in response to your memorandum dated March 3, 1988, in which you request guidance on the regulatory status of chlordane and heptachlor pesticide waste under Subtitle C of the Resource Conservation and Recovery Act. My staff has researched the specific questions raised in your memorandum; our responses are given below.

QUESTION NO. 1: Are products containing either chlordane or heptachlor, or both chlordane and heptachlor covered by the "P" or "U" listings of 40 CFR 261.33 (e) and (f) respectively?

Commercial chemical products or manufacturing intermediates that contain any of the compounds listed in 40 CFR 261.33 (e) or 261.33 (f) are potential "P" or "U" wastes. For our purpose, commercial chemical products or manufacturing intermediates are defined as materials which contain either the pure or technical grade of the listed chemical, crude product, or a formulation in which the listed chemical is the sole active ingredient. Also included as potential "P" or "U" listed wastes are off-specification products which, if they met specification, would have the generic name included in either of these lists.

When two or more compounds listed in 261.33 are present as active ingredients in a formulation, the formulation is not a listed "P" or "U" hazardous waste when disposed of. An active ingredient is defined as a compound or mixture that performs the function of the product (e.g., has the pesticidal effect

intended for the product). Fillers, solvents, propellants, and other components with no pesticidal role are functionally inert with regard to pesticide formulations and are therefore not active ingredients. It is possible for a hazardous constituent from 261.33(e) or (f) to be a functionally inert component of a commercial chemical product, for example, a solvent carrier. In these cases, its presence does not prevent the formulation containing another "P" or "U" constituent as the sole active ingredient from being a "P" or "U" listed waste.

With regard to chlordane products that contain small amounts of heptachlor, these formulations are considered to contain only one active ingredient. It is our opinion that the small amounts of heptachlor, which are not economical to extract from chlordane during its manufacture, do not constitute a second active ingredient because heptachlor occurs as an impurity in the synthesis of chlordane and is not mixed with chlordane to formulate a new product.

Finally, in order for commercial chemical products or manufacturing intermediates to be subject to regulation as "P" or "U" hazardous wastes, they must be discarded or intended for discard as described in 40 CFR 261.2 (a)(2)(i). This requirement is satisfied when materials are "abandoned" as defined in 40 CFR 261.2(b), "when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel."

QUESTION NO. 2: Is there a critical cutoff concentration or percent active ingredient at which chlordane or heptachlor product would fall under the umbrella of the listing?

No. Under the existing regulations, there is no critical cutoff concentration or percent active ingredient at which chlordane or heptachlor product would fall under the listing. The Agency is initiating a program that will establish concentration thresholds for compounds listed at 40 CFR 261.33, below which they will no longer be the listed waste. This effort, however, will take a number of years to complete.

QUESTION NO. 3: What does "technical" mean under the chlordane listing? (Above a specified percentage of chlordane?, Manufacturing use only?)

The Office of Solid Waste uses a definition of technical grade which is in general usage by the chemical profession. Technical grade refers to all commercial grades of a chemical, which in some cases, may be marketed in various stages of purity. There are no exact criteria, such as percent purity, to define a technical grade of a substance. The technical purity of a chemical substance will vary from compound to compound and may range from highly purified to very impure.

If we can be of any further assistance, please do not hesitate to contact Jerry Coalgate at 382-7738.



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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

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MEMORANDUM

SUBJECT: Guidance on Chlordane and Heptachlor
Pesticide Wastes

FROM: Susan H. Wayland, Deputy Director
Office of Pesticide Programs (TS-766C)

TO: Jeffrey H. Denit, Acting Director
Office of Solid Waste (WH-562B)

Susan Wayland

At a meeting of State and Federal pesticide officials (as well as several Federal RCRA people) on February 9, 1988, a number of unresolved issues arose involving the proper disposal of chlordane and heptachlor.

This is particularly relevant right now because of certain restrictions on these pesticides resulting from a recent agreement between EPA and the manufacturer, Velsicol Chemical Corporation (Velsicol). This agreement, among other things, established a deadline of April 15, 1988 for the legal sale, distribution and use of all chlordane and heptachlor products registered by Velsicol. With such a prohibition, holders of Velsicol products after the deadline may want to dispose of such stocks. In addition, holders of non-Velsicol products (which are not covered by the agreement) may want to dispose of their stocks.

As indicated by the discussion at the meeting between EPA officials (including Ms. Bakst and Mr. Dellarco of OSW) and state officials, there is considerable confusion as to the meaning of the listing of chlordane and heptachlors as hazardous wastes. Currently, the RCRA "E" list includes heptachlor and the "F" list includes chlordane (technical). Chlordane is the only chemical on the list with the word "technical" following in parenthesis. Ms. Bakst volunteered to prepare a brief description of what the listing meant and whether products containing these chemicals should be disposed in accordance with hazardous waste regulations. Because of

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some confusion at the staff level in the past on this issue, we would appreciate a formal OSW interpretation. Specifically, we would like guidance on the following:

- ° Are products containing either chlordane or heptachlor, or both chlordane and heptachlor covered by these listings? (Incidentally, all chlordane products contain some amount of heptachlor whether or not it is listed on the label as a second active ingredient.)
- ° Is there a critical cut-off concentration or percent active ingredient at which a chlordane or heptachlor product would fall under the umbrella of the listing?
- ° What does "technical" mean under the chlordane listing? (Above a specified percentage of chlordane?, manufacturing use only?)

I would appreciate hearing from you soon.

5/28/73

Jeff, we very much appreciated OSW's participation in our State Meeting, and hope your office will continue to work with us on pesticide disposal issues. The meeting referenced in this memo was held by a working committee of State pesticide and solid waste and water agencies dealing specifically with Ground Water and Disposal issues. This is a standing committee which meets several times a year, and our joint participation is critical to its success.

Susan

"P" and "U" Hazardous Waste

