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OSWER Directive #9487.01-1A(85)

RESTRICTION ON THE PLACEMENT
OF NONHAZARDOUS LIQUIDS IN HAZARDOUS WASTE LANDFILLS

STATUTORY INTERPRETATIVE GUIDANCE

(April 1986)



Land Disposal Branch
Office of Solid Waste
U.S. Environmental Protection Agency

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EXECUTIVE SUMMARY*

Section 3004(c)(3) of HSWA restricts the placement of non-hazardous liquids in hazardous waste (Subtitle C) landfills. Such placement is allowed only when it will not present a risk of contamination to any underground source of drinking water, and when there is no placement alternative other than another landfill that contains or may contain hazardous waste or an unlined impoundment that contains or may contain hazardous wastes.

The rules restricting the placement of nonhazardous liquids in hazardous waste landfills became effective on November 8, 1985. The Agency is issuing this guidance to ensure that owners and operators of landfills regulated under Subtitle C of the Resource Conservation and Recovery Act understand the legal requirements of this provision (which are presented in Section 2 of this guidance) and to provide assistance to owners or operators in complying with the provision (presented in Section 3 of this guidance).

The scope of the nonhazardous liquids (NHL's) provision and the overall demonstration process are explained in a flowchart, included as Exhibit 1. Owners/operators are not subject to the prohibition when the following situations occur:

1. NHL's are absorbed and the material passes the Paint Filter Liquids Test prior to placement in the hazardous waste landfill, or
2. NHL's are used in the hazardous waste landfill to meet other regulatory or safety requirements:
 - a. dust suppression
 - b. fire fighting
 - c. watering of vegetative cover
 - d. moistening of clay cap
 - e. washing of landfill equipment
 - f. herbicide or pesticide treatment
 - g. as part of an EPA-approved corrective action program (e.g. "landfill washing" or "soil flushing")

Section 2.B provides more information about those situations that are not subject to the prohibition.

An owner or operator who wishes an exemption in order to place NHL's into his hazardous waste landfill must make the demonstrations under §3004(c)(3). Section 3.C describes what information should be submitted to EPA beyond that already provided in a complete Part B permit application.

Sections 3.B and 3.E describe procedures for processing exemption requests. The appendices provide reference material for assisting owners or operators in selecting alternative treatment methods (Appendix A), in assessing whether hazardous wastes might be associated with certain industrial processes (Appendix B), and in determining whether an aquifer might be an Underground Source of Drinking Water (Appendix C).

*This guidance is subject to change based on comments received on 40 CFR 270.21(h)(2) and the nonhazardous liquids preamble language as part of the Proposed Codification Rule (51 FR 10706). The comment period closes on May 27, 1986.

1. Introduction

Subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976 created a management system to ensure that hazardous waste is safely treated, stored, and disposed of to ensure protection of human health and the environment.

On November 8, 1984, RCRA was amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Section 3004(c)(3) of HSWA addresses the placement of nonhazardous liquids (NHL's) in hazardous waste landfills (i.e., those landfills that are regulated under Subtitle C of RCRA). Section 3004(c)(3) states:

Effective twelve months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any liquid which is not a hazardous waste in a landfill for which a permit is required under Section 3005(c) or which is operating pursuant to interim status granted under Section 3005(e) is prohibited unless the owner or operator of such landfill demonstrates to the Administrator, or the Administrator determines, that -

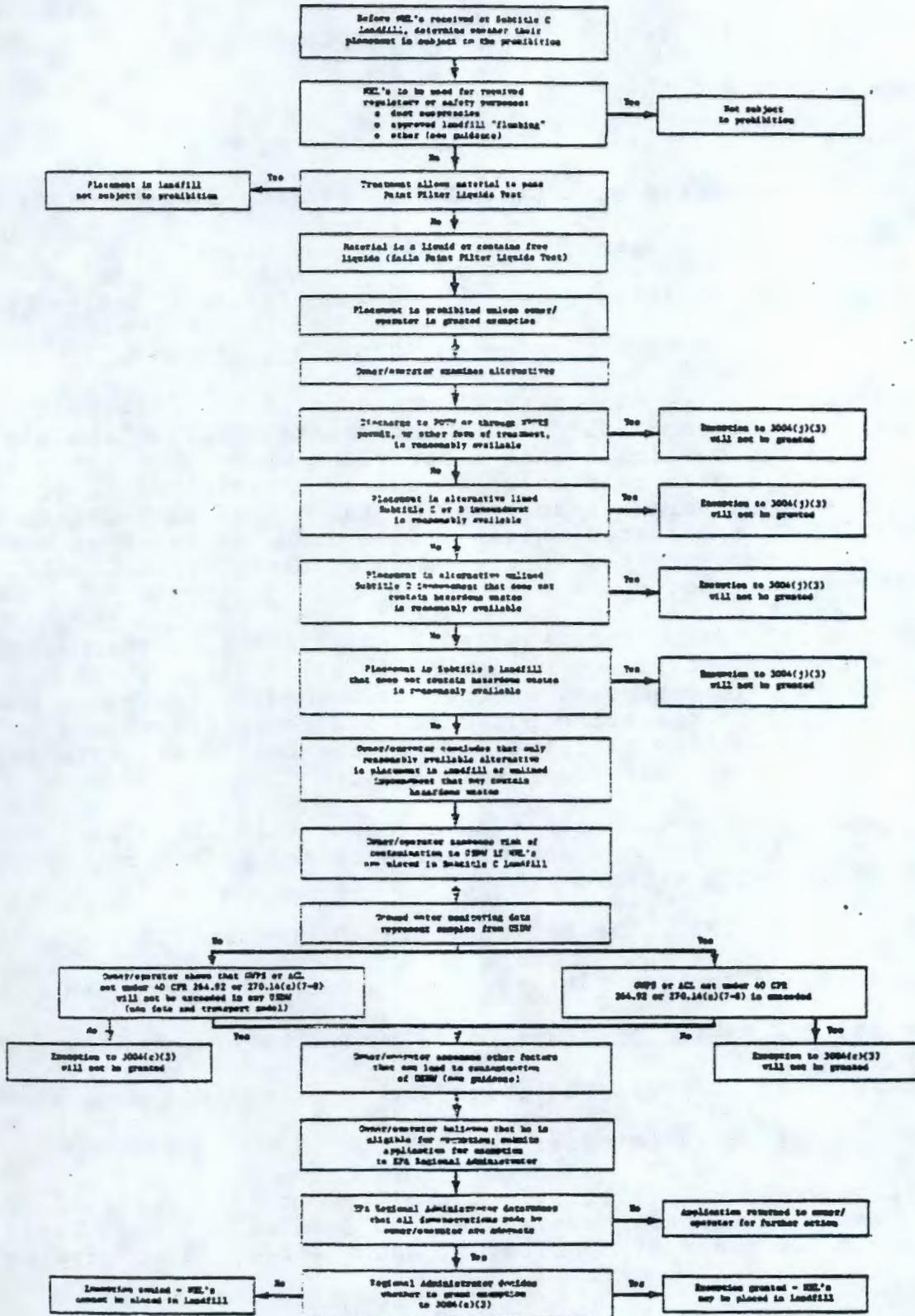
- A) the only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted under Section 3005(c) or operating pursuant to interim status under Section 3005(e), which contains, or may reasonably be anticipated to contain, hazardous wastes; and,
- B) placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water.

On July 15, 1985, the Environmental Protection Agency (EPA) published in the Federal Register, as 40 CFR 264.314(e) and 265.314(f), the Final Codification Rule which addresses this provision (50 FR 28749). The rules are identical for permitted and interim status facilities:

Effective November 8, 1985, the placement of any liquid which is not a hazardous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates

EXHIBIT 1

PROCESS TO DETERMINE WHETHER OWNER/OPERATOR SHOULD SEEK AN EXEMPTION TO THE PROHIBITION ON PLACEMENT OF NONHAZARDOUS LIQUIDS (NHL'S) IN SUBTITLE C LANDFILL*



*This flowchart summarizes the guidance, and should not be used without it.

to the Regional Administrator, or the Regional Administrator determines, that:

- (1) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and
- (2) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in section 144.3 of this chapter).

2. Statutory and Regulatory Requirements

A. Purpose

The Section 3004(c)(3) provision and related provisions that restrict the placement of bulk and containerized liquid hazardous wastes in landfills (Sections 3004(c)(1) and (2) of RCRA) are intended to reduce the placement of liquids in hazardous waste landfills and thus to reduce the probability of migration of hazardous wastes into ground water. The provisions will also reduce the quantity of leachate that must be collected and treated at these landfills.

B. What constitutes placement of nonhazardous liquids?

Congress used the word "placement" in several places in the Hazardous and Solid Waste Amendments, including the section that addresses bulk liquid hazardous wastes. The Agency's interpretation of "placement" of nonhazardous liquids is, accordingly, similar to that adopted for bulk liquid hazardous wastes (see Prohibition on the Placement of Bulk Liquid Hazardous Waste in Landfills, Statutory Interpretative Guidance - Draft, March, 1985

and Final, expected in June, 1986).

The Agency interprets the restriction on "placement" of NHL's to include, but not be limited to, the following:

1) placing nonhazardous liquids still in liquid form into any part of a landfill cell prior to solidification, and 2) placing NHL's into any part of an active landfill unit where the liquids are then solidified, whether or not subsequent transfer to another part of the active landfill unit may occur. The legislative history of a related statutory provision, Section 3004(b) (banning the placement of liquid hazardous wastes in salt domes, underground mines, or caves), supports the view that Congress intended the ban on "placement" to be construed broadly in order to prohibit the storage of material that is awaiting further treatment or disposal, and to preclude the use of such locations as treatment chambers (129 Cong. Rec. H8141, daily ed. October 6, 1983). Thus, EPA considers that the restriction on nonhazardous liquids applies regardless of the purpose of placing the liquids into a landfill, except as described below.

Uses of NHL's that are necessary to meet other regulatory or safety requirements, including EPA-approved corrective actions, are not considered to be subject to the restrictions under 3004(c)(3). The Agency believes that Congress did not intend to require owners or operators to apply for an exemption for uses of nonhazardous liquids in or near a landfill that are necessary to comply with the technical requirements of the RCRA regulations. Based on the language and legislative history of Section 3004(c)(3) and

of Section 3004(c) generally, EPA believes that Congress' primary concern in banning liquids was the control of the placement of liquids in landfills for treatment, storage, or disposal. The presence of the provision in 3004(c)(3)(A), which was intended to prevent shifting of the nonhazardous liquids to other locations, confirms that Congress intended this provision to address waste management methods. For this reason, uses such as the following should not be subject to the restrictions under 3004(c)(3): dust suppression, fire fighting, intermittent watering of vegetative cover, moistening of a clay cap to prevent cracking or offgassing, washing of landfill equipment, and herbicide or pesticide treatment to control certain organisms that could breach a cap or liner. In addition, EPA believes that the use of liquids for approved corrective action purposes (e.g., landfill washing or soil flushing to reduce hazardous waste concentrations) does not require an owner or operator to apply for an exemption under 3004(c)(3). Such uses are clearly outside the scope of the provision. It would not be appropriate to require the identification of "reasonably available alternatives" under 3004(c)(3)(A) in these cases because the liquid is being used to meet corrective action requirements at the landfill. Section 3004(c)(3)(B) also appears to be largely inapplicable, inasmuch as ground water (though not necessarily an underground source of drinking water) will already be contaminated in these cases, and EPA will already have made the determination that corrective action is necessary to remove or treat contamination.

A liquid is considered to be nonhazardous if its composition

or its physical or chemical properties would not, if it were a waste, qualify it as a hazardous waste under 40 CFR Part 261. It should be noted that an NHL need not be a "waste" for the restrictions under 3004(c)(3) to apply. When addressing bulk liquid hazardous wastes and other classes of materials, the statute refers to them as "wastes"; there is no such reference in 3004(c)(3). Therefore, EPA interprets the restriction in Section 3004(c)(3) as applying to all nonhazardous liquids, not only to liquid wastes.

To comply with the restriction, the owner or operator must determine if a nonhazardous material, whether containerized or in bulk form, is a liquid or contains free liquids. EPA regulations define "free liquids" as "liquids which readily separate from the solid portion of a waste under ambient temperature and pressure" (40 CFR 260.10). ("Liquids" and "free liquids" include liquids that separate out during transportation to the landfill.) If it is not obviously clear to the owner or operator that a nonhazardous material contains free liquids, the material must be tested. The Agency considers the Paint Filter Liquids Test (Method 9095; 50 FR 18370 (April 30, 1985)) appropriate for this purpose; this is the same test that should be used for bulk liquid hazardous waste. (The legislative history states that "the definition of liquids is the same for liquid hazardous and nonhazardous waste" (129 Cong. Rec. H8139, daily ed., October 6, 1983); thus the use of the same test as for bulk hazardous wastes is clearly appropriate.) The test defines the substance being tested as a liquid if, within