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DIPOSAL OF SORBED LIQUIDS, PARTICULARLY "BIODEGRADABLE" SORBENTS IN WASTES DESTINED FOR LANDFILLS

United States Environmental Protection Agency
Washington, D.C. 20460
Office of Solid Waste and Emergency Response

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Mr. Frederick Scheffler
Director
Absorption Corporation
1808 Eagle Harbor Lane
Bainbridge Island, Washington 98110

Dear Mr. Scheffler:

Thank you for your letter of March 7, 1993, asking for clarification of EPA's recent rule governing disposal of sorbed liquids in hazardous waste landfills. This rule, which becomes effective on May 18, 1993, was published in the Federal Register of November 18, 1992. I trust the clarification below addresses your concerns.

In the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act (RCRA), Congress required EPA, by February 8, 1986, to develop rules that (1) minimize the disposal of containerized liquid hazardous waste in landfills," (2) "minimize the presence of free liquids in containerized hazardous waste to be disposed of in landfills," and (3) "prohibit the disposal in landfills of liquids that have absorbed in materials that biodegrade or that release liquids when compressed as might occur during routine landfill operations" (Sec. 3004(c)(2)). EPA satisfied the first two of these requirements in a rule published on April 30, 1985 (50 FR 18370), which requires that hazardous waste disposed of in landfills not contain free liquids, as determined by the Paint Filter Test. EPA's November 18, 1992 rule addresses the third requirement.

Your letter particularly focuses on the 1992 rule's effect on the use of "biodegradable" sorbents in wastes destined for hazardous waste landfills. In the rule, EPA identified two

categories of sorbents as "nonbiodegradable" (i.e., those made up of primarily inorganic or elemental carbon materials and those consisting of high-molecular weight organic polymers), and promulgated two tests of biodegradability (ASTM Methods G21-70 and G22-76). In the preamble to the regulation, we also identified certain specific materials as "biodegradable," including natural organic materials like sawdust, municipal waste, and shredded paper. We took this approach because of explicit language in the RCRA legislative history identifying these materials as biodegradable and therefore "unacceptable" for use as sorbents if they are to be disposed of in hazardous waste landfills (July 25, 1984, Congressional Record -- Senate S9177), and in response to comments received on earlier proposals (51 FR 46824, December 24, 1986, and 52 FR 23695, June 24, 1987).

To respond specifically to your letter, EPA's rule on "biodegradable" sorbents does not establish a ban on the use of "organic sorbents, nor should it be interpreted as a statement by EPA on the efficacy of one or another type of sorbent material in addressing spills. Instead, the rule prohibits only the direct landfilling in hazardous waste landfills of liquids that have been sorbed with "biodegradable" sorbents. Thus, the rule does not in any way prohibit or restrict the use of sorbents (organic or otherwise) to address wastes or products going to a non-hazardous landfill). Furthermore, it does not affect the use of sorbents with hazardous waste that is not landfilled -- for example, that is burned for energy recovery, incinerated, recycled, or treated through bioremediation or land treatment. In addition, most hazardous waste today must be treated prior to placement in a landfill, and such treatment will generally remove the biodegradable components or render them unavailable to the environment or will remove the liquid. Thus, in the case of such treated wastes, the rule can be expected to have no effect. Therefore, only a small proportion of wastes would be affected by this rule (and that proportion will decrease as EPA issues more treatment standards in the future).

You are also correct in pointing out in your letter that EPA, in its rulemaking, did not conduct tests on the degradation of organic sorbents in an anaerobic landfill environment. Also, EPA did not test, and made no judgment in the rulemaking (which addresses a narrow situation) on the efficacy of different sorbents, including organic sorbents, in spill situations. Factors like absorption and retention--important considerations in the

performance of sorbents in responding to spills--lay outside the scope of the rulemaking. Instead the rule only addressed the direct landfilling of sorbed materials in hazardous waste landfills.

I hope this response adequately clarifies the intent and scope of EPA's regulations on placement of liquids in landfills. If you have any further comments, you should contact Matt Hale of my staff (703-308-8404).

Sincerely yours,
Richard J. Guimond
Assistant Surgeon General, USPHS
Acting Assistant Administrator