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

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Catherine Sharp, Assistant Director Waste Management Division Department of Environmental Quality 1000 N.E. 10th Street Oklahoma City, Oklahoma 73117-1212

Dear Ms. Sharp:

This is in response to your letter of June 18, 1997 presenting several questions regarding hazardous waste debris that arose as a result of discussions with a permitted hazardous waste facility, testimony in court, and review of the August 18, 1992 debris rule (57 <u>FR</u> 37194). We have reviewed your questions and include them with our responses below.

1. As indicated in the August 18, 1992 <u>Federal Register</u> (57 FR 37194, 37225), are broken or ruptured containers always hazardous debris when contaminated with hazardous waste, or will the origin and conditions under which the containers are ruptured affect whether the containers may be considered hazardous debris?

The Agency has stated that broken or ruptured containers that are contaminated with prohibited wastes are subject to the land disposal restrictions (LDR) treatment standards for debris. See 57 FR 37225/2 which states, "broken or ruptured containers are always debris if contaminated with prohibited waste." If the contaminating waste is removed from the containers during treatment, the waste itself is subject to the treatment standards for the waste (57 FR 37225/3). EPA intended for the debris standards to apply to cases where the debris and the waste are inseparable, since then the matrix is different from that of a process waste, and it needs treatment by special standards (57 FR 37223 n. 13). Therefore, wastes in a non-intact drum can be left in the drum and the entire matrix treated as debris only if the wastes are not readily separable from the drum. Furthermore, the mixing of hazardous waste or contaminated soil with debris to avoid LDR treatment standards is prohibited (57 FR 37243).

2. is it permissible for either a TSD facility or a hazardous waste generator to shred hazardous debt-is prior to macroencapsulation?

There is no prohibition against shredding the debris prior to

macroencapsulation. The Phase I preamble at 57 <u>FR</u> 37235 states it is the Agency's position that material with a particle size less than 60 mm is amenable to conventional treatment for process waste and small particle-sized material and that such material can be reasonably sampled for analysis to document compliance with the concentration-based treatment standards for the waste contaminating the material. Furthermore, 40 CFR 268.45, Table 1(C)(2) footnote 5 also applies to macroencapsulation, and states that if the particle size is reduced so that the material no longer meets the 60 mm minimum particle size limits for debris, then the most stringent treatment standard of any waste contaminating the material applies, unless the debris has been cleaned and separated from the contaminated soil and waste prior to size reduction.

3. If the answer to question 2 above is yes, must the shredder be permitted as a miscellaneous unit, and under what conditions may the shredding be performed i.e., must the conditions at 40 CFR 268.45, Table 1(C)(2), footnote 5 be followed?

Because shredding hazardous waste or debris meets the definition of treatment in 40 CFR 260.10, shredders handling hazardous wastes have been identified as either distinct units or ancillary devices to other units, depending on the specific circumstance. However we believe that shredders are generally controlled most appropriately when permitted as individual units, either as miscellaneous units or as tanks. Table 1(C)(2), footnote 5 must be followed, especially as it pertains to maintaining proper particle size limits.

4. If hazardous debris has been either intentionally or unintentionally mixed with hazardous waste by a TSD facility, can the resultant mixture be separated and the hazardous debris disposed using the alternative treatment standards found at 40 CFR 268.45 Table 1(C)(1) or would the entire mixture be subject to the most stringent treatment standard of any waste that is part of the mixture?

The Phase I preamble at page 57 FR 37243 states that the intentional mixing of hazardous waste or contaminated soil with debris to avoid the concentration-based treatment standard for the waste or soil is prohibited. Furthermore, on page 57 FR 37224, "such situations where debris is used merely to dilute another prohibited waste, the mixture would remain subject to the most stringent treatment standard of any waste that is part of the mixture." As a practical matter (for example, during cleanup activities) debris and non-debris material may be found in a mixture. However, containers cannot be loaded with debris and hazardous waste in percentages such as 49 percent hazardous waste and 51 percent debris to meet the classification of "primarily debris"; the containerized mixture must be representative of the mixture as found at the excavation site. The Phase I preamble at 57 FR 37243 states that if debris is intentionally mixed with contaminated soil or hazardous waste (e.g., after

excavation) and the mixture is regulated as debris by the application of the mixture principle and subsequently immobilized. prohibited sham mixing has occurred. However, once mixing has occurred, there is no prohibition against reseparating the debris from the waste and treating each according to the appropriate standards.

5. Is designation of a waste by the generator as hazardous debris on the accompanying land disposal restriction form as described at 268.7(a)(1)(iv) the only acceptable or required means of designating a particular waste as hazardous debris?

According to 40 CFR 268.7(a)(1)(iv), a generator must identify on the notification form, for hazardous debris, the contaminants subject to treatment as provided by 40 CFR 268.45(b) and the following statement: "this hazardous debris is subject to the alternative treatment standards of 40 CFR 268.45." If a generator fails to meet the requirements of 40 CFR 268.7(a)(l)(iv), the generator must submit the proper forms to the TSD facility prior to treatment or disposal by the TSD.

6. If a generator does not designate its hazardous waste as hazardous debris as described at 268.7(a)(1)(iv), is it permissible for a TSD facility to designate the hazardous waste as hazardous debris after receipt without prior approval of the generator?

Although the regulations (40 CFR 268.7) do not specifically prohibit a treater from identifying waste or debris differently from the generator's identification of that waste, they require generators and treaters to accurately characterize wastes. This does not change the prohibition on intentional mixing of waste with debris to avoid the treatment standard for the waste itself, so if the treater's characterization differed from the generator's characterization due to sham mixing, the practice would not be allowed, and the treater (as well as a generator who mixes impermissibly) may well be in violation of Resource Conservation and Recovery Act (RCRA) requirements. Therefore, the Agency certainly expects that in cases of disagreement, the treater will contact the generator to resolve the discrepancy.

7. How must a TSD's hazardous debris management practices, i.e., bulking or mixing from different sources; be described in its hazardous waste permit?

Practices such as bulking and mixing of wastes must be included in the TSD's hazardous waste permit. The Phase I preamble at 57 <u>FR</u> 37241-242 addresses permit requirements for the treatment of hazardous debris, and states that treatment is "currently subject to the applicable interim status and permit standards of 40 CFR parts 264, 265, 266 and 270 that ensure protection of human

health and the environment." Furthermore, the preamble goes on to say that debris treatment standards "do not affect those existing facility standards." Therefore, descriptions used for hazardous debris management practices would be similar to descriptions for other waste treatment activities and incorporate either the technology specific standards of 40 CFR part 264, or the environmental performance standards of part 264, subpart X. Also, please note 40 CFR part 270, subpart C which addresses permit conditions for all RCRA hazardous waste permits.

We appreciate the opportunity to respond to your questions. Because of the complexity of some of these hazardous debris issues, we welcome the opportunity to provide any further clarification on this response, and respond to any case-specific questions you may have. For questions regarding the debris rule, please contact Peggy Vyas of my staff at (703) 308-5477. Questions regarding the miscellaneous unit standards of subpart X should be directed to Jeff Gaines of my staff at (703) 308-8655.

Sincerely,

Elizabeth A. Cotsworth, Acting Director Office of Solid Waste