

9443.1985(10)

OCT 21 1985

REQUESTED CHANGE IN EP TOXICITY EXTRACTION MEDIUM

Mr. Robert B. Carroll
P.O. Box 442
Laramie, Wyoming 82070

Dear Mr. Carroll:

I am writing in response to your petition requesting a change in the extraction medium employed in the Extraction Procedure (EP) from mild acetic acid to the tetra sodium salt of diethylene triamine pentaacetic acid (DTPA). We apologize for the delay in responding to your petition, but your original letter was lost.

The EP is designed to model waste leachability under a specified mismanagement scenario. This scenario assumes disposal of the waste with municipal refuse. The Resource Conservation and Recovery Act charges EPA with identifying, as hazardous, those wastes which may pose a danger to human health if mismanaged. The codisposal scenario was chosen because we believe that it accurately represents a reasonably aggressive mismanagement scenario (i.e., it is unlikely that wastes which are not regulated as hazardous will be exposed to leaching conditions more aggressive than those modelled by this scenario). While the EP is an accurate simulation of this disposal environment, it is possible that oil shale management constitutes a more aggressive leaching situation than the codisposal scenario. How poorly the EP procedure simulates the leachability of the oil shale waste under commonly occurring oil shale mismanagement appears to be the question?

In your petition you cite the study by Esmaili, et.al., to show that the EP "does not work for retorted oil shale waste." While DTPA may, admittedly, be a more aggressive extraction medium than the mild acetic acid employed in the EP, we are not aware of any data which indicates that DTPA more closely simulate "real world" leachate generation than the EP does. The fact that DTPA is more aggressive does not, in and of itself, make it more accurate.

Since the EP does not model the specific environment en-

countered during the disposal of oil shale waste, it may fail to identify such a disposal situation as hazardous. The RCRA listing process could be used, however, to bring such management under regulatory control, if the waste can be shown to present a significant danger to human health or the environment. Site and waste specific leaching procedures can be used in making such a demonstration. If you have specific data with which we can assess the accuracy of this procedure or other candidate leaching procedures under the disposal conditions encountered during oil shale management, it might help speed up the development of such procedures. Since, in the case of petitions, the burden of proving the value of a proposed test falls on the petitioners, unless we receive additional data to support the need for the change you have requested (e.g., a comparison between actual leachate from retorted oil shale waste disposal facilities and Ep and DTPA leaching data) we will not be able to proceed any further with the petitions. You had also requested that we publish your petition in the Federal Register. It is our policy only to publish a notice of receipt of petitions and not the complete petition. We anticipate publishing such a notice in the near future. If you would like to discuss the specific information needed to proceed with this petition, please contact David Friedman, of my staff (202-382-4770).

Sincerely yours,

Original Document signed

Marcia E. Williams
Director
Office of Solid Waste

Enclosure