

JRC  
8/28/89

EHD

Subject: Comments on the Work Plan for the Mixed Waste Landfill

To: A. R. Chernoff, Director, MSD

We have reviewed the Final Draft Work Plan for an Expanded Site Assessment at the Mixed Waste Landfill, dated July 1989 and offer the following comments. Importantly, the work plan does not follow any type of accepted protocol. Since this landfill will ultimately be closed under the provision of the Resource Conservation and Recovery Act (RCRA) we suggest that Sandia follow the guidance for conducting a RCRA Facility Investigation (RFI) (interim final dated May 1989). The Expanded Site Assessment would be very deficient if the yard stick for measurement were the RCRA RFI guidance.

This review will focus on the technical details of the proposed field effort and will not compare the Expanded Site Assessment to the RCRA guidance.

page 2-1 P-1 TA-3 is located on KAFB

page 2-3 A base map drawn to scale is important and should be developed as soon as possible.

page 2-4 P-2 Several terms should be defined for the regulatory/public reader (e.g. liquid scintillation cocktails, tritium, and depleted uranium).

page 2-4 P-2 Doesn't Sandia have an inventory of the radioactive materials which were disposed of in the landfill, if so the inventory should be presented.

page 2-6 P-2 & 3 The discussion of previous studies is very weak; are we making the best use of existing data in developing this work plan; I can't tell based on the information presented here.

page 2-7 P-3 The Statement that "The Sandia Fault lies closest to TA-3 and the MWL." is ambiguous. Is the fault 100 feet or 5 miles from the MWL? A map showing the approximate surface trace of the faults would be very helpful.

page 2-7 P-3 What about the three other faults; provide a statement that the other three faults either are, or are not, relevant.

page 3-1 P-1 What is a topographical survey?

page 3-1 P-1 Will sample locations which are not a part of the sampling grid be surveyed in after the field effort; if not they should be.

page 3-2 P-3 The topographical survey should be conducted prior to the "walkover survey".

page 3-8 P-3 Will a 1.5 foot contour interval provide adequate resolution; maybe a 0.5 foot contour interval would be more appropriate.

page 3-10 P-5 The sample label should also include the name of the facility (SNLA) and possibly the name of the site.

page 3-11 Analyzing composite samples might be justifiable if this study had a limited analytical budget. However, with a 197 analytic "slots" discrete sample analysis would be better. The "true" range of values is always compromised by analysis of composite samples; thus reducing resolution.

page 3-12 P-3 The number of soil borings (18) seems excessive, although it is impossible to tell from figure 3-2 if the borings are 30 feet apart or 300 feet apart. If this site did not have such an ominous title (mixed waste landfill) I would suggest deleting 33% of the sample locations. However over sampling may be appropriate considering the potential public/state interest.

page 3-12 P-3 Based on the information provided, I disagree with the proposed sampling locations. Assuming homogenous conditions the proposed perimeter boring locations could miss a significant plume in the unsaturated zone. Heterogeneous conditions could cause lateral spreading of contaminants in the unsaturated zone which could be detected by the proposed perimeter borings; however this work plan does not make that argument. I would strongly suggest moving several of the perimeter borings in to the landfill proper.

page 3-16 P-3 The analytical program is good as far as it goes, however since the mixed waste landfill also served as Sandia's chemical waste landfill prior to 1962(?) a number of samples should also be analyzed for metals (e.g. chromium, and lead).

page 3-17 EPA SW 846 is not an analytical method, please specify specific analytical methods.

page 5-1 P-1 QA is much more than "... an overview of ...QC procedures...".

We appreciate the opportunity to review this work plan; question may be directed to Mr. John Cochran of my staff at 846-4751.

Sincerely,

Richard R. Sena  
Project Manager,

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N. R. Ortiz, SNLA 3200

*Sue,  
Who owns the land  
the MWL is on?  
JRC*