14 July 2003

Mr. Steve Zappe
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive, Building E
Santa Fe, NM 87505

Re: WIPP Hazardous Waste Act permit; proposed modification concerning packaging-specific drum age criteria for newly approved waste containers

Dear Mr. Zappe:

This letter submits comments by the Water, Environment, and Utilities Division of the New Mexico Attorney General’s Office concerning a proposed modification to the Hazardous Waste Act permit for the Waste Isolation Pilot Plant (WIPP). The proposed modification concerns packaging-specific drum age criteria (DAC) for newly approved waste containers. DOE has designated the modification for review under Class 2 procedures.

The previous modification concerning DAC was considered pursuant to Class 3 procedures. DOE asserts that this modification simply involves application of the previously approved modeling approach to containers of different sizes and can be handled pursuant to Class 2. However, the present application leaves it unclear how various factual predicates for DAC will be enforced or determined. If DOE cannot
readily show the grounds for the various assumptions made in modeling, this matter should be heard under Class 3 procedures.

Additional comments on the current proposal are as follows:

1. The new container types for which DAC are proposed, unlike 55-gallon drums, have not historically been used to store DOE legacy waste. Thus, these containers presumably will contain newly generated waste, or repackaged waste that is to be managed as newly generated waste. Therefore, the list of packaging configurations appearing in Tables B1-8 and B1-9 functions not as a list of categories into which a filled and closed drum is to be fitted but as a set of packing options, addressed to persons assigned to package newly generated waste. In other words, the current modification does not seem to present difficult issues of determining packaging configuration. So much should be stated by NMED ruling on the modification, and the new DAC should be limited to newly generated waste.

2. It is stated that the DAC for 85-gallon drums, 100-gallon drums, and ten drum overpacks (TDOPs) have been developed using the same methodology as was used in developing DAC for 55-gallon drums, which were adopted by order dated December 31, 2002. However, Attachment C outlines various assumptions made in deriving DAC values, and such assumptions require examination. For example, assumptions as to the presence, number, and diffusivity of filters in the newly added containers should be supported by reference to design drawings and filter specifications. Other assumptions as to 85-gallon, 100-gallon, and TDOP containers (See Att. C at 1.) call for
different factual support. On what basis does DOE assume that the inner bags and liner bags used in packaging a TDOP will be the same as used in a Standard Waste Box (at 1)? Why does DOE assume that compacted 55-gallon drums with rigid liners placed inside a 100-gallon drum will have met the appropriate 55-gallon DAC value before compacting (at 2)? Why does DOE assume that TDOP packaging configuration parameter values will be the same as for a SWB (at A-5)? What is the basis for assuming that headspace void volumes of 85- and 100-gallon drums are 20% of the volume outside of packaging (at A-5)? As for the filter in the inner lid of 85-gallon or 100-gallon drum, DOE should establish the bases for assuming the range of diffusivity values stated (Att. C, at 3, Table 1). Further, it should be shown how (or whether) the diffusivity value of the inner lid filter is to be identified after the drum is closed.

3. There is an ambiguity in proposed Table B1-8. The footnote says that in event of inability to determine packaging configuration group, a 55-, 85-, or 100-gallon drum will be assigned by default to Group 3. However, Group 3 is captioned as applicable only to 55-gallon drums.

4. Scenario 3 packaging configuration groups are defined with reference to layers of confinement. (See Table B1-8). However, it is not clear from the proposal how the term “layer of confinement” will be applied with respect to waste drums that have been treated by compacting.

5. In the proposal, 85-gallon drums and 100-gallon drums come exclusively within packaging configuration group 7, a group that allows no inner bags or
liner bags. It appears to be assumed that such drums will not contain such bags. It should be clarified whether this means that no bags of any size will be placed within such containers, or, on the contrary, such bags are not counted as confinement layers if they do not enclose substantially all the waste contents. The definitions at the end of Table B1-8 should state that “Inner Bags” include any layer of confinement of some or all of the waste in the container.

1. The model sets the release rate of the outer layer of confinement to the diffusivity of the inner liner filter (at A-6). Further explanation of the justification for such approach should be provided.

The proposal is complex and raises several questions as to the use of the BWXT 2000 model with reference to other containers and container configurations. If the proposal is to be granted without further proceedings, the above questions should be answered, and the use of DAC for new containers should be limited to newly packaged (or repackaged) waste.

Very truly yours,

LINDSAY A. LOVEJOY, JR.
Assistant Attorney General

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