9 February 2001

Mr. Steve Zappe
New Mexico Environment Department
Hazardous and Radioactive Materials Bureau
2044A Galisteo Street
Santa Fe, NM 87505

Dear Mr. Zappe:

The following comments are submitted by the New Mexico Attorney General’s Office in response to the notice issued by the permittee U.S. Department of Energy ("DOE") concerning a proposed Class 2 modification to the Hazardous Waste Act permit issued by the New Mexico Environment Department ("NMED") for the Waste Isolation Pilot Plant ("WIPP"). The proposed modification would change the drum age criteria ("DAC") used in determining whether a waste drum or other container has reached or sufficiently approached a state of equilibrium so that headspace gas may be sampled as part of waste characterization. Amendments are proposed to be made to Permit Attachment B1, including several new tables specifying DAC for a variety of packaging configurations.

This office does not oppose all changes in Drum Age Criteria (DAC). However, the proposed modification now presented is incomplete and could not be granted without significant changes. If changes are made in DAC as proposed, then there must also be changes in other parts of the permit to require:
(a) that DOE's waste characterization processes incorporate the factors (packaging, liner bags, sealed containers, etc.) that determine what DAC to apply to a given container, and

(b) that DOE's waste characterization audits establish that DOE's processes are effective to identify the relevant characteristics.

Thus, the proposal is incomplete and these items need to be added. Further, the changes can only be adopted after NMED determines that DOE can effectively implement them.

Once these additional questions are added to the proposed changes, it is evident that it is more complex than originally appeared and that Class 3 procedures are necessary.

Under the applicable rule, 20.4.1.900 NMAC, incorporating 40 CFR § 270.42, NMED must, alternatively:

(A) Approve the modification request, with or without changes, and modify the permit accordingly;
(B) Deny the request;
(C) Determine that the modification request must follow the procedures in § 270.42(c) for Class 3 modifications for the following reasons:
   (I) There is significant public concern about the proposed modification; or
   (2) The complex nature of the change requires the more extensive procedures of Class 3.
(D) Approve the request, with or without changes, as a temporary authorization having a term of up to 180 days, or
(E) Notify the permittee that he or she will decide on the request within the next 30 days. § 270.42(b)(6)(i).

On December 22, 2000, NMED denied DOE's request for temporary authorization to make the requested changes. In this situation, this office submits that the proposal should be denied as incomplete. If the proposal is to be considered by NMED, it should be treated as a Class 3 modification, not a Class 2 modification. Thus, NMED
should determine, under § 270.42(b)(6)(i)(C), that the proposal must follow Class 3 procedures.

1. NMED should deny the proposed modification.

The application at present is incomplete and should be denied. A Class 2 modification proposal must include supporting documents that “explain why the modification is needed, and provide the applicable information required by § 270.13 through 270.21, 270.62, and 270.63.” (53 Fed. Reg. at 37915-16)(See also 40 CFR § 270.42(b)(iv)). Section 270.14 prescribes the contents of a Part B application.

The proposed modified standards for headspace gas sampling require changes in several parts of the permit that are not contained in DOE’s proposal. The modification, if adopted, would require DOE to identify in detail the nature of the packaging contained within the drum or other container in order to determine the appropriate DAC. However, the permit at present contains no requirement that DOE make such determinations nor have the ability to do so nor institute safeguards to ensure that such determinations are properly made. For example, Table 3 in the modification requires identification of the liner lid opening diameter and the filter diffusivity. Table 4, as to drums, requires detailed information about the number of inner bags and liner bags. As to pipe components it requires detailed information about the number of bags or filtered metal cans contained therein. As to SWBs it requires specific information about the number of inner bags and liner bags. The present permit contains no requirement that DOE have the capability to characterize all relevant factors at all affected sites. Neither is there a requirement that audit procedures ascertain whether the characterization procedures have such a capability. Neither has DOE shown that such requirements can successfully be
complied with. The extent of the questions in issue shows that full public processes are required.

Thus, the application is incomplete and deficient. At least the following items would need to be changed:

1. Waste analysis plan (Permit Att. B): Provision must be made for the identification of the relevant container characteristics. If the data to be relied upon consist of acceptable knowledge, section B-3b should be modified to so state.

2. Quality assurance objectives and data validation techniques for waste characterization sampling and analytical methods (Permit Att. B3): Section B3-2 should be modified to include quality assurance objectives as to relevant items such as date of venting, number of inner bags, number of liner bags, filter type, and so forth.

3. TRU mixed waste characterization using acceptable knowledge (Permit Att. B4): Section B4-2b should be expanded to call for waste process information to include the data required to establish the appropriate DAC for each drum or other container.

4. WIPP Permittees’ Audit and Surveillance Program (Permit Att. B6): Table B6-4, headspace gas checklist, should be amended to specify the DAC as called for in a modified permit. Further, it should elaborate to require recording, as to each container, of the data required to establish the appropriate drum age criterion.
Since the proposal is currently incomplete for failure to include these items, the proposal should be denied so that DOE may, if it wishes, submit a proposal in proper form.

2. Alternatively, NMED should direct that the proposed modifications shall be considered under the rules for Class 3 modifications

The applicable rule, 20.4.1.900 NMAC, incorporating 40 CFR § 270.42, adopts EPA’s RCRA permit modification rule, which creates three categories—Class 1, Class 2, and Class 3—for permit modifications. EPA’s explanatory preamble (53 Fed. Reg. 37912)(Sept. 28, 1988) points out as follows:

First, “Class 1 and 2 permittee-requested modifications do not substantially alter existing permit conditions or significantly affect the overall operation of the facility.” 53 Fed. Reg. at 37913. Class 2 modifications address “common or frequently occurring changes needed to maintain a facility’s capability to manage wastes safely or to conform with new regulatory requirements.” (id.). EPA specifically emphasized the limited scope of such modifications:

“Class 2 modifications cover changes that are necessary to enable a permittee to respond, in a timely manner, to (i) common variations in the types and quantities of the wastes managed under the facility permit, (ii) technological advancements, and (iii) regulatory changes, where such changes can be implemented without substantially altering the design specifications or management practices prescribed by the permit.” (53 Fed. Reg. at 37915)

Class 2 modifications include “authorizations to treat or store new wastes that do not require different unit design or management practices, and modifications to improve the design of hazardous waste management units or improve management practices.” (id.).

The major changes proposed here are clearly outside the proper scope of Class 2 modifications. Here, DOE proposes to introduce new rules for waste characterization phases and new management practices. Thus, when the permittee wishes to make “major
changes that substantially alter the facility or its operations,” Class 3 procedures are required. (id. 37913). Class 3 procedures essentially call for a public hearing as would occur on the issuance of a new permit. Class 3 treatment is required for “substantial changes to facility operating conditions or waste management practices.” (id. 37919).

These principles make clear that the proposal is not a Class 2 modification. The proposal incorporates entirely new processes and systems of waste management. If adopted, it would:

1. Call upon DOE to identify drums or other containers according to whether they were initially vented or were vented at a later time and in each instance the date of venting;

2. Call upon DOE to identify drums or other containers according to whether they contain one or more inner layers of confinement and if so how many (up to six);

3. Call upon DOE to identify the packaging configuration of standard waste boxes (SWBs) and pipe components according as they contain one or more inner bags or liners or metal cans;

4. Calculate steady-state headspace concentrations based, in many cases, on multipliers that project the concentrations of gases at a later time.

These proposals would replace the simple and conservative DAC contained in the existing permit, calling for 142 days for debris waste and 225 days for homogeneous solids and soil/gravel. See Permit Att. B1 at B1-1. Plainly, the proposed modifications, for the most part, reduce the level of conservatism of the original permit, add to the
complexity of the headspace determinations, and introduce several changes in waste management.

Moreover, adoption of the proposed DAC would call for changes in numerous other sections of the permit, as pointed out above. Further, the question of DOE’s capability to comply with the revised terms must also be explored. The complexity of the proposal, seen in its entirety, calls for a full public hearing. Before ruling on the proposal, NMED needs to know DOE’s overall plan to effectuate all of the proposed, and necessarily implied, changes. To conduct such an inquiry, NMED needs to follow the processes applicable to a Class 3 permit modification. NMED must classify a modification in Class 3 if there is significant public concern or by reason of the “complex nature of the change.” 40 CFR §270.42(b)(6)(i)(C). In this instance, both tests are met.

Very truly yours,

C. MICHAEL BRYCE
Environmental Enforcement Division
Director

[Signature]

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