



## Attorney General of New Mexico



ENTER

**PATRICIA A. MADRID**  
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Deputy Attorney General

3 October 2002

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 to add new waste code U134

Dear Mr. Zappc:

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, entitled Add Additional Waste Number, would add an additional hazardous waste designation to the permit. The Department (NMED) has classified the modification as a Class 2 proposal.

The code U134 designates unused or off-specification hydrofluoric acid, here applicable to unused sampling material from Idaho National Engineering and Environmental laboratory (INEEL). Permittees state that INEEL personnel "neutralized and complexed the HF with excess aluminum nitrate to form a non-corrosive aluminum fluoride complex in a nitric acid matrix ..." (A-13). Permittees state that the concentration of HF is below detectable limits and the toxicity and corrosivity





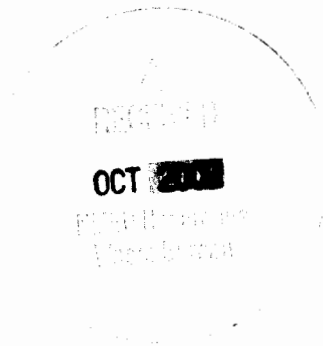
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Re: WIPP Hazardous Waste Act permit; proposed modification to add new waste code U134

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, entitled Add Additional Waste Number, would add an additional hazardous waste designation to the permit. The Department (NMED) has classified the modification as a Class 2 proposal.

The code U134 designates unused or off-specification hydrofluoric acid, here applicable to unused sampling material from Idaho National Engineering and Environmental laboratory (INEEL). Permittees state that INEEL personnel "neutralized and complexed the HF with excess aluminum nitrate to form a non-corrosive aluminum fluoride complex in a nitric acid matrix ..." (A-13). Permittees state that the concentration of HF is below detectable limits and the toxicity and corrosivity

characteristics do not apply. (id.). They assert that INEEL will demonstrate as to future waste shipments that the corrosivity tests of 40 CFR § 261.22 are not met because liquids are not present. Permittees state that, since all waste containers are examined by radiography or visual examination to determine “the absence of liquid waste,” no corrosive wastes will enter the facility. (A-14).

However, the WIPP Waste Acceptance Criteria (WIPP-WAC) allow the disposal of waste containing up to 1-% free liquids. (WIPP-WAC Rev. 0.1, July 25, 2002, at 3-12). Permittees’ proposal would add a provision to Attachment B3, section B3-12b(1), listing elements of the Characterization Information Summary, stating that any waste assigned the waste code U134 is not corrosive because *no* liquid is present. It should be noted that some wastes at INEEL certified as containing less than 1-% free liquids have been found to contain significant amounts of water in excess of 1-%. See Statement on behalf of Environmental Evaluation Group by Matthew K. Silva, before the Hazardous and Radioactive Materials Committee of the New Mexico Legislature, at 13-14, Sept. 10, 2002.

We submit that Permittees should demonstrate how it would be determined that no liquids are present in the INEEL wastes. If a satisfactory showing of such capability were made, the modification would not be objectionable.

Very truly yours,



LINDSAY A. LOVEJOY, JR.  
Assistant Attorney General

LALJr:laljr



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3 October 2002

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 Add Waste Containers modification

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, entitled Add Waste Containers, would allow the receipt and disposal of transuranic waste in new containers, specifically: direct-loaded 85-gallon drums, direct-loaded ten-drum overpacks, and 100-gallon drums. The Department (NMED) has classified the modification as a Class 2 proposal.

We submit that this proposed modification is deficient and should be denied. At minimum, it is not appropriate for Class 2 consideration, because it proposes a significant change in existing requirements.

NMED recently held a hearing concerning modification to the Drum Age Criteria (DAC) used in sampling headspace gas in waste containers. It then became apparent that

the DAC contained in the existing permit, and even in the permit as proposed to be modified to incorporate new DAC, apply only to 55-gallon drums and Standard Waste Boxes (SWBs). Thus, there are not and would not be, even under the proposed modified DAC, any DAC for other containers such as those now proposed. The current proposed modification to add waste containers, therefore, does not contain DAC calculated for such containers. Since sampling of headspace gas would still be required for transuranic waste containers (Att. B at B-3a(1), p. B-10), the permit as modified would omit a critical element. The proposal should, therefore, be denied.

The proposal contains a provision stating that, in event of a breach of a ten-drum overpack (TDOP) waste container resulting in more than “spot” contamination, the TDOP “will be decontaminated and repaired/patched or transferred to a container in good condition.” (A-8). Such a provision is objectionable. There is no description of how the breached container would be repaired or transferred to another container. The proposal also does not state what container could receive a faulty TDOP, and no authorized container is known to us.

The proposal states elsewhere that if a waste container is not in good condition, Permittees will overpack it, “repair/patch the container, or transfer the contents to a container in good condition.” (A-21, A-23, A-24). This proposed language is not limited to the TDOP. Such language is objectionable, because there is no description of the safety measures (glove box, shielding, etc.) which must accompany any such repackaging, and no facilities now exist at WIPP for such a use.

For the reasons stated herein, we request NMED to deny the proposed modification entitled Add Waste Containers.

Very truly yours,

A handwritten signature in black ink that reads "Lindsay A. Lovejoy, Jr." in a cursive script.

LINDSAY A. LOVEJOY, JR.  
Assistant Attorney General

LALJr:laljr



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3 October 2002

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

Re: WIPP Hazardous Waste Act permit; proposed modification allowing use of  
radiography for newly generated waste

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, entitled Use of Radiography for Newly Generated Waste, would allow generator sites to characterize newly generated waste based upon examination by one qualified individual, plus verification through the use of radiography, rather than a second individual, as now required. The Department (NMED) has classified the modification as a Class 2 proposal.

The Permittees have stated (A-103) that some generator sites find it inefficient to adhere to the current permit requirements, which stipulate that newly generated waste is to be characterized and the initial characterization confirmed by a separate individual, both performing visual examination before the package is closed. Before modifying the

permit, NMED should receive a presentation concerning the practical difficulties presented by current practice.

Also, there is some ambiguity as to the nature of the radiography to be adopted as an optional substitute. The proposed modification to section B-3(d)(1) directs sites to conduct “radiography as specified in Attachment B1-3 for retrievably stored waste.” (A-105). Attachment B1-3 describes a detailed examination by radiography of the contents of a waste package, including the determination of waste material parameter weights, an inventory of waste items, residual materials, and packaging materials. (See section B1-3a). Section B1-3b(3), a parallel provision in the current permit, describes a VE process that generates detailed information: “Visual examination shall be conducted to describe all contents of a waste container, and includes estimated or measured weights of the contents. The description shall clearly identify all discernible waste items, residual materials, packaging materials, or waste material parameters.”

However, the permit (currently and as proposed to be modified) states that, when VE is used to verify characterization of newly generated waste, the process is much simpler: Such VE “is different than the VE process described in Attachment B1-3b(3) and consists of the operator confirming that the waste is assigned to a waste stream that has the correct Summary Category Group for the waste being packaged.” In addition, the VE process for newly generated waste also functions to identify any prohibited items. (See section B-3d).

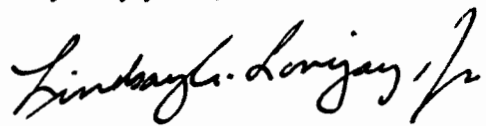
Thus, is it Permittees’ intent to introduce radiography as an option in the characterization of newly generated waste, but to require much more detailed



characterization when radiography is used, compared with VE? If such is the intent, will there be a significant gain in efficiency?

We submit that Permittees should clarify exactly what process of radiographic examination is contemplated and should demonstrate how efficiency is enhanced by the proposed modification, before NMED can make any determination of the appropriateness of the proposed modification.

Very truly yours,

A handwritten signature in black ink, reading "Lindsay A. Lovejoy, Jr." in a cursive script.

LINDSAY A. LOVEJOY, JR.  
Assistant Attorney General

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

Re: WIPP Hazardous Waste Act permit; proposed data management modification

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 would establish new data management procedures for data concerning waste characterization and management. The proposed modification is voluminous and affects numerous parts of the permit. Thus, it is appropriately designated for review pursuant to Class 3 procedures. Our comments are as follows:

The proposed revision to Attachment B would include a section on audit requirements. There should be an addition of a provision requiring that annual audits be completed and a report approved within a specified number of days or the site's certification lapses. (See B-5).

The proposed revision to Attachment B would now include a discussion of the WIPP Waste Information System (WWIS)(Section B-6b). There should be reference here to public access to the WWIS data available to NMED.

Proposed changes to Attachment B3 place emphasis on the role of the Independent Technical Reviewer. (See A-21, B3-33). Under the existing permit the review of data generation functions as follows:

First, data are generated and recorded in Batch Data Reports. (B3-10). An Independent Technical Reviewer certifies, in substance, that:

- (a) data generation and reduction were conducted in a technically correct manner,
- (b) calculations have been verified,
- (c) data have been reviewed for transcription errors,
- (d) testing, sampling, and analytical QA documentation is complete,
- (e) QC sample results are within control limits or are qualified,
- (f) reporting flags are assigned,
- (g) sample holding times were met,
- (h) radiography tapes have been reviewed at least once per testing batch,
- (i) field sampling records are complete.

Following this Independent Technical Review, the Technical Supervisor determines that the independent review was correctly conducted and verifies that:

- (a) the results are technically reasonable based on the technique used,
- (b) data received Independent Technical Review,
- (c) testing, sampling, or analytical Quality Assurance (QA) documentation is complete,
- (d) sample holding time requirements were met,

- (e) field sampling records are complete.

Thereafter, review by a QA Officer is held. The QA Officer determines that:

- (a) Independent Technical Review and Technical Supervisor reviews were conducted,
- (b) QA documentation is complete,
- (c) sampling and analytical Quality Control (QC) checks were performed,
- (d) Quality Assurance Objectives (QAOs) have been met.

Following such review, the Site Project QA Officer reviews the data to ensure that:

- (a) Batch Data Reports are complete and properly reported,
- (b) sampling batch QC checks were properly performed,
- (c) testing batch QC checks were properly performed,
- (d) analytical batch QC checks were properly performed and meet QAOs,
- (e) on-line batch QC checks were performed and meet QAOs,
- (f) proper procedures were followed to ensure representative samples.

Thereafter, the Site Project Manager reviews Batch Data Reports to determine that:

- (a) data generation level Independent Technical, Technical Supervisory, and QA Officer review were performed and documented,
- (b) review checklists are complete,
- (c) Batch Data Reports are complete and data properly reported,
- (d) data are within established data assessment criteria and meet QAOs.

Finally, at the Permittee level, the Permittees must determine that the Batch Data Reports include:

- (a) project level signature releases,
- (b) waste container listing,

- (c) listing of all testing, etc., batch numbers,
- (d) analytical batch data report case narratives,
- (e) Site Project QA Officer summary,
- (f) data validation Summary,
- (g) complete summarized qualitative and quantitative data for all waste containers.

The proposal would introduce the following system, which places emphasis on Independent Technical Review and authorizes several subsequent stages of review to be carried out electronically. Following data generation, Independent Technical Review is performed by a qualified individual who reviews the work done by the original data generator(s). The reviewer determines that:

- (a) data generation and reduction were conducted in a technically correct manner,
- (b) calculations were verified,
- (c) data were reviewed for transcription errors,
- (d) testing, sampling, and analytical data QA documentation is complete,
- (e) QC sample results are within control limits,
- (f) reporting flags have been assigned,
- (g) sample holding time requirements were met,
- (h) radiography tapes have been reviewed as required,
- (i) field sampling records are complete,
- (j) deviations are documented,
- (k) data are technically reasonable based on the technique used,
- (l) proper procedures were followed to ensure representative samples.

The review by the Independent Technical Reviewer is, in turn, subject to Technical Supervisor Review. (See B3-34). Such review determines that:

- (a) data are technically reasonable based on the technique used,
- (b) data received Independent Technical Review, except radiography tapes, which receive periodic technical review,
- (c) testing, sampling, and analytical data QA documentation is complete,
- (d) sample holding time requirements were met,
- (e) field sampling records are complete.

The Technical Supervisor Review may be conducted by an automated electronic system. (See B3-35).

The next level of review is by the QA Officer. (See B3-35). The QA Officer determines that:

- (a) Independent Technical Review has been performed,
- (b) Technical Supervisor review has been performed,
- (c) QA documentation is complete,
- (d) sampling and analytical QC checks have been properly performed,
- (e) QAOs have been met.

This review as well may be conducted by an automated electronic system. (B3-36).

Thereafter, a review is conducted by a Site Project QA Officer (See B3-38). The Site Project QA Officer must determine that:

- (a) Batch Data Reports are complete and data properly reported,
- (b) sampling batch QC checks were properly performed,
- (c) testing batch QC checks were properly performed,
- (d) analytical batch QC checks were properly performed,

- (e) on-line batch QC checks were properly performed,
- (f) Independent Technical Reviewer verified that proper procedures were followed to ensure representative samples.

Again, the Site Project QA Officer review may be conducted by an automated electronic system. (id.).

The last site-level review is by the Site Project Manager, and this review determines that:

- (a) data generation level Technical Supervisor, Independent Technical, and QA Officer review were performed,
- (b) data are within established data assessment criteria and meet all applicable QAOs.

See B3-39. Again, this review may be done by an “automated electronic system.” (id.).

The optional electronic data evaluation system is described in new section B3-13 (at B3-51). It should be noted that, although a process is established for initial certification of electronic data systems, no process of ongoing verification is referred to.

Thus, the existing system of human review and verification is to be replaced with an (optional) automated electronic system. Such a change may have benefits in reducing errors, but it may also have detriments, in that the repeated reviews are now to be conducted invisibly and electronically, and an error not caught in one review may have little chance of being caught by another review.

We submit that Permittees have the burden of showing exactly how the new electronic system will function and how it will achieve results at least as reliable and consistent as the existing system of manual reviews. Until such showing is made, the proposal should not be adopted.

Finally, even if the new optional automated system is adopted, it would seem prudent to at least require occasional spot checks of the functioning of the system by manual review.

Very truly yours,

A handwritten signature in cursive script that reads "Lindsay A. Lovejoy, Jr." The signature is written in black ink and is positioned above the typed name.

LINDSAY A. LOVEJOY, JR.  
Assistant Attorney General

LALJr:laljr





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Mr. Steve Zappe  
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Re: WIPP Hazardous Waste Act permit; proposed Classified Shapes modification

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 modifications would establish new Classified Information Recordkeeping and Audit Requirements. The Department (NMED) has classified the modification as a Class 2 proposal.

The proposed modification is occasioned by the identification of a quantity of waste, the dimensions of which constitute classified information. The Permittees state that such waste may be characterized in accordance with existing procedures. Permittees state, however, that classification requirements call for changes in the management of the records generated in connection with the receipt and disposal of such waste at WIPP.

It should be noted that Permittees currently have a pending modification proposal addressed to Data Management which will be considered under Class 3 procedures. Permittees do not explain what changes to this Classified Information proposal would be called for if the Data Management proposal were adopted. Such information should be useful to NMED.

Permittees also have proposed adoption of digital radiography-computed tomography (DR/CT) methods as a quality control for radiographic examination of waste containers. Permittees should explain how rules for classified shapes would need to be modified in the event of the adoption of DR/CT.

Throughout the history of the WIPP project it has been understood that the disposal site will not deal with classified information. Evidently, Permittees have now decided that it would be too costly to maintain this policy. Thus, they have chosen not to treat the waste in question to eliminate its classified nature and instead to ship it unchanged to WIPP and to call upon various sites to adopt special procedures to maintain classification. We suggest that it would be more appropriate to treat the waste, and that NMED should not allow the modification without receiving information on the volume of classified waste and the cost of treating it to eliminate the classified information.

The proposal states that “this modification request will deal with radiography tapes of the classified shaped only.” (A-48). Thus, Permittees state that they seek no changes in any procedures with regard to recordkeeping, except with respect to magnetic tapes which record radiographic images. We suggest that NMED explore whether any new or changed security plans call for other changes in WIPP site procedures.

The specific language changes sought by Permittees are limited: They seek to add language to the discussion in Section B-1c, which states that radiography tapes for one percent of the waste “received at WIPP” will be reviewed to determine the accuracy of entries in data forms. The new language would add that review of tapes containing classified information will be done at a secure location other than WIPP. (A-49). Further, they would add that, when a site closes, waste information that is classified will not be sent to WIPP. (A-50).

Permittees also seek revisions to Attachment B1, stating, as to containers that contain classified shapes, that a radiography tape or a video tape of visual examination shall be considered classified, but data forms prepared in connection with characterization shall not be considered classified. (A-51, -52).

Permittees request an additional provision of somewhat ambiguous import:

“In the case of classified information, additional security provisions may apply that could restrict retrievability. The additional security provisions will be documented in generator/storage site procedures as outlined in the QAPjP in accordance with prevailing classified information security standards.” (A-52)

This language should be limited so that it conforms with Permittees’ stated intent to modify only terms affecting magnetic tapes.

The requested modifications should be adopted only after Permittees identify the approximate volume of radiography or visual examination tapes that will be covered by classification rules and the generator/storage sites where transuranic waste containing classified shapes is stored.

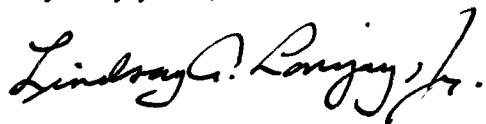
Further, Permittees should clarify how media containing digital radiography would be managed under the proposed modification. Under some circumstances digital

images may be examined from a distance via an Internet connection, and how such viewing would be done when images are classified should be explained.

Permittees should make clear how procedures at generator/storage sites may be affected by the classified nature of wastes. It is not clear from the proposal that the full range of security procedures intended to apply to such waste at generator/storage sites has been described.

Until the concerns expressed above have been sufficiently answered, we object to the adoption of this proposed modification.

Very truly yours,

A handwritten signature in black ink, reading "Lindsay A. Lovejoy, Jr." in a cursive script.

LINDSAY A. LOVEJOY, JR.  
Assistant Attorney General

LALJr:laljr