



**SOUTHWEST RESEARCH AND INFORMATION CENTER**  
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November 2, 2001

Steve Zappe  
 New Mexico Environment Department  
 2905 Rodeo Park Drive, Building 1  
 Santa Fe, NM 87505

Dear Steve,

Southwest Research and Information Center (SRIC) provides these comments regarding the class 2 permit modification to the WIPP permit requested on August 28, 2001 and revised on September 28, 2001 to change waste compositing for headspace gas analysis, change the visual examination requirements, and change the procedure for headspace gas sampling.

SRIC strongly opposes the modification request and asks that NMED deny it because the request is substantially incomplete, the activities proposed do not protect public health and the environment and are not consistent with the regulations.

Moreover, SRIC reiterates its long-held concern about the permittees' continuing practice of submitting incomplete, inadequate, and inaccurate modification requests that waste the time and money of NMED and the public. Indeed, the public suffers a "triple whammy": (1) it pays for the permittees to prepare and submit inadequate applications (and sometimes pays for essentially the same request multiple times), (2) it pays for NMED to review requests and make its decisions, and (3) it pays with its own time and resources to review and comment on inadequate requests. NMED must take decisive action to stop this process. SRIC has previously suggested several possible measures, including informing the permittees that class 3 modifications will only be reviewed on a consolidated basis once a year, and proposing dramatically increased fees when multiple modification requests are pending simultaneously. NMED should also impose strict penalties on violations of the permit, including the practices included in this request that were inappropriately put into effect by the permittees months ago.

Regulations under the New Mexico Hazardous Waste Act (20 NMAC 4.1.900, incorporating 40 CFR 270.42(b)(7)) provide that NMED may deny any Class 2 modification for any of the following reasons:

- (1) the modification request is incomplete;
- (2) the modification does not comply with other regulations covering the operating standards for hazardous waste storage and disposal facilities; or
- (3) the conditions of the modification fail to protect human health and the environment.

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The requested modification fails to meet any of those standards, so NMED should deny the request.

**1. The modification request for compositing of up to 20 samples should be denied because it is incomplete, does not comply with operating standard regulations, and fails to protect public health and the environment.**

The permittees state that the modification request "will improve both efficiency and safety at the generator/storage sites." (at 1). The modification request is inadequate because any modification should improve safety at WIPP, the disposal site. Supposed improvements at the generator/storage sites are not an adequate basis for a modification, especially since there is no health and environment benefit proven for New Mexicans. In addition, the request is incomplete because it alleges, but does not document the alleged improvements at other sites.

The information submitted in Attachment B of the modification request purports to show that headspace gas compositing of 20 samples is equivalent to compositing of five samples and to results on individual containers. The permittees' technical evaluation is based only on comparisons of headspace gas sampling at INEEL and Rocky Flats, but the permit modification would apply to all sites. Analysis from those two sites, which have a long history of waste characterization for WIPP, is not sufficient to demonstrate that it is comprehensive for all sites that would ship wastes to WIPP. Further, the very limited survey of wastes at INEEL and Rocky Flats is not sufficient to demonstrate that it is comprehensive even for the wastes at those two sites.

Permit Attachment O states that the capacity of WIPP is 175,600 cubic meters of transuranic (TRU) waste. (at O-5) As of October 25, 2001, WIPP had received less than 2,700 cubic meters, or about 1.5 percent of the stated capacity. Of the amount received, about 842 cubic meters was from INEEL and about 1,452 cubic meters was from Rocky Flats. DOE's current environmental impact statement estimates that INEEL will send 28,000 cubic meters of contact-handled (CH) TRU waste to WIPP and that Rocky Flats will send 11,000 cubic meters of CH-TRU waste to WIPP. (Attachment 1). Moreover, in 1995 DOE signed a settlement agreement with the State of Idaho to dispose of 65,000 cubic meters of TRU waste at WIPP or other facilities outside of Idaho. Thus, the limited amount of waste and waste streams on which the permittees are basing their technical evaluation is not at all sufficient for the amounts of waste that are to come to WIPP. Nor is the analysis sufficient for the two sites since it is based on a very small percentage of INEEL wastes and none of the Rocky Flats mixed waste streams.

The request is also seriously incomplete because compositing of headspace gas samples impacts the ability of sites to identify and report tentatively identified compounds (TICs). TICs were an important issue during the permitting process, and there are extensive findings in permit hearing record. See, for example, the Hearing Officer's Report, Findings of Fact #241-253 and Conclusions of Law #32-40. Thus, the permit was adopted with a legal conclusion that:

39. Permit Conditions II.C.3.k and II.C.4, and associated language regarding TICs, are conditions necessary to achieve compliance with the hazardous waste act and regulations specified at 20 NMAC 4.1.200 & 500 (incorporating 40 CFR §§261.20(b), 261.30(c)), 264.13(a)(1), (b)(1),(2) & (3), 264.601, 264.601(c) & 264.602), as required by 20 NMAC 4.1.900 (incorporating 40 CFR §270.32(b)(1)).

That record and the findings of fact and conclusions of law must be complied with and proposed modifications must be based on a similarly extensive factual record and determinations that provisions of the permit are no longer valid, since the proposed modification is fundamentally inconsistent with, and less stringent than, the permit provisions that would be changed.

Because the permittees have not demonstrated that the changed methods of composite sampling are protective of human health and the environment, the modification request does not meet the requirements of 40 CFR 264.13 related to waste analysis and 40 CFR 264.31 related to ensuring that unplanned releases do not occur.

Similarly, the request does not protect public health and the environment, as required by the permit and regulations, since it does not demonstrate that all TICs will be identified and reported and that required headspace gas sampling will be carried out in accordance with the permit.

2. The modification request to change the procedures for visual examination of waste containers must be denied because it is incomplete, does not comply with regulations, and does not protect public health and the environment.

The request does not provide any basis for the change. Section B1-3b(3) of the permit provides that results of radiography can be made available to visual examination (VE) personnel prior to VE taking place. With that information, VE personnel can take any necessary precautions in opening the drum and examining its contents. The request provides no information the inadequacy of the permit requirement. Indeed, examining drums that radiography has identified as having unusual conditions provides an important check on radiography and should be encouraged, not eliminated.

In the discussion in support of the request, permittees cite one drum at Rocky Flats (D82863), which is included in Attachment C, as the only example of why the modification is needed. Attachment C is the Real Time Radiography Waste Package Report, dated September 17, 2000. The request is incomplete in that it includes no information that the drum was subject to VE and that any worker was endangered, or any VE report or any other information that would be necessary to support a modification request. The request is also incomplete in that it does not explain why one drum out of more than 11,000 that have been characterized under the provisions of the permit provides any basis to change anything in the permit. SRIC does not agree that the one drum at Rocky Flats provides any basis for any change in the permit.

The modification request would allow sites to develop "safety conditions" that apparently would allow drums that otherwise would be subject to VE to not undergo that procedure. Those conditions are not well defined in the proposed permit text, which could result in widely varying practices being used at different sites. Such a situation would result in different procedures being used at different sites, thereby leading to arbitrary results that would not meet the requirements of the permit. Once again, the request is incomplete, inadequate, and vague.

The permit requires containers subject to VE to be "randomly sampled." (at B2-2). The request would change that procedure so that it would no longer be random, but rather could exclude certain drums randomly selected from VE. Such a change would fundamentally change an important Waste Analysis Plan requirement for verification of radiography. Thus, changing this one provision would substantially affect other provisions, which is not discussed; a further aspect of incompleteness with the request.

The need for visual examination and the frequency that it should be done was an important issue during the permit hearing and significant findings of fact (#205-212) and conclusions of law (#20-22) were made to support the VE requirements in the permit. As a finding of fact, the hearing officer concluded that the VE requirements "are required to protect human health and the environment." Finding of Fact #212. That record and the findings of fact and conclusions of law must be complied with unless a similarly extensive factual record and determinations are made that provisions of the permit are no longer valid, since the proposed modification is fundamentally inconsistent with, and less stringent than, the permit provisions that would be changed.

Similarly, the request does not protect public health and the environment, as required by the permit and regulations since it does not demonstrate that visual examination will be carried out in accordance with the permit and the Waste Analysis Plan, which is required by 40 CFR 264.13.

**3. The modification request to change the procedures for taking samples of headspace gas through existing filter vent holes must be denied because it is incomplete, does not comply with regulations, and does not protect public health and the environment.**

The basis for the request is to provide an additional headspace gas sampling method. The discussion indicates that the reason for the request is to allow pipe overpack containers (POC) to be sampled through the filter vent hole. Thus, this is a self-imposed problem since DOE created POCs in order to ship highly radioactive residues to WIPP from Rocky Flats, a container and wastes not specifically discussed in the permit application. Thus, the public has not had the opportunity for full analysis of all the ramifications of POCs. As they have done in the past, for example with Drum Age Criteria and Centralized Confirmation Facility modifications, the permittees are using a piecemeal approach to trying to change the permit. Such an approach results in an incomplete request that does not discuss the wide-ranging implications for POCs, including other future changes that the permittees would undoubtedly request, should this change be approved.

Among other things, the request should include information regarding how many of the more than 450 POCs that have been certified as of October 25 have been sampled through the filter vent hole, and which containers have been sampled through procedures specified in the permit. The request should specify what problems, if any, have occurred from the approved sampling procedures.

Moreover, as written, the request would apply to all containers, not just POCs. The request is incomplete because the justification is based only on POCs, yet the request includes no information about whether the new technique would provide for representative gas sampling for containers other than POCs. The request includes no data to support the proposition that other containers left unsealed for an unspecified amount of time would produce adequate headspace gas sampling of the container. Such information must be included in any request.

The result of inadequate headspace gas sampling, in addition to violating the permit, would be to allow drums of waste to come to WIPP inadequately characterized. Such drums could introduce larger amounts of VOCs than that allowed by the permit. As such, the modification would not comply with the regulations, including 40 CFR 264.31 and 264.601, and would not protect public health and the environment. Given these deficiencies, the request must be denied.

Thank you for your careful consideration of these comments.

Sincerely,



Don Hancock

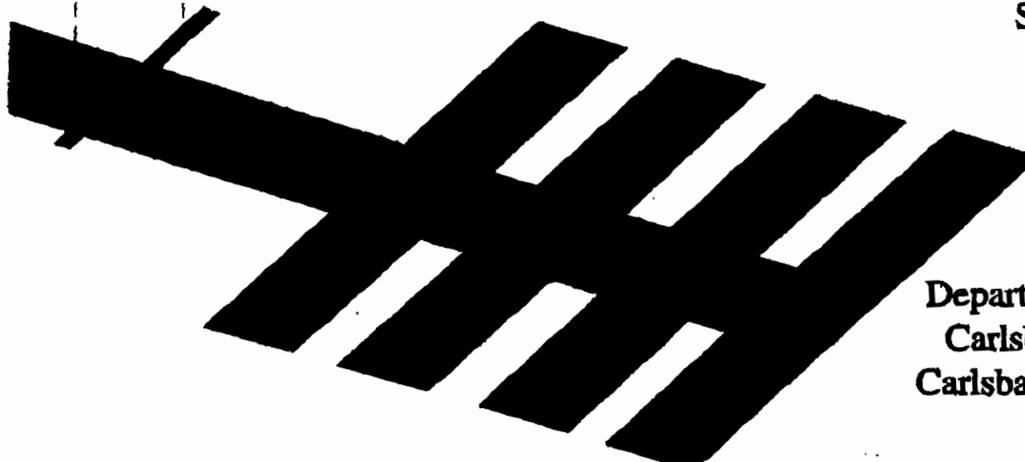


DOE/EIS-0026-S-2

# Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement

Volume I  
Chapters 1-6

September 1997



Department of Energy  
Carlsbad Area Office  
Carlsbad, New Mexico

### 2.1.3 Waste Management at the Generator-Storage Sites

The locations and volumes of the TRU waste inventory are given in Table 2-2 (for the Basic Inventory) and Table 2-3 (for the Additional Inventory).

The 1990 SEIS-I (DOE 1990) stated that WIPP may eventually dispose of post-1970 defense TRU waste from 10 sites. These sites are identified in Table 2-2. Since 1990, DOE has identified 12 additional sites that either store or are anticipated to generate TRU waste. Eight of these sites store or generate TRU waste considered to be part of the Basic Inventory (Table 2-2). TRU waste

**Table 2-2**  
**Basic Inventory TRU Waste Volumes<sup>a, b</sup>**

Site <sup>c</sup>	Stored (1995) (cubic meters)		Estimated Total through 2022 <sup>c</sup> (cubic meters)		Projected Total through 2033 <sup>d</sup> (cubic meters)	
	CH-TRU	RH-TRU	CH-TRU	RH-TRU	CH-TRU	RH-TRU
Hanford Site (Hanford)	12,000	200	46,000	22,000	57,000	29,000
Los Alamos National Laboratory (LANL)	11,000	94	18,000	190	21,000	230
Idaho National Engineering and Environmental Laboratory (INEEL)	28,000	220	28,000	220	28,000	220
Argonne National Laboratory - West (ANL-W)	7	19	750	1,300	1,000	1,700
Argonne National Laboratory - East (ANL-E)	25	---	150	---	200	---
Savannah River Site (SRS)	2,900	---	9,600	---	12,000	---
Rocky Flats Environmental Technology Site (RFETS)	4,900	---	9,300	---	11,000	---
Oak Ridge National Laboratory (ORNL)	1,300	2,500	1,600	2,900	1,700	3,100
Lawrence Livermore National Laboratory (LLNL)	230	---	940	---	1,200	---
Nevada Test Site (NTS)	620	---	630	---	630	---
Mound Plant (Mound)	300	---	300	---	300	---
Bettis Atomic Power Laboratory (Bettis)	---	---	120	7	170	9
Sandia National Laboratories - Albuquerque (SNL)	7	---	14	---	17	---
Paducah Gaseous Diffusion Plant (PGDP)	---	---	6	---	8	---
U.S. Army Materiel Command (USAMC)	3	---	3	---	3	---
Energy Technology Engineering Center (ETEC)	2	6	2	7	2	7
University of Missouri Research Reactor (U of Mo)	1	---	1	---	1	---
Ames Laboratory - Iowa State University (Ames)	---	---	1	---	1	---
Battelle Columbus Laboratories (BCL)	---	580	---	580	---	580
<b>Totals</b>	<b>62,000</b>	<b>3,600</b>	<b>116,000</b>	<b>27,000</b>	<b>135,000</b>	<b>35,000</b>

<sup>a</sup> The inventory for SEIS-II is based on BIR-3, which takes into account potential thermal treatment at some sites. The thermal treatment, though, is not necessarily for PCB-commingled waste. TRU waste containing more than 50 parts per million of PCBs cannot be disposed of at WIPP without applicable permits. The Basic Inventory is waste that resulted from defense activities and that was placed in retrievable storage pursuant to the Atomic Energy Commission policy of 1970 and TRU waste reasonably expected to be generated by these ongoing activities. Volumes have been rounded. Actual totals may differ due to rounding. Projected totals have not been adjusted in anticipation of disposal. A discussion of updated volumes and TRU waste locations presented in the *National Transuranic Waste Management Plan* is presented in Appendix J, throughout SEIS-II, where appropriate, and in the Summary.

<sup>b</sup> Dashes indicate no waste.

<sup>c</sup> Post-1970 defense TRU waste volumes through 2022 are estimated in BIR-2.

<sup>d</sup> The Proposed Action, described in Chapter 3, is based on operation of WIPP for 35 years through 2033. Total includes TRU waste to be generated for 35 years.

<sup>e</sup> Sites in boldface were included in SEIS-I. INEEL and ANL-W are located near each other and are counted as a single site in SEIS-II; however, ANL-W is listed separately to indicate its contribution to the inventory.