



CCNS

Concerned Citizens for Nuclear Safety

ENTERED



July 6, 2001

BY FAX TO (505) 428-2567
AND MAIL

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

Re: Proposed Class 2 WIPP Permit Modifications for the Drum Age Criteria
Requirements and Increased Surface Storage Areas for 10-Drum Overpacks

Dear Mr. Zappe:

Concerned Citizens for Nuclear Safety (CCNS) respectfully requests that the New Mexico Environment Department (NMED) deny the Department of Energy's (DOE's) proposed Ten Drum Overpack (TDOP) and resubmitted Drum Age Criteria (DAC) modifications to the operating permit for the Waste Isolation Pilot Plant (WIPP). CCNS requests such denial by NMED because the proposed modifications do not meet the requirements for such modifications.

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

- a. The modification request is incomplete;
- b. The modification does not comply with other regulations covering the operating standards for hazardous waste storage and disposal facilities; or
- c. The conditions of the modification fail to protect human health and the environment.

DOE's requested modifications fail to meet any of those standards; therefore NMED should deny the requested modification.

1. Ten Drum Overpack (TDOP). The TDOP application is incomplete because the copy CCNS downloaded from the Internet prior to the June 7, 2001 Albuquerque public information meeting is different from the redline copy DOE sent to CCNS after the public information meeting. DOE's application should remain the same throughout the



comment period. Specifically, page A-5 of the copy CCNS downloaded did not include b.1 Module IV.C.1 Acceptable Disposal Containers as found in the DOE's redline copy. CCNS found that b.1 Module IV.C.1 had been inserted into the DOE redline copy, thereby changing the numbering for the remaining proposed changes. If CCNS did not receive the DOE redline copy we would not have had the opportunity to review the proposed changes to the Module IV.C.1. NMED should deny the permit modification because it is incomplete and require DOE to resubmit the proposed TDOP modification.

In addition, the container volumes should be consistent throughout the Permit. For example, the volume for the standard waste box (SWB) is in cubic meters, whereas the drum volumes are in gallons (liters). It is difficult to compare the statements for SWB and the 85-gallon drums. For instance, "The SWB is the largest container that may be used to collect derived waste" (p. A-6) and "85-gal (321-L) drums may be direct loaded with CH TRU-mixed waste and may be used to collect or store derived waste" (p. A-7). It is ambiguous whether the SWB is larger than the 85-gallon drums.

DOE is required on the Part A Hazardous Waste Application to use cubic meters for Section XII. Process Codes and Design Capabilities. The container volumes should be consistent. CCNS suggests both the cubic meters and gallons (liters) be listed.

2. Drum Age Criteria (DAC). The DAC application is also incomplete because it does not include additional changes to the permit that would be necessary to address the major changes in headspace gas sampling requirements, including how each DOE site would accurately determine the numbers of plastic bags and liners in each drum. The change would not protect public health and the environment because if implemented it could result in substantial quantities of toxic chemicals being disposed at WIPP without adequate measurement.

DOE responded to NMED comments on the first submittal of the DAC in a somewhat trivialized manner. DOE did not respond to those comments made by the public interest groups. CCNS resubmits its February 9, 2001 comments for the first DAC submittal because DOE has not adequately addressed these issues in the resubmittal.

a. The modification is incomplete because it would make major changes in one aspect of the Waste Analysis Plan (WAP), specifically, how to sample headspace gas. The modification does not make other changes in the WAP necessary to ensure that the new sampling procedures give accurate results. For example, the modification would change the existing permit requirement of a 142-day waiting period before headspace gas sampling is done on debris waste to as little as 4 days, if the drum has no liner and no bags. If the drum has some bags or liner, the waiting period can vary from 8 to 46 days. However, the existing permit has no procedures to determine whether a drum has a liner or not, the type of liner(s) in a drum, or the number of bags in the drum. Under the current permit, such a determination is not necessary since all debris waste drums have the 142-day waiting period. In order to change the waiting period, the permit would need to be modified to ensure that it contains procedures to ensure that each drum's liners and bags can be identified and that there are quality assurance and quality control procedures and visual examination checks. DOE's permit modification contains no such procedures.

b. The modification does not meet the operational standards regulations (40 CFR 264). For example, the waste analysis requirements mandate adequate information about the hazardous waste constituents in any facility. The WIPP permit requires that in order to determine the amount of volatile organic compounds (VOCs) in each drum, it must undergo headspace gas sampling to ensure that the amount of VOCs that could be released from WIPP would not endanger public health and the environment. If drums are not sampled, or if the sampling results are inaccurate and underestimate the amounts of VOCs, the waste analysis requirements are not met. Under the DOE permit modification, there could be large underestimates of the amounts of VOCs disposed at WIPP, since the headspace gas sampling might not capture amounts of VOCs contained in bags inside a drum which take several weeks to accumulate in the headspace. There could be many thousands of drums that have such inaccurate sampling.

c. The modified headspace gas sampling would not protect public health and the environment. Because of the likelihood of inaccurate sampling, increased quantities of VOCs could be brought to WIPP than estimated. The increased quantities of VOCs could endanger public health and the environment.

d. The proposed Drum Age Criteria modification would put even more reliance on DOE acceptable knowledge (AK) at the generator/storage sites. DOE would use its AK records about each drum to make the determination as to how long the waiting period would be, based on what the records say about the liner(s), bags, and related matters. But those records are frequently wrong, and should not be relied upon. CCNS has repeatedly pointed out that DOE is working with "new" waste now, presumably with the better records. What will happen when DOE begins working with the "old" wastes, presumably with worse records? NMED should keep this question in mind in its decisionmaking process.

e. DOE Science Then and Now. The 142-day waiting period for debris waste and 225 days for other wastes was based on DOE's permit application and specifically a 1995 study at the Idaho National Engineering and Environmental Laboratory (INEEL) regarding how long it takes a drum to reach equilibrium so that headspace gas can be accurately sampled. While those waiting periods were assumed to be conservative, none of the waiting periods for debris waste drums under the requested modification are at all close to 142 days. The drums and their contents and the processes by which VOCs are created have not changed since 1995. DOE must explain why its science was so wrong in 1995; something that is not discussed in the permit modification.

On the contrary, it is DOE's current science that must be questioned. The proposed Drum Age Criteria are very complex and do not include all of the types of debris waste drums. The criteria are clearly designed to address a "problem" at INEEL in which that site does not have drums ready to ship to WIPP because headspace gas sampling has not occurred. The criteria have not been shown to give accurate headspace gas sampling results for debris waste at INEEL, yet they would apply to all sites. While DOE asserts that a "survey" was done of generator sites, that survey is not included in the modification request of the reference documents. Thus, there has been no showing that all sites have been surveyed and that the three scenarios cover all types of debris waste drums included in the modification request.

NMED should deny both requests by DOE to modify the permit. Should you have any questions or comments, please contact me. Thank you for your consideration of our comments.

Sincerely,

Joni Arends
Waste Programs Director

cc: Mary Kruger, U.S. EPA
Charles Byrum, U.S. EPA