**SOUTHWEST RESEARCH AND INFORMATION CENTER**

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February 8, 2001

Steve Zappe
NMED
2044A Galisteo Street
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RE: Class 2 Modification for Drum Age Criteria

Dear Steve,

Southwest Research and Information Center (SRIC) provides the following comments on the December 7, 2000 class 2 modification to the WIPP Hazardous Waste Act (HWA) Permit related to Drum Age Criteria. We appreciate the fact that on December 22, 2000 NMED rescinded the Temporary Authorization that it initially approved regarding this modification.

SRIC believes that the requested class 2 modification for Drum Age Criteria must be denied because it does not meet the requirements for such modifications. The application is 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 bags and liners in each drum. The change would not comply with other regulations nor protect public health and the environment because it could result in substantial quantities of toxic chemicals being disposed at WIPP without being adequately measured.

1. The class 2 modification must be denied.

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:

- (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.

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

A. The modification is incomplete because it would make major changes in one aspect of the Waste Analysis Plan (WAP) -- how to sample headspace gas -- but it doesn't make other changes in the WAP necessary to ensure that the new sampling procedures give accurate results or are consistent with other parts of the permit. 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 (Permit Attachment B1-1a) to as little as 4 days (proposed Table B1-7). Proposed Tables B1-7 and B1-10 give a range of waiting periods, ranging from 4 days to 283 days, if the drum has some bags or liner, setting up a highly complex determination, which could be confusing and complicated for workers to carry out and subject to substantial errors. Reviewing the procedure could be difficult for NMED to audit, and would be extremely complicated for the public to understand. Moreover, the existing permit has no procedures to determine whether a drum has a liner or not, the type of liner(s) in a drum, the number of bags in the drum, because 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, if any, can be identified and that there are quality control procedures and visual examination checks. DOE's permit modification contains no such procedures. In addition to various changes in the WAP, the audit and surveillance program, including the B6 checklists, would need to be revised to ensure that the new procedures are correctly implemented and are audited. None of these changes are included in the modification request, thus it is wholly incomplete and inadequate.

B. The modification doesn't meet the operational standards regulations (40 CFR 264). As one example, the waste analysis requirements mandate adequate and accurate information about the hazardous waste constituents in any facility (40 CFR 264.13). The WIPP permit requires that to determine the amount of volatile organic compounds (VOCs) each drum 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, larger amounts of VOCs could be brought to WIPP than estimated. That increased amount of VOCs could endanger public health and the environment.

2. The Drum Age Criteria 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 inaccurate, as was demonstrated at the permit hearing in which DOE submitted not one accurate example of AK. During the permitting process, NMED concluded that AK itself was not acceptable or sufficient characterization. Relying on AK to determine the Drum Age Criteria is inconsistent with basic principles and requirements of the permit, and is certainly not justified by the modification request.

3. DOE has not explained how its science could have been so wrong before and how it is right 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, so 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 science now that must be questioned. The new Drum Age Criteria are highly complicated and complex and are not shown to 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 (see point 4 below). Thus, there has been no showing that all sites have been surveyed and that all types of debris waste drums are covered by the three scenarios included in the modification request.

4. Additional aspects of incompleteness in the modification request.

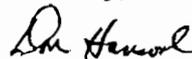
On page A-4 of the modification, three different sampling scenarios are described. But the modification does not indicate how each individual site would know that a particular drum fits into any of the three scenarios. Nor is it demonstrated that the three scenarios adequately bound the range of containers at all of the sites, which is necessary since the modification would apply to all sites, not just INEEL, which is the site currently most desirous of the modification.

On page A-5, there is a reference to a survey of generator/storage sites. However, the survey is not referenced or documented. The reference in the following sentence (BWXT 2000) does not include any such survey. Without having the actual survey, it cannot be determined whether it was comprehensive as to all sites and thorough as to all packaging scenarios. Thus, the request is incomplete in providing adequate documentation for such a survey.

Referenced document INEEL/EXT-99-01010 (Attachment B, page 18) has not been available to SRIC, even though we specifically requested it on January 25. For this modification, and for future modifications, all referenced documents must be available for public review.

Thank you for your consideration.

Sincerely,



Don Hancock