July 15, 2002

Dr. Inés Triay, Manager
Carlsbad Field Office
Department of Energy
P. O. Box 3090
Carlsbad, New Mexico 88221-3090

Mr. John Lee, General Manager
Westinghouse TRU Solutions LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

RE: NMED COMMENTS, REMOVAL OF UNDERGROUND BOOSTER FANS
WIPP HAZARDOUS WASTE FACILITY PERMIT
EPA I.D. NUMBER NM4890139088

Dear Dr. Triay and Mr. Lee:

On June 13, 2002, the New Mexico Environment Department (NMED) Hazardous Waste Bureau received your Class 1* permit modification request to remove three booster fans from the WIPP underground ventilation system. This request was submitted as a Class 1 modification requiring NMED approval prior to implementation, based upon an analysis of 20.4.1.900 NMAC (incorporating 40 CFR §270.42 Appendix I, Item A.8). This category of modification addresses “[c]hanges to remove permit conditions that are no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the facility).”

NMED subsequently received a letter with your request to withdraw this proposed permit modification on July 11, 2002. This letter stated that a Class 2 permit modification request addressing this issue would be submitted in the future. NMED is providing the attached comments to assist the Permittees in developing a revised modification request.
If you have any questions regarding this matter, please contact Steve Zappe of my staff at (505) 428-2517.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

Attachment

cc: Paul Ritzma, NMED
    Greg Lewis, NMED
    John Kieling, NMED HWB
    Chuck Noble, NMED OGC
    Laurie King, EPA Region 6
    Connie Walker, TechLaw
    Don Hancock, SRIC
    Lindsay Lovejoy, NMAGO
    Geoffrey Petrie, Nuclear Watch
File: Red WIPP '02
NMED Comments on Request to Remove Underground Booster Fans

NMED received public comment on this modification requesting a review of this modification under 20.4.1.900 NMAC (incorporating 40 CFR §270.42(a)(1)(iii)). Commentors questioned the classification of this permit modification, stating that it did not meet the description of a Class 1 modification as being non-substantive, trivial, and possessing simplicity. Commentors also questioned the applicability of citing 40 CFR §270.42 Appendix I, Item A.8 as the basis for this permit modification, as it was unclear that a standard that had previously applied at the facility (i.e., the requirement of mechanical ventilation reversal specified in 30 CFR §57.4760(a)(2) as administered by the Mining Safety and Health Administration [MSHA]) had actually changed and was therefore “no longer applicable to the facility.” Finally, commentors cited the WIPP permit hearing record to suggest that the underground booster fans were not only used to satisfy MSHA requirements, but were part of the overall ventilation system necessary to protect human health and the environment, and therefore served a safety purpose that was not addressed in the modification request.

In order to address these public concerns, NMED investigated the circumstances under which the US Environmental Protection Agency (EPA) added Item A.8 to 40 CFR §270.42 Appendix I in a final rule issued on September 30, 1999 (64 FR 52828). Review of the final rule demonstrates that EPA changed 40 CFR §270.42 specifically to provide “the RCRA permit modification procedure to eliminate inapplicable RCRA requirements once specified [Clean Air Act (CAA) regulations] part 63, subpart EEE and other requirements have been met.” (64 FR 52992, September 30, 1999, footnote 307). EPA further clarified in their response to comments, “We are providing a tool in today’s final rule to assist regulators and sources in implementing the deferral from RCRA to CAA; we are adding a new line item to the permit modification table in 40 CFR §270.42, Appendix I, to specifically address the transition from RCRA to CCA.” (Final Response to Comments on the Proposed HWC MACT Standards, Volume IV: Permitting; response to Comment PREG6.1(165), page 161). NMED interprets these and other statements in the final rule to limit the applicability of 40 CFR §270.42 Appendix I, Item A.8, to instances where the “permit conditions that are no longer applicable” are tied directly to the elimination of RCRA requirements, generally because the underlying regulation has been changed or rescinded.

Based upon this review, NMED concurs with commentors who noted that the MSHA requirements in 30 CFR §57.4760(a) to control the spread of fire, smoke, and toxic gases underground in the event of a fire have not changed, and that seeking a permit modification under Item A.8 is inappropriate. WIPP had apparently satisfied the MSHA requirement by providing ventilation control doors, both during construction of the repository and after the permit was issued. The only significant change between the Permittees’ submittal of the original permit application and this modification request was the Permittees’ belief that the underground booster fans were no longer necessary to satisfy MSHA requirements and should be removed because of operational considerations. This change of position does not meet the criteria for a modification under Item A.8.
NMED previously approved a Class 1* permit modification under Item A.8 to eliminate the use of magnesium oxide (MgO) mini-sacks in the WIPP underground in a letter issued April 6, 2001. Although this was not an explicit requirement based upon regulation, it was instead based on a radiation disposal compliance criteria determination by EPA, which they subsequently rescinded. Because NMED had required the use of MgO mini-sacks in the permit solely because of EPA’s requirements, this previous approval remains consistent with NMED’s current interpretation of the applicability of Item A.8.

Commentors also suggested that the underground booster fans were part of the overall ventilation system and therefore served a safety purpose that was not addressed in the modification request. NMED notes that the Permittees’ testimony at the hearing for the original permit stated that the ventilation system has three purposes: allow compliance with MSHA requirements; allow control of ventilation in the event of a contaminant release; and allow control of ventilation in the event of an underground fire (Record Proper, Transcript, R. Kehrman at p. 88). The Permittees’ testimony further identified the permanently mounted underground booster fans and other auxiliary fans as being used to ventilate dead-end areas when a through ventilation circuit could not be established, and to reverse the air in the event of certain underground emergencies such as an unexpected fire (Tr., R. Kehrman at pp. 89 and 91). In light of this testimony, NMED concurs with the commentors in concluding that the modification request should address the function of the underground booster fans in the context of the overall ventilation system in order to justify their removal, rather than limiting the discussion to conclusory statements regarding the opinion that they no longer served their intended purpose.

Several commentors identified the failure of the WIPP evacuation process to meet the ten-minute evacuation standard specified in 30 CFR §57.4760(a)(3), and pointed out that this contradicted the Permittees’ statement that “WIPP currently complies with the MSHA requirement by providing control doors as well as evacuation procedures.” Although this is not a RCRA issue, NMED believes the Permittees should clarify that MSHA only requires “at least one” of the three means (control doors, mechanical ventilation reversal, or evacuation) to control the spread of fire. Furthermore, the Permittees might explain why the current evacuation procedures do not meet MSHA standards specified in 30 CFR §57.4760(a)(3), discuss efforts to improve evacuations, and provide results from more recent mine evacuation drills.

NMED concurs with the Permittees’ decision to revise the modification request and submit it for public comment as a Class 2 modification. NMED recommends classifying it under 40 CFR §270.42 Appendix I, Item B.6.a. This item is intended for changes to emergency procedures in RCRA contingency plans, such as this proposal to eliminate the options to reverse air flow in the event of a fire as currently specified in Attachment F, RCRA Contingency Plan (Section F-4d, Fire), and Attachment M2, Geologic Repository (Section M2-2a(3), Underground Ventilation Modes of Operation). The revised modification request should include: the technical, health and safety, and operational bases for removal of the fans, in light of the testimony referenced above; maps and
drawings indicating the location of the booster fans and the controls doors, along with a
description of how the control doors would be configured in the event of a fire; a
description of the evolution of the mine ventilation system at WIPP, with emphasis on the
thought process leading to the conclusion that the underground booster fans are no longer
necessary; and the anticipated impact on current and future operations if the booster fans
are removed.