

**Subject: Unofficial NMED comments on WIPP Astrophysics EA**

**Date:** Mon, 20 Nov 2000 16:12:19 -0700

**From:** Steve Zappe <Steve\_Zappe@nmenv.state.nm.us>

**Organization:** NMED Haz/Rad Materials Bureau

**To:** Harold Johnson <JohnsoH@wipp.carlsbad.nm.us>


**CC:** Steve Holmes <Steve\_Holmes@nmenv.state.nm.us>

Harold -

Attached are NMED's unofficial comments on the Astrophysics EA. I say "unofficial" since I have also forwarded them to Gedi Cibas in the Office of the NMED Secretary. He will provide you with NMED's official comments, which should look just like these with an official looking cover letter or something like that. When the official comments arrive, please discard these comments. Call with questions. Hope you have (or had) a happy Thanksgiving!

Steve

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## INTEROFFICE MEMORANDUM

**TO:** Gedi Cibas, NMED Office of the Secretary

**THROUGH:** Steve Zappe, NMED WIPP Project Manager

**FROM:** Steve Holmes, NMED Hazardous Waste Bureau

**DATE:** November 20, 2000

**SUBJECT:** Comments on Environmental Assessment for Astrophysics Experiments at the WIPP Site

The following comments should be considered in the document "Environmental Assessment for Conducting Astrophysics and Other Basic Science Experiments at the WIPP Site." The Department of Energy (DOE)/Battelle environmental assessment (EA) should be modified to reflect consideration of these comments:

- **Section 1.3 Permits Required**, page 1-7: there should be a clause to indicate that hazardous, low level mixed radioactive, and low level radioactive wastes may potentially be generated as a result of the experiments, and that these wastes shall be managed by WIPP and shipped off site, per existing generator regulations specified in 40 CFR §262.
- **Section 1.4.1 WIPP NEPA Compliance**, starting on page 1-7 and ending on page 1-9: there should be a NEPA reference for closure of the facility. There must be such a document. This document should be inclusive in the narrative.
- **Table 1-1. Required Permits and Approvals for Ongoing Activities at WIPP**, page 1-8: the relevant NMED document is properly entitled the "Hazardous Waste Facility Permit." The footnote referencing RCRA may be eliminated.
- **Section 1.4.2 Stakeholder Outreach and Involvement Activities**, on page 1-9: NMED should be considered for inclusion on **Table 1-2. Government Agencies Consulted** due to the fact that hazardous, low level mixed radioactive, and low level radioactive wastes may be generated during the experiments. However, the paragraph mentioning NMED following Table 1.2 may suffice.
- **Section 2.1.1.1 Range of Possible Experiments**, pages 2-3 through 2-9: each category (*LANL WIMP Dark Matter HpSi Detector, Observatory for Multi-flavor Neutrino Interactions from Supernovae [OMNIS], Surface Experiment Related to OMNIS, Enriched Xenon-136 Observatory [EXO], Germanium in Liquid Nitrogen Underground System [GENIUS], Institute for Nuclear and Particle*

*Astrophysics and Cosmology [INPAC], Majorana Project, and Neutrino Factory Detector at WIPP*), should have statements for the potential to produce wastes.

- **Sections 2.1.1.4 Nonproliferation and Nuclear Accountability Experiments** and **2.1.1.5 Chemical and Material Processing Experiments**, page 2-12: statements should be made pertaining to the potential to produce wastes.
- **Section 2.1.2 WIPP Experimental Gallery**, page 2-13: a statement regarding the establishment of a less than 90-day waste accumulation area should be included in the narrative.
- **Figure 2-7. Closeup of Experimental Gallery**, page 2-14: the figure should indicate the location of the less than 90-day waste accumulation area.
- **Section 2.1.5 Decommissioning**, page 2-15: a statement should be included in the narrative to indicate that the experiment gallery will also be decommissioned in compliance with requirements in the NMED hazardous waste facility permit.
- **Section 4.1.1 Proposed Action**, paragraph four on page 4-1: an inclusive statement should be amended to identify potential waste production.
- **Section 4.1.1 Proposed Action**, paragraph one on page 4-6 and **Section 4.2.1 Proposed Action** on numerous pages: statements declare that the ventilation airflow is split between the experimental area and the disposal area. A figure should be added depicting the split between the two areas. There should also be a statement somewhere in the EA, referencing this figure, supporting the conclusion that activities in the experiment gallery will have no impact on the Confirmatory VOC Monitoring Plan required by the NMED hazardous waste facility permit.
- **Table 4-1. Summary of Potential Hazards That Could Be Introduced by the Proposed Science Experiments (continued)**, on page 4-4, Xenon-136 should be added to the list of **Cause/Source** for the **Toxicity/inadequate oxygen levels (oxygen displacement)** row.
- **Section 4.2 ACCIDENTS**, on pages 4-6 through 4-14, a subsection should be created to discuss the potential of spills and /or releases of wastes stored in the less than 90-day waste accumulation area.
- **Section 4.9 AIR QUALITY**, on pages 4-17 through 4-18, a statement should be made relating to the potential release of Xenon-136, due to the great quantity of the material proposed for use.