

Department of Energy

Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221
November 13, 2003

Mr. Frank Marcinowski
Office of Radiation and Indoor Air
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Subject: 2003 Annual Change Report

Dear Mr. Marcinowski:

This letter and the three enclosures constitute the Department of Energy (DOE) 2003 annual report of non-significant changes in activities or conditions for the Waste Isolation Pilot Plant (WIPP).

This Annual Change Report is required by Title 40 Code of Federal Regulations (CFR) 194.4(b)(4), which states:

"No later than six months after the administrator issues a certification, and at least annually thereafter, the Department shall report to the Administrator, in writing, any changes in conditions or activities pertaining to the disposal system that were not required to be reported by paragraph (b)(3) of this section and that differ from information contained in the most recent compliance application."

This report informs the Environmental Protection Agency (EPA) of changes to information in the most recent Compliance Certification Application (CCA). Significant planned-changes must be reported to the EPA prior to implementation. Title 40 CFR 194.4(b)(3) requires that significant unplanned-changes be reported to the EPA within 24 hours or 10 days, depending on the activity or condition. To date, there have been no significant unplanned-changes to the original certification basis and therefore no requirement to provide 40 CFR 194.4(b)(3) change reports. If changes are not significant, they must be reported annually.

The enclosed tables list those items identified for reporting under 40 CFR 194.4(b)(4). The majority of the changes described in this report are associated with modifications to written plans and procedures for WIPP operations.

The period covered by this Annual Change Report changed this year and for future years (Docket A-98-49, Item II-B3-52). This report includes changes that occurred between September 16, 2002, and June 30, 2003. For 2004 and beyond, the reporting period would begin July 1st and end June 30th of the report year.

This submittal contains three enclosures:

Enclosure 1 contains five tables:

- 1. "Table 1: Changes in WIPP Conditions or Activities Reportable under Title 40 CFR 194.4(b)(4)".
- 2. "Table 2: SNL (Sandia National Laboratories) Procedure Revision Table" documents changes to relevant Sandia National Laboratories' plans and procedures during the reporting period.
- "Table 3: WWIS (WIPP Waste Information System) Procedure Revisions
 Table" documents changes to the WWIS implementing procedures during the
 reporting period.
- 4. "Table 4: Summary of Waste Emplacement Inventory" documents the TRU waste inventory in cubic meters; cellulosics, plastics and rubber materials inventory in kilograms; ferrous metals and non-ferrous metals inventory in kilograms; liquids and radiological activity inventory in curies. This table provides the total emplaced inventory in the repository as of June 30, 2003 and the inventory that was emplaced during the reporting period (September 16, 2002 to June 30, 2003).
- 5. "Table 5: SNL (Sandia National Laboratories) Computer Software and Hardware Changes Table" documents the changes to relevant codes, software and hardware that have occurred during the reporting period.

Enclosure 2 contains copies of the following reports:

"Waste Isolation Pilot Plant Subsidence Monument Leveling Survey 2002, DOE/WIPP 03-2293, October 2002."

"Geotechnical Analysis Report for July 2001 – June 2002, DOE/WIPP 03-3177, Volumes 1 & 2, March, 2003. (Volume 2 is provided in electronic form only, because of the size)"

Enclosure 3 is an electronic copy of the 2003 Annual Change Report provided on a compact disk (CD) in pdf format.

Because of the change in the reporting period (to end June 30, 2003), the *Annual Site Environmental Report* the *Delaware Basin Monitoring Report*, and the *Annual COMPs Report*, that are issued in September, October, and November respectively, are not included in this report. These annual reports will be included in the next annual change report. Current versions of any annual report will be available on the Compliance Recertification Electronic Library (CREL) as soon as they are completed.

In accordance with your requests, this annual change report does not include all administrative changes to procedures. Examples of administrative changes to procedures that were not included are editorial changes, reformatting to conform to formatting requirements of applicable procedures, correcting the title of references, correcting internal inconsistency within a procedure, and other changes that do not change the substance or intent of a particular document.

The Waste Emplacement Report (Table 4) format has been modified to reflect the change in the radiological activity inventory you requested in the EPA/DOE conference call on May 7, 2003. The columns included in the report are now: the cumulative activity for the previous reporting period, the activity values for the current reporting period, and the total activity to date.

Also, Table 1 (of Enclosure 1) has been modified as discussed in the May 7, 2003, conference call. References now identify the EPA Docket Item Number for the specific information and add a general sentence identifying the change.

Additionally, as requested in your letter approving the 2001 Annual Change Report (Docket A-98-49, II B-3, Item 32), we are providing the following:

- The quantities of radionuclides and other limited components actually disposed of at the WIPP (Enclosure 1, Table 4)."
- Listing only approvals for the purpose of expanding CBFO's certification of transuranic waste sites to include new equipment, processes, or waste streams (Enclosure 1, Table 1).
- Copy of change report in pdf format (Enclosure 3) and one paper copy.

Planned changes that have been submitted to the EPA for review and approval prior to their implementation per the requirements of 40 CFR 194.4(b) include the following:

- Characterization program for RH-TRU waste planned for disposal at WIPP.
 In April 2003, DOE provided the proposed change notification to receive and dispose of remote-handled (RH) TRU waste. EPA and DOE continue to exchange information working towards approval.
- Additional astrophysics experiments proposed for installation and operation in the WIPP underground. On September 3, 2003, DOE provided additional information in support of Enriched Xenon Observatory (EXO) experiment and requested approval for Phase 1.
- Proposed change to allow the emplacement of supercompacted waste from the INEEL Advanced Mixed Waste Treatment Project in the WIPP repository.

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- The proposal includes a technical assessment of waste characteristics and components important to the long-term performance of the repository.
- Proposed change to the Panel Closure System. On October 7, 2002, DOE requested a change to Condition 1 of the Final Rule to have EPA agree that the New Mexico Environment Department (NMED) is responsible for final review and approval of the design and construction of the panel closure system at WIPP. EPA has deferred review of this proposal until after the recertification decision. On December 6, 2002, EPA did approve a delay in installing the complete closure system for Panel 1 pending final decisions on the new design by both EPA and the New Mexico Environment Department.

If you have any questions related to this report, please contact Mr. Russ Patterson at (505) 234-7457.

Sincerely,

Original Signature on File Dr. Inés R. Triay Manager

Enclosures

cc: w/enclosures
H. Johnson, CBFO
R. Patterson, CBFO
B. Forinash, EPA
C. Byrum, EPA
R. Lee, EPA
N. Stone, EPA
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^{*}ED denotes electronic distribution