

Los Alamos National Laboratory

Solid Waste Operations

Environmental Management Division

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Los Alamos, New Mexico 87545

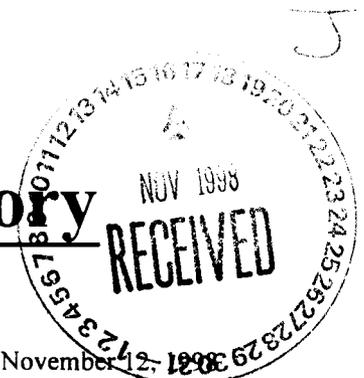
(505) 665-6158 / FAX: (505) 665-8347

Date:

November 12, 1998

Refer to:

EM-SWO:98-179



Mr. H.L. (Jody) Plum
U.S. Department of Energy
Los Alamos Area Office
Los Alamos, NM 87544 – MS A316

SUBJECT: FOURTH QUARTERLY PROGRESS REPORT (1998) FOR CONSENT AGREEMENT FOR COMPLIANCE ORDERS NMHWA 93-01, 93-02, 93-03, 93-04

Dear Mr. Plum:

Pursuant to the requirements of the Consent Agreement for Compliance Order's NMHWA 93-01, 93-02, 93-03, 93-04, the Fourth Quarterly Progress Report (1998) has been prepared detailing progress towards retrieval of waste currently in earthen covered storage on Pad's 1, 2, and 4 at Technical Area 54, Area G. The Report, and a draft letter to Mr. Benito Garcia of the New Mexico Environment Department (NMED), has been included for your review and signature. The Fourth Quarterly Progress Report (1998) is due to the NMED no later than close of business on November 15, 1998.

As described in the Report, the Transuranic Waste Inspectable Storage Project (TWISP) has made substantial progress towards completion of actions as required in the Consent Agreement. Retrieval of waste from Pad 1 is complete, construction has been completed on all storage domes and soil has been removed from Pad 4 in preparation of waste retrieval. We will continue our efforts to maintain compliance with the Consent Agreement.

If you have any questions regarding this matter please contact me at (505) 665-5396 or Sean French at (505) 667-5953.

Sincerely,

Gilbert Montoya
TWISP Manager



Cy: Tom Baca, EM-DO, MS J591
Roger Ferenbaugh, ESH-IEP, MS K491
Sean French, ESH-19, MS J595
Joe Rochelle, LC/GL, MS A187
Anthony Stanford, EM-SWO, MS J595
EM-SWO RMDCC, MS J595

**DRAFT
CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Mr. Benito Garcia, Chief
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Bldg. A
P.O. Box 26110
Santa Fe, New Mexico 87505

**SUBJECT: FOURTH QUARTERLY PROGRESS REPORT (1998) FOR
CONSENT AGREEMENT FOR COMPLIANCE ORDERS
NMHWA 93-01, 93-02, 93-03, and 93-04**

Dear Mr. Garcia:

The purpose of this letter is to submit the Department of Energy/Los Alamos National Laboratory Fourth Quarterly Progress Report (1998) for the Transuranic Waste Inspectable Storage Project (TWISP) at Technical Area 54, Area G. This report is required by Section IX.C of the December 10, 1993 Consent Agreement between the Department of Energy (DOE), the University of California (UC) and the New Mexico Environment Department (NMED).

The enclosed report addresses activities related to the TWISP during the reporting period of August 1, 1998 through October 31, 1998. The following elements, as required by the referenced Consent Agreement, are addressed in the report:

- I. A brief description of activities completed during the reporting period to implement the requirements of the Consent Agreement.
- II. A brief description of activities scheduled for the following reporting period.
- III. A description of any change in key project personnel that occurred during the reporting period.
- IV. A description of problems encountered during the reporting period and mechanisms used or proposed for resolving the problems.
- V. Tables and figures summarizing all data, sampling and test results for the period.

The TWISP Project is enthusiastic about the progress made to date. We will continue to keep you apprised of the progress as per our agreement. If you should have any questions, please feel free to contact me at (505) 665-5042.

Sincerely,

H.L. (Jody) Plum
Office of Environment and Projects

Enclosure

cc w/enclosure:

John Tymkowych
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo Street
P. O. Box 26110
Santa Fe, NM 87505

bcc w/enclosure:

Jack Ellvinger, ESH-19, MS K490
Roger Ferenbaugh, ESH-IEP, MS K491
Sean French, ESH-19, MS J595
Hortense Haynes, LAAO, MS A316
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Anthony Stanford, EM-SWO, MS J595
Robert Dodge, EM-SWO, MS J595
James White, ESH-19, MS K490
Joe Vozella, LAAO, MS A316

**TRANSURANIC WASTE INSPECTABLE STORAGE PROJECT
FOURTH QUARTERLY PROGRESS REPORT
AUGUST 1, 1998 through OCTOBER 31, 1998**

The Transuranic Waste Inspectable Storage Project (TWISP) was initiated in February 1993 in response to the New Mexico Environment Department's (NMED's) Consent Agreement for Compliance Order's NMHWA 93-01, 93-02, 93-03, 93-04. The TWISP involves the recovery of approximately 16,865 TRU and TRU-mixed waste containers currently under earthen cover on Pads 1, 2, and 4 at Technical Area (TA)-54, Area G, and placement of that waste into inspectable storage. All waste will be moved into inspectable storage by September 30, 2003. Waste recovery and storage operations will emphasize protection of worker safety, public health, and the environment.

I. Activities accomplished during the period August 1, 1998 - October 31, 1998

1. Summary

- Received final approval of Unreviewed Safety Question Determination (USQD)-54G-019, R.1, *Discontinuation of Retrieval Dome over Pads 2 and 4*.
- Received final NMED approval of the Revised Remedial Action Plan for TWISP retrieval and storage operations.
- The Drum Venting System (DVS) remains fully operational. The Detailed Operating Procedure for the DVS continues to be updated and validated as conditions change. A total of 4,527 (55)-gallon drums have been successfully vented.
- The DVS is operational, and maintenance of the system is ongoing per the procedure.
- The *FRP Box and Drum Retrieval Operations* procedure was updated.
- The Project Management Plan was updated.
- All of the 4,813 (55)-gallon drums on Pad 1 have been retrieved.
- 4,527 drums have been washed.
- 88 Fiberglass reinforced plywood (FRP) boxes have been retrieved.
- 3 FRP boxes were repaired due to damage caused by soil overburden.
- Soil removal from Pad 4 has been completed, and waste material covered.
- Real-time Radiography (RTR) of TWISP drums continues.
- Preparation for Pad 4 retrieval started this quarter.

2. TWISP Facility Construction

In accordance with the TA-54/FMU-64 Storm Water Pollution Prevention Plan, storm water run-on/runoff controls were installed around Pad 4 during the fourth quarter.

3. Drum Vent System

The Drum Vent System (DVS) remains operational. The TWISP project continues to procure spare parts for the DVS. The system engineer continues to evaluate ways to optimize operation of the system.

4. Equipment Purchasing

Two MART industrial drum washers were purchased during the fourth quarter.

Approximately 5,000 Nuclear Filter Tech, Inc. drum filters were purchased during the fourth quarter.

5. Update on Waste Verification Facilities

Development of new waste characterization processes to supplement existing process knowledge is ongoing. A brief description of facilities and equipment is provided below:

- **Drum Prep Facility:** The DPF is fully operational and being used for drum washing, painting, and venting.
- **Waste Characterization Glovebox, Phases I (sorting), II (coring), and III (head space analysis):** A glovebox for sorting, repackaging and visual examination is now on site and will soon be used in Phase I activities. Headspace analysis equipment is operational and being used in the Waste Characterization, Reduction and Repackaging Facility (WCRRF).
- **Waste Characterization, Reduction and Repackaging Facility (WCRRF) upgrades for verification of hazardous constituents:** The Safety Analysis Report has been approved, and is in the process of being implemented.
- **Radioactive Materials Research, Operations and Demonstration Facility (RAMROD):** RAMROD personnel continue preparing for the DOE-AL Operational Readiness Review (ORR).
- **Real-time Radiography (RTR) for non-intrusive inspection of drum contents:** The Chemistry, Science and Technology Division continues to conduct RTR for all TWISP drums retrieved from Pad 1. The mobile RTR system has been used successfully to inspect 3,000 drums currently stored in TA-54, Domes 229, 230, and 231.

5. Update on Waste Verification Facilities (cont.)

- **Segmented Tomographic Gamma Scanner (S/TGS) to quantify isotopic content of drums:** The Laboratory now has an operational mobile S/TGS that has been used at a variety of Laboratory sites. The S/TGS was augmented with additional software to give it tomographic gamma scanning capabilities.
- **Passive active Neutron Assay (PAN):** The PAN is fully operational for assaying Pu-239 and U-235. The system is currently being used at Technical Area 50 for WIPP drum characterization activities.

6. RCRA Permit Application Activities

NMED's final approval of RCRA permit modifications for TWISP and supporting operations remains on the critical path for the project. NMED legal staff is currently reviewing the TWISP permit modification. No date has been provided by NMED for completion of that review.

II. Activities scheduled for the period November 1, 1998, through January 31, 1999

- Retrieval of waste on Pad 4 will begin.
- Drum venting operations will continue.
- Enhanced environmental surveillance of the TRU Pad area will continue.
- Work will continue at the waste verification facilities.
- Drum washing activities will continue.
- RTR will continue.

III. Changes in key personnel during the period August 1, 1998 - October 31, 1998

No changes occurred.

IV. Problems encountered during the period August 1, 1998 - October 31, 1998

The reliability of the DVS continues to challenge the project.

V. Summary of monitoring during the period August 1, 1998 - October 31, 1998

Continuous air monitoring is ongoing in domes 54-229, 54-230 and 54-231 (storage domes) and, dome 54-33 (drum prep facility). No elevated readings above action limits have been detected.