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GOVERNOR

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**ENVIRONMENT DEPARTMENT**  
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MARK E. WEIDLER  
SECRETARY

EDGAR T. THORNTON, III  
DEPUTY SECRETARY

July 17, 1996

G. Thomas Todd, Area Manager  
U.S. Department of Energy  
Los Alamos Area Office  
528 35th Street  
Los Alamos, New Mexico 87544-8316

Dear Mr. Todd:

The New Mexico Environment Department (NMED) wishes to commend you and your staff and Los Alamos National Laboratory (LANL) staff for improvements made in LANL's efforts to comply with the New Mexico Hazardous Waste Management Regulations (20 NMAC 4.1). LANL has improved its hazardous waste regulatory compliance status as evidenced by NMED's recent inspection conducted on June 10-13, 1996. The violations cited during this inspection resulted in a Letter of Violation, which constitutes an informal enforcement action, instead of a formal Compliance Order resulting from more severe and/or more numerous violations.

However, there is, of course, still room for improvement and NMED expects that LANL will continue to work towards full compliance with hazardous waste regulations as well as all other applicable environmental regulations. Should future inspections find violations in number and type that warrant issuance of a compliance order, then NMED will of course pursue that option.

Again, thank you for your efforts. If you have any questions, please contact me at (505) 827-2834 or Benito Garcia of my staff at (505) 827-1557.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ed Kelley".

Ed Kelley  
Director  
Water and Waste Management Division

xc: Benito Garcia, Chief, HRMB  
Coby Muckelroy, RCRA Inspection/Enforcement Program Manager

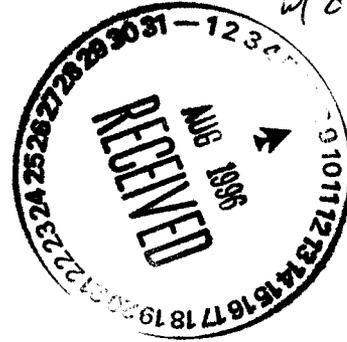


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**Department of Energy**  
Albuquerque Operations Office  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

AUG - 6 1996



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Garcia:

Subject: FY 1996 Third Quarterly Progress Report, Consent Agreement for Compliance Orders NMHWA 93-01, 93-02, 93-03, and 93-04

Enclosed for your review is the FY 1996 third quarterly progress report for the Transuranic Waste Inspectable Storage Project (TWISP) at Los Alamos National Laboratory (LANL). The report is being submitted by the Department of Energy and the University of California as required by Section IX.C of the referenced December 10, 1993 Consent Agreement.

The subject report addresses the activities related to the TWISP during the reporting period of May 1, 1996 through July 31, 1996. The following elements, as required by the referenced Consent Agreement, are addressed for this reporting period:

- 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 changes in key project personnel that have 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.

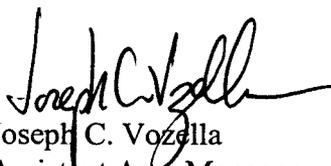
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Benito Garcia

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Supporting documents will be retained at LAAO and will be made available to your staff upon request. As you can see, there has been significant progress. We will continue to keep you apprised of the progress per our agreement. If you should have any questions, please feel free to contact Jody Plum of my staff at (505) 665-5042.

Sincerely,



Joseph C. Vozella  
Assistant Area Manager  
Office of Environment and Projects

LAAMEP:3JP-011

Enclosure

cc w/enclosure:  
Barbara Hoditschek  
Hazardous and Radioactive Materials Bureau  
New Mexico Environment Department  
2044 Galisteo Street  
P. O. Box 26110  
Santa Fe, NM 87505

**LOS ALAMOS NATIONAL LABORATORY (LANL)  
TRANSURANIC WASTE INSPECTABLE STORAGE PROJECT  
QUARTERLY PROGRESS REPORT  
MAY 1, 1996 - JULY 31, 1996**

The transuranic (TRU) 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 NMHWA 93-03. 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 May 1, 1996 - July 31, 1996**

- DOE-AL review of the TWISP Final Safety Analysis Report (FSAR) was completed. Comments have been incorporated.
- A Statement of Work (SOW) was prepared for the retrieval phase of TWISP. DOE-LAAO reviewed and commented on the SOW. Applicable comments were incorporated in the SOW. The Laboratory's BUS-2 contract support personnel are reviewing the SOW. Upon completion of the BUS-2 review, the contract can be released for bid.
- Activities pertaining to the Operational Readiness Review continue. They include: finalizing the plan of action, and the implementation plan start up.
- The power upgrade in support of TWISP characterization equipment (PAN, STGS, RTR, etc.) was completed.
- The contract for installation of the dry pipe fire suppression system was awarded.
- LANL has completed updating the Quality Assurance Program Plan for TWISP.
- The update of the Fire Hazards Analysis for the retrieval dome was completed.

**2. TWISP Facility Construction**

TWISP facility construction commenced upon DOE approval of the TWISP Preliminary Safety Analysis Report (PSAR) in December, 1994. To date, Phase I construction is 100% complete. A final inspection of construction activities was performed as part of the close-out for construction. A "punch list" was generated and completed as part of the final inspection. Fire suppression systems were not part of the contractual agreement, with required installation beginning May, 1996.

Work on upgrading the electrical transformers was completed. The upgrade will provide the necessary electrical power required in operating non-destructive assaying equipment.

The fire suppression installation contract was awarded.

### **3. Waste Analysis Plan (WAP)**

A revised WAP with a specific waste analysis schedule was submitted to NMED in March 1995. Waste Analysis Plan approval by NMED is now on the critical path for retrieval activities and a formal response from NMED is still pending. Most recent action was that LANL received a NOD and a response was submitted to NMED.

### **4. Sampling in Support of Eventual Closure**

Soil samples were collected from various locations as part of the TWISP. Analysis of these samples provided a baseline of information for comparison to be used in the future when the planned storage facilities are eventually closed.

The assessment of data received to date have not identified organic or metal concentrations exceeding site-wide background levels, except for a few constituents commonly associated with analytical laboratory extraction procedures.

### **4. Operational Readiness Review (ORR)**

The ORR Plan of Action, and start-up notification were completed. The ORR Team Leader is drafting the Implementation Plan. The ORR Team Leader is in the process of forming the review team. ORR training was provided for the Team Leader.

### **5. Drum Vent System**

The Drum Vent System (DVS) is complete. The system is undergoing cold testing to verify all working components. Because this DVS was not able to be used at Rocky Flats as originally planned, LANL will incorporate the DVS into the TWISP Operational Readiness Review. LANL is in the process of reviewing the feasibility of procuring an additional DVS from NFT Corporation. Detailed operating procedures for the DVS were completed.

### **6. Equipment Purchasing**

A custom-designed forklift with custom boom/cage/hoist attachment was delivered.

### **7. Update on Waste Verification Facilities**

Development of new facilities for verifying the validity of existing process knowledge are ongoing. A brief description of planned facilities is provided below:

- **Drum Prep Facility:** Upgrades to the Drum Prep Facility were completed. A final inspection of construction activities was performed as part of the close-out for construction. A "punch list" was generated and completed as part of the final inspection. All items identified were satisfactorily addressed. Construction activities are complete as part of the contractual agreement.

- **Waste Characterization Glovebox, Phases I (sorting), II (coring), and III (head space analysis):** The Phase I glovebox is now on site; design for the Phase II glovebox is complete; Phase II ancillary equipment design has been completed. The glovebox is essentially 100% complete.
- **Waste Characterization, Reduction and Repacking Facility (WCRRF) (formerly the Size Reduction facility) upgrades for verification of hazardous constituents:** The Safety Analysis Report has been approved, and is in the process of being implemented.
- **Real-time Radiography (RTR) for non-intrusive inspection of drum contents:** The RTR was delivered in January of 1996.
- **Segmented Tomographic Gamma Scanner (S/TGS) to quantify isotopic content of drums:** The Laboratory now has an operational S/TGS that has been used at a variety of 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.

#### **8. RCRA Permit Application Activities**

A permit modification classification request and proposed permit revision text was submitted December 22, 1995, to supplemental the final draft RCRA Part B permit application of November 1, 1995, for nine container storage areas at the TA-50 Decontamination Facility, the TA-50 Waste Characterization, Reduction and Repackaging Facility, and the TA-54 Radioassay and Non-Destructive Testing Facility. Proposed permit revision text was also submitted on January 31, 1996 for the TWISP Storage Domes and Pads. This is now on the critical path for TWISP start-up.

#### **II. Activities scheduled for the period August 1, 1996, thru October 31, 1996**

1. The TWISP FSAR comments will be approved.
2. The enhanced environmental surveillance of the TRU Pad area will continue.
3. Draft documentation such as the Project Management Plan, Container Recovery Detailed Operating Procedures (DOPs), the Quality Assurance Plan, and the Health and Safety Plan will be finalized by the contractor receiving the retrieval contract. Additional draft DOPs will be completed as necessary.
4. Work will continue on planned waste verification facilities.
5. Work will continue in preparation for the upcoming ORR.

Readiness will be determined based on the following anticipated schedule:

- DOE approval of the TWISP ORR Plan of Action will be obtained by July 30, 1996.

- The implementation plan for the independent verification of readiness will be completed by August 30, 1996.
- The independent review will begin by September 2, 1996. It is anticipated that the independent review will be performed, the results will be documented in a readiness review report, any prestart findings will be closed, and readiness will be certified within eight weeks.
- The readiness to proceed memorandum will be submitted to DOE by November 1, 1996.

Based on this schedule, the anticipated start date for the DOE ORR is November 11, 1996.

6. Installation of the fire suppression system will be completed.

7. TWISP retrieval contract will be awarded.

**III. Changes in key personnel during the period May 1, 1996 - July 31, 1996.**

No changes occurred.

**IV. Problems encountered during the period May 1, 1996 - July 31, 1996.**

No problems encountered.

**V. Summary of monitoring during the period May 1, 1996 - July 31, 1996.**

No new survey data is available.