

United States Government

Department of Energy

# memorandum

Ohio Field Office  
West Valley Demonstration Project

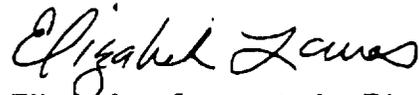
DATE: July 11, 2000

SUBJECT: Weekly Activities Report

TO: Mark E. Rawlings, Team Leader  
West Valley Demonstration Project  
DOE-HQ, EM-31, 1188/CLOV

Attached is a copy of the West Valley Demonstration Project Weekly Activities Report (Predecisional Draft), dated July 11, 2000.

Please advise me if we can provide any further information.



Elizabeth A. Lowes, Acting Director  
West Valley Demonstration Project

## Attachment

cc: A. R. Griffith, EM-21, 2086/CLOV, w/att.  
S. L. Baggett, NRC, TWFN, Room 6 D10, MS-6 F18, w/att.  
T. Jackson, NRC-Region 1, w/att.  
J. D. Parrott, NRC, TWFN, Room 8 C30, MS-8 F37, w/att.  
OH/WVDP Staff, w/att.  
P. L. Piciulo, NYSERDA-WV, w/att.

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**WEEKLY ACTIVITIES REPORT  
WEST VALLEY DEMONSTRATION PROJECT**

July 11, 2000

**CURRENT ACTIVITIES**

**HIGH-LEVEL WASTE PROJECT ACTIVITIES**

- Progress continues toward high-level waste tank heel removal. Completed work this past week included: liquid processing from Tank 8D-1 through the Supernatant Treatment System (STS) to the Liquid Waste Treatment System (LWTS) evaporator; operation of the LWTS evaporator for volume reduction; liquid decanting from tank 8D-2 to tank 8D-1; boil down of liquid in the Concentrator Feed Makeup Tank (CFMT) and the second batch of glass formers to the CFMT; Vitrification Expended Materials Processing (VEMP) support activities, including testing of the mini-max steam cleaner in the Vitrification Test Facility and successful size reduction of the CFMT ADS pump; continued support for the beta/gamma detection arm and mast assembly in the test tower; and installation of the mercury test columns.
- Scheduled high-level waste (HLW) operations next week include: continued Vitrification Expended Materials Processing support including sorting and characterization of existing in-cell components; liquid processing from Tank 8D-1 through the Supernatant Treatment System to the Liquid Waste Treatment System (LWTS) evaporator; operation of the LWTS evaporator for volume reduction; and continued support and installation of the beta/gamma detection arm and mast assembly in Tank 8D-2, riser M-7.
- The melter is currently feeding with the 248th canister, the seventh in fiscal year 2000 under the melter feed pour spout. Canister 246 is scheduled to be welded this week.
- The Office of Site Closure (EM-30) assembled a team and conducted a technical review of the revised West Valley Demonstration Project Waste Form Compliance Plan (WCP) and Waste Form Qualification Report (WQR). The documents were revised to incorporate the strategy to encapsulate Inconel<sup>®</sup> melter hardware in high-level waste canisters. EM-30 issued formal comments to the Ohio Field Office West Valley Demonstration Project (OH/WVDP) on May 17, 2000. OH/WVDP submitted responses to the formal comments on June 13, 2000. EM-30 has completed their evaluation of the responses and considers them acceptable. West Valley Nuclear Services Company (WVNS) will now revise the WCP and WQR in accordance with the accepted responses.
- West Valley Nuclear Services Company (WVNS) transmitted Revision 2 of the "High-Level Waste (HLW) Canister Ship-out from the West Valley Demonstration Project" report to DOE Ohio Field Office West Valley Demonstration Project (DOE-OH/WVDP) on June 28, 2000. The report was revised to evaluate the options and life-cycle costs for alternative interim storage of the HLW canisters at the Project until a Federal Repository is available for final disposal. DOE-OH/WVDP will perform a technical review of the report; the review is scheduled to be completed by the beginning of August 2000.

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**PROJECT COMPLETION**

- Removal of the asbestos material between the Process Mechanical Cell Room (PMCR) roof hatches began this week and will continue into next week. An entry was made into the PMCR to spray fixative on the floor and walls. Additional entries are planned to spray fixative on the underside of the roof hatches and to disassemble the scaffolding.
- Excavation for the column footers continued this week for the General Purpose Cell Crane Room (GCR) Enclosure. Excavation of the eastern most footer was completed and the forms and rebar installed. The studs and drywall for the new wall in the Equipment Decontamination Room (EDR) Change Room were installed.
- Size reduction of the Off-Gas Aisle (OGA) second tank (14D-25A) is complete and awaiting packaging. The Portable Ventilation Unit (PVU) collecting the off-gas from plasma cutting was moved to the EDR in order to change out the pre-filters.
- Dismantlement of the Old Cooling Tower continues with the cutting of the remaining ten-inch fuel pool piping. All of the waste generated from demolition of the Cooling Tower shell has been removed from the Fuel Receiving and Storage (FRS) yard and packaged by Waste Management Operations (WMO). Volume of waste packaged to date is 648 cubic feet which is the skin of the cooling tower.

**WASTE MANAGEMENT**

- The Ohio Field Office reviewed and approved the West Valley Demonstration Project (WVDP) implementation plan for DOE Order 435.1, "Radioactive Waste Management" on July 6, 2000.
- In support of the Site Treatment Plan, preparations continue to begin sorting, inspecting, and sampling debris containing elemental lead in preparation for recycling at GTS or Alaron, or for those waste forms which cannot be recycled, macroencapsulation at Envirocare.
- In support for the leak repair of the Chemical Process Cell/Waste Staging Area (CPC/WSA), Butler Construction is testing a sealant to determine the best application technique and adequacy of adherence on the structure. Work continues in preparation for installation of a roll-up door on the east end of the facility and the placement of steel shielding tables during the leak repair.
- The next waste shipment to Envirocare is scheduled this week, July 13, 2000. This shipment will consist of eight intermodals of miscellaneous debris that will be trucked to railhead in Conway, PA. This shipment will coincide with a Fernald unit train so soil pricing can be obtained for debris disposal.

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**ENVIRONMENTAL, SAFETY, AND HEALTH**

- The Ohio Field Office has reviewed and approved the revised Authorization Agreement (AA) for the West Valley Demonstration Project (WVDP). The revised AA adds the Environmental Program as an Authorization Basis Program and reformats the AA to be consistent with DOE-HQ recommendations.

**QUALITY ASSURANCE**

- The Ohio Field Office West Valley Demonstration Project (OH/WVDP) has assembled a team to complete the revision of the Policy and Procedures manual by August 15, 2000
- The DOE-EM High-Level Waste Quality Assurance Program Audit is being conducted June 10 through 14, 2000.
- West Valley Nuclear Services Company (WVNS) Internal Audits which Ohio Field Office West Valley Demonstration Project (OH/WVDP) staff will participate in include: Spent Nuclear Fuel (SNF) Engineering Activities – August 2000; Waste Management Procedures Implementation – August 2000; Procurement/Material Control – September 2000; and Maintenance – September 2000.

**PROJECT OR PROGRAM SPECIFIC ACTIVITIES****Spent Nuclear Fuel Program**

- The Ohio Field Office West Valley Demonstration Project (OH/WVDP) sent a letter to the Idaho Operations Office requesting concurrence on the adequacy of the OH/WVDP and the West Valley Nuclear Services Company (WVNS) Quality Assurance (QA) Programs for the spent nuclear fuel (SNF) shipment.
- Preparations are underway to begin fuel handling/cask loading operations mockup training. The Transnuclear Big Rock Point (TN-BRP) cask cavity mock-up was installed in a canister in the lift rack, and the TN-BRP mock-up fuel assemblies were installed in the cavity last week. Crew A and B Operations personnel continued on-the-job training on Fuel Receiving and Storage (FRS) equipment, facilities, and Standard Operating Procedures (SOPs) to complete qualification standards.
- Operation of the Transnuclear Inc. (TN) Cask Vacuum Drying System (VDS) continued for the purposes of equipment checkout, procedure development, and operator training last week. Penetration seal testing was also completed. A work request was issued last week to simulate draining of the cask with a pump through a three-way valve to either the pool weir or the settling tank.

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- o Quality Inspection Services (QIS) with oversight provided by a Transnuclear (TN) technical advisor successfully completed the Transnuclear Big Rock Point (TN-BRP) cask helium leak test last week. No leaks of helium were detected during the test. Similar leak tests will be performed on the Transnuclear Robert E. Ginna (TN-REG) later next week. TN provided information required for the impact limiter leak test, which will follow the cask leak tests.
- o The IDOX railcar with the Transnuclear Big Rock Point (TN-BRP) transport frame attached arrived in Buffalo and is expected to arrive at the West Valley Demonstration Project (WVDP) on July 11, 2000. Work orders for receipt and staging of the IDOX railcar on the spur have been issued.

#### Remote Handled Waste Project

- o The U.S. Nuclear Regulatory Commission (NRC) is nearly complete with their review of the Remote Handled Waste Facility (RHWF) Preliminary Safety Analysis Report (PSAR) and is currently preparing an NRC Safety Evaluation Report for the facility in lieu of a Request for Additional Information. With NRC's innovative approach to this review, it is anticipated that DOE approval of the RHWF PSAR will occur ahead of the scheduled September 29, 2000, completion date.
- o The 22 documents that make up the Preliminary Design Deliverables for the Remote Handled Waste Facility (RHWF) have all been reviewed and returned to Butler Construction as "Approved" or "Conditionally Approved" (with comments). Two previously dispositioned "Conditionally Approved" System Design Documents have been resubmitted, reviewed, and returned this week as "Approved."
- o Preparations to allow Butler Construction to begin site mobilization have been completed. Temporary utilities have been routed to the Remote Handled Waste Facility (RHWF) construction site. Butler Construction is scheduled to bring in four or five office trailers this week.

#### Site Support

- o In support of the repair of the Buttermilk Creek culvert, Butler Construction has completed installation of 36 ribs. The project is on schedule for completion by August 31, 2000.

#### Environmental Impact Statement (EIS)

- o U.S. Department of Energy (DOE), New York State Energy Research and Development Authority (NYSERDA), and West Valley Nuclear Services Company (WVNS) are reviewing Science Application International Corporation's (SAIC) 80 percent draft of Chapter 3. SAIC is continuing Environmental Impact Statement (EIS) preparation work on development of Chapter 4. The draft is being reviewed to verify the inclusion of new information on structure, seismic hazard, and nature and extent of contamination. Work on deterministic performance assessment and uncertainty analysis for the high-level waste (HLW) tank in support of the incidental waste determination is in progress. The results of calibrating the

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erosion code SIBERIA using Water Erosion Prediction Project (WEPP) have been documented. The sensitivity runs for SIBERIA are continuing.

- o The U.S. Nuclear Regulatory Commission (NRC) is preparing a commission paper that includes how West Valley Demonstration Project Environmental Impact Statement documents can be shared between agencies informally, which is consistent with the Memorandum of Understanding between the U.S. Department of Energy and NRC. NRC staff anticipates submittal of the commission paper to the commission in the next few weeks.

#### **MEETINGS/TRIPS**

- o Joel T. Case, DOE Idaho, who has been selected as the DOE Spent Nuclear Fuel (SNF) Operational Readiness Review Team Leader will visit the West Valley Demonstration Project (WVDP) on July 20, 2000. The purpose of the visit is for Mr. Case to receive initial briefings and status on the WVDP SNF Program and readiness activities.
- o The next Citizen Task Force (CTF) meeting is planned for August 22, 2000.