

United States Government

Department of Energy

# memorandum

Ohio Field Office  
West Valley Demonstration Project


DATE: February 29, 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 February 29, 2000.

Please advise me if we can provide any further information.

  
Barbara A. Mazurowski, Director  
West Valley Demonstration Project

Attachment

- cc: J. D. Parrott, NRC-HQ, w/att
- T. Jackson, NRC-Region I, w/att.
- A. R. Griffith, EM-21, 2086/CLOV, 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  
February 29, 2000  
CURRENT ACTIVITIES**

**HIGH-LEVEL WASTE PROJECT ACTIVITIES**

**High-Level Waste Transfer Activities**

- Progress continues towards high-level waste (HLW) tank heel removal. Completed work this past week included: completed melter pour/filling of the 246th canister, liquid transfer of 6,812 gallons from Tank 8D-3 to the Liquid Waste Treatment System (LWTS) evaporator, evaporator processing in the LWTS for volume reduction, two HLW Transfers from Tank 8D-2 to the Concentrator Feed Makeup Tank (CFMT) were performed resulting in approximately 76,640 gallons of waste being transferred, and boil down of liquids in the CFMT.
- Scheduled activities next week include one waste transfer from Tank 8D-2 to Concentrator Feed Makeup Tank (CFMT), boil down of liquids in the CFMT, continued operation of the Liquid Waste Treatment System (LWTS) evaporator for volume reduction, and continued CFMT sample pump support.
- The melter is currently in idle with the 247th canister, the sixth in fiscal year 2000 under the melter feed pour spout.

**PROJECT COMPLETION**

- Mock-up of the hard walled airlock for the General Purpose Cell (GPC) Crane Room was completed in the Test and Storage Building and the unit is currently being disassembled for relocation to the General Operating Aisle (GOA). Preparation of the floor area in the GOA is in progress. The airlock will be moved into the GOA early the week of February 28, 2000.
- Construction of the Process Mechanical Cell Crane Room (PMCR) enclosure continues. Installation of the crane rail beams and crane rails were completed and pouring of the concrete floor was completed. The design of the equipment for the removal of the PMCR roof hatches is complete and the drawings are in preparation.
- Completed core drilling of an eight-inch diameter hole into the roof hatch of Extraction Cell 1 (XC-1). The hole provides access for the installation of video and radiation monitoring equipment into XC-1. The effort is to acquire current radiological and in-cell data.

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- The results from Analytical and Process Chemistry (A&PC) have confirmed that the samples obtained from the Fuel Receiving and Storage Area (FRS) Cooling Tower concrete block building are Asbestos Containing Materials (ACM). The site Asbestos Engineer has been notified that work to remove the ACM must be initiated.
- The Data Quality Objectives (DQOs) and work order for sampling for the Mechanical Operating Aisle (MOA) Project are being revised to reflect a new approach to sampling design for radioactive classification. This approach will reduce the number of samples required to meet the Waste Acceptance Criteria (WAC) for off-site disposal.
- The proposal for the West Valley Demonstration Project (WVDP) Permeable Treatment Wall project for the EM-50 Accelerated Site Technology Deployment (ASTD) program was completed and forwarded to the Ohio Field Office. Proposals are due to the ASTD program office at Idaho National Engineering and Environmental Laboratory (INEEL) by March 3, 2000.
- A conference call is being scheduled with Argonne National Laboratory (ANL) regarding their dual-arm work platform technology. ANL is requesting the West Valley Demonstration Project (WVDP) be a subsequent deployment site under the ASTD program. Requests for subsequent deployment of technologies at the WVDP were also received for gamma spectroscopy software (Sandia National Lab and Thermo Retec Corporation) and an in-pipe characterization unit (Columbus Environmental Management Project). Information was received from RMI on magnetic resonance technology for detection of underground contaminants. A request to be a subsequent deployment site is expected by the end of February 2000, along with additional technical information. Discussions were held with the Mixed Waste Focus Area regarding a waste characterization technology need. Technical information is being forwarded to the WVDP.

## WASTE MANAGEMENT

- In support of the Lag Storage Area (LSA) 4 Phase II Project (Shipping Depot and Connector), roofing installation is complete. Installation of conduit and electrical fixtures in the depot high bay and office areas continues. Depot high bay and office heating, ventilating, and air conditioning (HVAC) installation has started. Delivery and installation of the ramp end plates and LSA-4 column modification steel is expected next week.

## PROJECT OR PROGRAM SPECIFIC ACTIVITIES

### Spent Nuclear Fuel Program

- In support of the Borated Stainless Steel (BSS) Acceptance Testing Program for the Transnuclear Big Rock Point (TN-BRP) and Transnuclear Robert E. Ginna (TN-REG) cask baskets, two BSS plates were removed from the top row of each cask basket and shipped to

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Westmoreland Mechanical Testing and Research, Inc. (WMTR). This approach was accepted by the U.S. Nuclear Regulatory Commission (NRC) on February 14, 2000. Transnuclear Inc. (TN) will place an order with Carpenter Technology for BSS material for replacement plates for those removed for the BSS Acceptance Testing Program. TN has placed the purchase order with WMTR for fracture toughness testing of the BSS. TN and West Valley Nuclear Services Company (WVNS) Quality Assurance will conduct a joint audit of WMTR on February 29, 2000. Testing will include Charpy V-notch, tensile, and J-integral type impact fracture toughness tests at -20 degrees Fahrenheit, and subsequent metallography and fractography. The testing is expected to be completed by early April 2000.

- o Transnuclear Inc. (TN) continues to prepare revised Transnuclear Big Rock Point (TN-BRP) and Transnuclear Robert E. Ginna (TN-REG) cask safety analysis reports (SARs) for full loads for submittal to the U.S. Nuclear Regulatory Commission (NRC). TN will transmit drafts of completed sections of the SARs to the West Valley Demonstration Project (WVDP) on March 3, 2000. Chapters 6 (Criticality), 7 (Operating Procedures), and 8 (Maintenance) will be transmitted to WVDP on March 17, 2000. The borated stainless steel fracture toughness testing results will be incorporated into the SARs as an Appendix to Chapter 2 (Structural) following completion of the testing. TN will provided a detailed schedule for completion of the SARs by March 10, 2000. The goal is the submit the revised SARs for full loads including damaged fuel to the NRC in April 2000.
- o The Ohio Field Office West Valley Demonstration Project issued meeting minutes for the February 14, 2000, U.S. Department of Energy (DOE) - U.S. Nuclear Regulatory Commission (NRC) Technical Meeting on the Borated Stainless Steel Acceptance Testing Program.
- o The Ohio Field Office West Valley Demonstration Project (OH/WVDP) and the Foreign Research Reactor (FRR) Program will meet with the Seneca Nation of Indians on March 16, 2000. OH/WVDP will discuss the planned shipment of the 125 spent nuclear fuel (SNF) assemblies currently stored at the West Valley Demonstration Project. This shipment is scheduled for 2001. The FRR Program will discuss the plan for the FRR SNF shipment from Canada that is scheduled for Summer 2000.

#### Remote Handled Waste Facility

- o Butler/Raytheon and West Valley Nuclear Services Company (WVNS) personnel visited the Waste Receiving and Packaging (WRAP I) facility in Hanford and obtained design/operational data on a bagless transfer system in use there. The tour of the facility and discussions with their engineering and operational people was very productive. An electronic version of selected WRAP's design drawings is being obtained from Hanford.

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- o Remote Handled Waste Project (RHWP) personnel met with Pacific Northwest National Laboratory (PNNL) personnel on February 17, 2000, to gain the latest information on remote size reduction technology and end effector development. After the meetings, PNNL provided a tour of a facility where new powered dexterous manipulators were being tested along with new PNNL designed end effectors.
- o The Ohio Field Office (OH) and the Ohio Field Office West Valley Demonstration Project (OH/WVDP) completed the joint review of WVNS-SAR-023, Rev. 0, Draft B, "Preliminary Safety Analysis Report for the Remote Handled Waste Facility." Consolidated comments were provided to the West Valley Nuclear Services Company on February 23, 2000.

#### Site Support

- o A design review close-out meeting for the repair of the Buttermilk Creek culvert was held on February 25, 2000, with no major issues noted. The culvert pipe for the full-scale mock-up has been received. The purchase order for the ribs to be used in the full-scale mock-up has been placed. The Army Corps of Engineers has issued a draft Section 404 permit for the proposed repair, which will be out for public comment through March 17, 2000. In addition to the Army Corps permit, the New York State Department of Environmental Conservation (NYSDEC) has determined that a Fresh Water Wetlands Permit is required. The present schedule for issuance is March 17, 2000.
- o Preliminary analysis of the Lake No. 1 Dam indicates that a major repair is not required and that the stability safety factor is well within acceptable limits. This positive result resolves the immediate concern for the railroad use over the dam. The final report will be issued after completion of the monitoring program and confirmatory analysis. Monitoring will continue for several months.

#### Environmental Impact Statement (EIS)

- o The public comment period for providing comments on the U.S. Nuclear Regulatory Commission's (NRC) Draft Policy Statement regarding decommissioning criteria for the West Valley Demonstration Project and West Valley Site has been extended to April 1, 2000. A Federal Register Notice announcing this extension was published February 24, 2000. The U.S. Department of Energy intends to provide comments during this comment period.

#### **ENVIRONMENT, SAFETY, HEALTH**

- o The Ohio Field Office West Valley Demonstration Project (OH/WVDP) and West Valley Nuclear Services Company (WVNS) completed activities associated with the Department-wide Nuclear Criticality Safety (NCS) Improvement Initiative. The actions included NCS Program self-assessments by both OH/WVDP and WVNS, and the development of NCS-related performance measures.

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**QUALITY ASSURANCE**

- Ohio Field Office West Valley Demonstration Project (OH/WVDP) staff is planning to participate in West Valley Nuclear Services Company (WVNS) Internal Audits in Radiation Protection Program the week of February 28, 2000; Price Anderson Amendments Act (PAAA) Program the week of March 13, 2000; Measuring and Test Equipment the week of March 13, 2000; and Waste Characterization Process the month of April 2000.

**MEETINGS/TRIPS**

- The Citizen Task Force (CTF) Meeting scheduled for February 15, 2000, has been rescheduled for Tuesday, April 11, 2000.
- T. Vero, DOE and D. Ploetz, WVNS met with the U.S. Nuclear Regulatory Commission on February 23, 2000, and provided an overview briefing of the Remote Handled Waste Facility and its associated Preliminary Safety Analysis Report.
- T. Jackson, A. Al-Daouk, and C. Eckert will be attending the West Valley Demonstration Project (WVDP) Spent Nuclear Fuel (SNF) Shipping Meeting in Las Vegas, NV on February 29 through March 1, 2000. The purpose of the meeting is to coordinate the activities for shipping the SNF to Idaho and the participants include personnel from various Federal Agencies, Rail Road companies, Idaho, and West Valley Nuclear Services Company (WVNS).