

Enclosure 2

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**Civilian Radioactive Waste Management System
Management & Operating Contractor**

Monthly Summary Report

December 1996

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1. PROGRAM-LEVEL REPORT

December was another month of steady progress across the program with the exception of the TBM.

The TBM became the victim of natural phenomena as it entered an area of loosely constituted rock. Progress slowed as constructors struggled to provide the TBM with surfaces it could "grip" in order to thrust forward through the mountain. Operations were largely reduced to hand-mucking material that continually fell into the tunnel. Alternative ways to accelerate progress were being developed. Elsewhere in the ESF, work continued on schedule. Alcove and test facility tunneling moved forward and preparations continued on the Large Block Test for heat-up. All Yucca Mountain Project deliverables scheduled for the month were completed on time.

The East Coast-based M&O supported development of the RFP for the Regional Servicing Agents under the initiative for privatization of the spent fuel acceptance and transportation functions. DOE issued the draft RFP for industry comment during the month. Extensive work resulted in a successful transition to the multi-year baseline. Good progress continued on both the Topical Safety Analysis Report and responses to NRC questions concerning the Actinide Burnup Credit Topical Report.

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2. YUCCA MOUNTAIN PROJECT REPORT

December was another progressive month with all deliverables scheduled for the period submitted on time. Expert Elicitation and Performance Abstraction workshops were held in support of unsaturated zone processes. Good progress was made in readying the Large Block Test for heat-up, and important testing at the C-Well complex was completed.

The rate of advance of the TBM was slower than for previous months due to an unexpectedly long section of poorly consolidated rock. Operations have been reduced to hand-mucking material that is falling into the tunnel. Common advance rates were 1 to 2-meters a day. According to geologic projections, this situation could continue for some time. Alternative measures to accelerate progress if the poor rock quality persists are under investigation. Alcove construction is proceeding as planned.

HIGHLIGHTS

- Advanced tunnel excavation to Construction Station 71+30.8 meters (23,369 feet or 4.4 miles). Progress using the TBM was 54.6 meters (179 feet).
- Advanced the Upper portion of the Heated Drift to Station 0+39.4 meters (129 feet). Progress was 26.4 meters (86.6 feet).
- Completed excavation of the Turn Around Bay and continued excavation of the Southern Ghost Dance Fault. Total progress for the month was 20.3 meters (66.6 feet).
- Completed tracer testing at the C-Hole Complex. Testing verified previous laboratory models, and provided confidence that YMP can construct a predictive transport model. Retardation of lithium substantiated earlier laboratory findings of retardation in YMP tuffaceous rock, and physical retardation of polystyrene microspheres compared closely to earlier laboratory determinations.
- Completed installing the first and second layers of the Large-Block Test (LBT) which included installing rubber membranes, ultratemperature insulations, and electric resistance tomography probes (ERT). Three layers need to be completed before LBT is initiated; the third layer of the LBT was grooved for ERT electrodes.
- Completed phase 1 of the Geographic Nodal Information Study and Evaluation System (GENISES) database restructuring. Data incorporation time was reduced by 60%, and an on-line ready data retrieval capability was provided.
- Completed the 1st Performance Abstraction Workshop on the Unsaturated Zone process Model. The Performance Assessment and Scientific Programs staffs worked together to define the process model in Total System Performance Assessment (TSPA).
- Completed the second Expert Elicitation Workshop on Alternative Models and Interpretations to present alternative models affecting the Unsaturated Zone flow and transport model. The

workshops involve internal and external experts and are being used to strengthen the basis for treating unsaturated zone flow in the TSPA.

- Completed a proposal for a criticality analysis of Savannah River aluminum clad and aluminum based fuel. The analysis would determine packaging concepts that would enhance the probability of fuel being acceptable for disposal without re-canisterization. The proposal will be presented as a model for the analysis needed for all DOE-owned spent fuel.
- Delivered the Site Environmental Report to DOE Headquarters, State of Nevada, American Indian tribes, and public stakeholders. The annual report statuses YMP environmental programs, confirms environmental compliance, and highlights significant program efforts.
- Provided a tour of Yucca Mountain to the Nevada Legislatures Committee on High-Level Radioactive Waste. An update was also presented during their quarterly meeting in Pahrump, Nevada.

3. WASTE MANAGEMENT AND INTEGRATION (WM&I) REPORT

Activities in December continued to emphasize providing support to OCRWM Headquarters as Federal staff become more directly involved in the technical elements of the Program.

Two significant events in December stand out. DOE released a draft RFP for Regional Servicing Agents under the initiative for privatization of the spent fuel acceptance and transportation functions. Also, a Director's Program Review was conducted in which the status of Program activities was reviewed against a multi-year baseline for the first time.

The M&O provided critical support to the development of work scope for the draft RFP. M&O personnel also ensured copies of the RFP were reproduced on compact discs and as complete text on the OCRWM internet home-page between the Christmas and New Year holidays.

M&O personnel have been working closely with DOE counterparts over the last several months to affect the transition to the multi-year baseline. The prompt development and approval of FY 1997 work plans, earlier in the year than ever before, permitted conversion to the multi-year reporting mode. This achievement was noted by senior OCRWM management.

Good progress continues to be made in both the development of the Topical Safety Analysis Report (TSAR) for a canister-only ISF and in preparation of responses to NRC staff questions concerning the Actinide Burnup Credit Topical Report. A briefing was provided to YMSCO staff to communicate the design bases for the ISF being used in the TSAR and ensure a compatible approach with those under consideration for repository surface facilities. In the case of the burnup topical report, preliminary informal agreements have been made by commercial cask vendors to provide analyses specific to their cask designs in the report. We expect that DOE will receive formal confirmation of these commitments in the coming weeks. Including these analyses in the topical report provides evidence that the cask industry supports the topical report activity and recognizes its benefits. The inclusion will signal to the NRC the relevance of this analysis to the industry and, should the NRC approve it, the possible intent to apply the credit in future designs.

The most recent activity supporting DOE's consideration of SNF disposal in a repository was submission of a performance assessment for inclusion in an INEL report. Recognition of the continuing support that has been provided came in the form of a laudatory letter from EM to RW-40 praising the work of both DOE and M&O personnel.

WASTE ACCEPTANCE, STORAGE AND TRANSPORTATION (WAST) HIGHLIGHTS

- The timely development and approval of FY 1997 work plans permitted the conversion to the multi-year reporting mode. The Program activities status was reviewed against a multi-year baseline at the Director's Program Review. This was the first time this performance measurement could be made.
- Completed ISF site, transfer facility, and storage configuration item design criteria.

- Completed the ALARA evaluation of the ISF. Remote handling equipment will be required to limit occupational exposure.
- Completed a draft annotated outline for Section 180(c), Notice of Final Policy and Procedures.
- Developed highway and railroad maps illustrating interjurisdictional eligibility for Section 180(c) grants.
- Completed the Draft RFP for the Regional Servicing Agents procurement. Copies of the Draft RFP are available to the public via hard copy, CD-ROM, and the OCRWM Home Page.
- Assisted DOE in preparing and distributing a letter to Purchasers notifying them that the 1998 deadline for pickup of SNF would not be met; invited views from contract holders on how to accommodate the delay.
- Obtained preliminary/informal agreement from commercial vendors that they will perform a sample calculation using the Actinide-Only burnup credit methodology to produce a loading curve for their individual casks/canisters. The calculation will be included in an appendix to the revision of the Burnup Credit Topical Report to be submitted to the NRC.

PROGRAM MANAGEMENT AND ADMINISTRATION HIGHLIGHTS

- Posted the Notice of Proposed Rulemaking to amend 10 CFR 960, the Draft Regional Servicing Agency RFP, and the *OCRWM Enterprise* (December 1996) on the OCRWM Home Page.
- Completed and delivered the performance assessment appendix deliverable for the INEL SNF plan to DOE.

REPOSITORY ANALYSIS FOR PLUTONIUM DISPOSITION HIGHLIGHTS

- The *Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement* was released with the ROD decision scheduled for mid-January 1997.

4. PROGRAM QUALITY ASSURANCE REPORT

HIGHLIGHTS

- **DOE Audit Results (MO-ARP-97-04) on the ISF TSAR work effort performed in Charlotte, NC and Vienna, VA resulted in an overall evaluation of "EFFECTIVE."**
- **Finalizing comments on draft 1 of the QA Consolidation Plan Phase A for submission to OQA. Continuing development of requirements for the Engineering Assurance Organization.**