

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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TO:

John J. Linehan, Director, HLPD, M/S 4 H 3

FROM:

Paul T. Prestholt and John W. Gilray

Sr. On-Site Licensing Representatives

DATE:

January 31, 1991

SUBJECT:

YUCCA MOUNTAIN PROJECT WEEKLY HIGHLIGHTS

Please find enclosed the above-referenced report for

the weeks ending January 11, and January 18, 1991.

There is nothing requiring specific management attention in these reports; there is a notation added onto the 1/18/91 report.

nan

cc w/encs.: King Stablein, M/S 4 H 3

Harold R. Denton, M/S 17 F 2

Dean Kunihiro, Region 5



## **Department of Energy**

Yucca Mountain Site Characterization
Project Office
P. O. Box 98608
Las Vegas, NV 89193-8608

WBS 1.2.9 QA: N/A

IAN 24 1991

John W. Bartlett, Director, Civilian Radioactive Waste Management, HO (RW-1) FORS

OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING JANUARY 18, 1991

## I. CRITICAL ITEM STATUS - YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP)

## A. Site Characterization Planning

#### Midway Valley Trenching

The Midway Valley Readiness Review was completed on January 11, 1991. The Review Record Memorandum identifying open items was transmitted on January 15, 1990. Revision 4 of the Midway Valley time-phased logic network was approved on January 15, 1990.

The Midway Valley Activities Exploratory Trenches Design Package Drawings and Specifications have been submitted to the YMP Change Control Board and baselined.

The Yucca Mountain Site Characterization Project Office (YMPO) has completed a management review of "The Technical Requirements for the Yucca Mountain Project (Midway Valley Trenching and Calcite/Silica Activities)," Revision 3. This document has been submitted to the YMP Change Control Board and baselined. YMPO may now use this document to initiate Midway Valley field activities.

#### Site Characterization Plan (SCP) Progress Report

The final draft of the third semiannual "Progress Report on Site Characterization: Yucca Mountain, Nevada" (Semiannual Progress Report [SPR] 3), for the period April through September 1990, was forwarded to the U.S. Department of Energy/Headquarters (DOE/HQ) for their concurrence review on January 11, 1991. Upon completion of this review, the YMPO will finalize a camera-ready copy of SPR 3 for submittal for printing.

Carl Gertz gave this office a copy of this document. He said he didn't mind if we forwarded it to NEC-Hq. We are holding it waiting for resolution of DOE-Ha & YMP understandings.

#### SCP Comments

Response development for the State of Nevada's September 1989 comment package on the statutory SCP continued. The OGD intends to send DOE/HQ draft responses to recommendations in the Nuclear Waste Technical Review Board's (NWTRBs) Second Report to the U.S. Congress before the end of January 1991.

#### SCP Study Plan Status

The following study plans were approved by the Regulatory & Site Evaluation Division Director and the Yucca Mountain Quality Assurance Division Director and are ready for controlled distribution:

Study Plan 8.3.1.2.1.3, "Characterization of the Regional Ground-Water Flow System"

Study Plan 8.3.1.2.2.1, "Characterization of Unsaturated Zone Infiltration"

Study Plan 8.3.1.17.4.6, "Quaternary Faulting Within the Site Area"

Study Plan 8.3.1.17.4.10, "Geodetic Leveling"

#### STUDY PLAN BREAKDOWN

In Revision After Screening Review				•	1
In YMPO and HQ Review					14
Awaiting Comment Resolution Meeting	•	•	٠	•	9
Awaiting Author Revision		•	•	•	7
In YMPO/HQ Verification Audit	•	•	•	•	5
Verification Complete-Awaiting HQ Sign-off					2
Awaiting YMPO Approval	•	•	•	•	1
Approved and Awaiting Transmittal to NRC	•	•	•	•	
NRC Acceptance Review					10
NRC Acceptance	•	•	•	•	4
•					
Total	•	•	•	•	60

## Exploratory Shaft Facility (ESF) Alternatives and Calico Hills Risk Benefit Assessment

The YMPO formally presented to John Bartlett, Director, Office of Civilian Radioactive Waste Management (OCRWM), a set of acceptable ESF design options. These were based on the review of the Sandia National Laboratories (SNL) Executive Report, "Findings of the ESF Alternative Study." This satisfies YMPO Milestone YK05M.

#### Testing Prioritization Task (TPT)

Core Team members continued to compile and draft sections of the Phase 1 final report.

An assessment meeting of the Integration Team was held on January 18-19, 1991, in Las Vegas, Nevada.

## B. Environmental and Transportation Programs

### Environmental Compliance and Permitting

The U.S. National Park Service review and approval of the groundwater monitoring plan is expected in January 1991. Once the plan is approved, they will withdraw their protest of the water appropriation permit application.

#### Environmental Field Programs

A site visit to Apache Leap, Arizona, was made to collect soil and vegetation samples and information that will be used to develop a reclamation plan for the prototype drill hole.

## C. Field Operations

The Site Manager reviewed and affixed his signature of approval on the two Safety and Health Administrative Procedures (APs) that were essential for Midway Valley Trenching preparedness. These APs were:

AP-6.12 - Safety and Health Record Keeping and Reporting

AP-6.18 - Resolution of Safety and Health Concerns

The Site Manager and the Field Operations staff have finalized the required Field Operating Instructions (FOIs) for Midway Valley Trenching preparedness. The Site Manager has approved these ten FOIs, and a letter to this effect has been submitted to the Project Manager, YMPO, and other key staff personnel.

Notices-to-Proceed for Job Packages 91-3, Field Management, and 91-4, Environmental Field Programs have been approved.

Specimens from existing core have been delivered to John Stuckless and Al Yang, U.S. Geological Survey (USGS).

A Sample Overview Committee approved Lawrence Livermore National Laboratory specimen removal requests for Marilyn Ten-Brink and Steve Blair, and resolved status of tabled specimens for John Stuckless during a meeting held on January 15, 1991.

## D. Project Planning and Control

Completed fiscal year 1991 Planning and Control System (PACS) updates for Technical and Management Support Services (T&MSS), MAC Technical Services Company, Reynolds Electrical & Engineering, Co., Inc., and Raytheon Services Nevada. Updates included the revision of summary account budget values to agree with allocations. Partial inputs have been received from Los Alamos National Laboratories (LANL) and input into PACS.

## E. QA Implementation

YMPO QA met with representatives from EG&G, Inc., on January 15, 1991, to discuss software QA requirements.

YMPO QA continued preparation for the upcoming QA Workshop. The Workshop will be held January 22-23, 1991, at the Howard Johnson Suites in Las Vegas, Nevada.

YMPO QA representatives attended the January 25, 1991, bimonthly U.S. Nuclear Regulatory Commission DOE meeting in Washington, D.C.

## F. Major Oversight Group Meetings

An NWTRB Full Board Meeting was held January 16-17, 1991, in the Washington, D.C., area. John Bartlett, Director, OCRWM, and David Leroy, Nuclear Waste Negotiator, plus representatives of industry, environmental organizations, public policy groups, and state interests were invited to speak regarding the disposal of high level waste.

## G. Public Outreach Activities

On January 15-16, 1991, Carl Gertz and Ace Robison represented the YMTPO at the Strategic Principals Workshop, DOE/HQ, Washington, D.C.

On January 16, 1991, Darwin Morgan and Frank Maxwell of YMPO, and Monica Dussman and Paul Standish of T&MSS made a presentation to the National Congress of American Indians in Sacramento, California. The meeting resulted in a good exchange of dialogue:

On January 18, 1991, Ace Robison received briefings on USGS activities in Denver, Colorado.

## H. Near Term Decision Plan

Milestone YKO5M "Report to RW-1 on ESF Configuration" was completed by the briefing given on January 14, 1991.

#### II. ANALYSIS & VERIFICATION DIVISION

Attended the Site Suitability Ad Hoc Core Team Meeting.

Attended the Strategic Principles workshops discussions related to site characterization and the repository program on January 16, 1991, in Las Vegas, Nevada.

Supported the YMP's "Recommendation of the Preferred Option for the ESF Alternatives Study," presentation to John Bartlett on January 14, 1991.

#### III. SIGNIFICANT ACCOMPLISHMENTS/INFORMATION ITEMS

YMPO support for Management System Improvement Strategy, included the following:

The Functional Analysis working group session continued in Las Vegas, Nevada.

## IV. UPCOMING EVENTS CALENDAR

Please note that the usage of "(P)" in the calendar indicates that the event is open to the public.

	Date	Event	Location	YMPO Contact
A.	DOE/HQ Meetings			
	Wednesday, January 30	Program Management Meeting	Washington, DC	C. Gertz, YMPO
в.	Internal and DOE	/NV Meetings		
	Thursday, January 24	State of the Project to SNL	Albuquerque, NM	C. Gertz, YMPO
	Friday, January 25	State of the Project to LANL	Los Alamos, NM	C. Gertz, YMPO
	Thursday, February 21	Planning & Budget Meeting	Las Vegas, NV	C. Gertz, YMPO
	Friday, February 22	TPO Meeting	Las Vegas, NV	C. Gertz, YMPO
c.	State and Public	Interactions (P)		
	Friday, February 1	Three Mile Island	Middletown, PA	C. Gertz, YMPO
	Thursday, February 7	Disabled American Veterans	Las Vegas, NV	C. Gertz, YMPO
	Friday, February 8	Chamber of Commerce	Las Vegas, NV	C. Gertz, YMPO
	Thursday, February 28	Waste Management 91	Tucson, AZ	C. Gertz, YMPO
	Wednesday, May 1	High Level Waste Management Conf.	Las Vegas, NV	C. Gertz, YMPO
	Tuesday, April 16	Tunnels '91	Golden, CO	C. Gertz, YMPO

	Date	Event	Location	YMPO Contact
D.	Exhibits			
	Tuesday- Wednesday, January 15-16	National Congress of American Indians	Sacramento, CA	M. Powell, YMPO
	Wednesday- Thursday, January 23-24	Salute to Seniors	Las Vegas, NV	M. Powell, YMPO
	Friday- Saturday, February 8-9	Southern Nevada Council for the Social Studies	Las Vegas, NV	M. Powell, YMPO
E.	NRC Interactions			
	Tuesday- Thursday, January 29-31	NRC Calico Hills Risk-Benefit Analysis ESF & TPT Meeting	Washington, DC	A. Simmons, YMPO
	Wednesday, February 20	NRC Seismic Hazards Staff Technical Position TE	Washington, DC	A. Simmons, YMPO
	Tuesday, March 12	NRC Management Mtg. on Procedural Agreements	Washington, DC	A. Simmons, YMPO
	Wednesday- Thursday, March 20-21	NRC TE on Radionuclide Retardation & Mineral Stability		A. Simmons, YMPO
	Tuesday, April 16	NRC Thermal Loading and Repository Design Staff Technical Position TE	Washington, DC	A. Simmons, YMPO
	Wednesday, May 15	WIPP Roundtable Discussion	TBD	A. Simmons, YMPO
F.	NWIRB Interactions	(P)		
	Tuesday- Thursday, April 16-18	NWTRB Full Board Meeting	Reno, NV	A. Simmons, YMPO

	Date	Event	Location	YMPO Contact
F.	MWIRB Interacti	ons (P) (Continued)		
	Tuesday- Thursday, July 15-18	NWTRB Full Board Meeting	Arlington, VA	A. Simmons, YMPO
	Tuesday- Thursday, October 8-10	NWTRB Full Board Meeting	TBD	A. Simmons, YMPO

Carl P. Gertz, Project Manager

Yucca Mountain Site Characterization Project Office

#### YMP:DLH-1781

cc:

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J. C. Bresee, HQ (RW-10) FORS

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## Department of Energy

Yucca Mountain Site Characterization
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WBS 1.2.9 QA: N/A

## JAN 14 1991

John W. Bartlett, Director, Civilian Radioactive Waste Management, HQ (RW-1) FORS

OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING JANUARY 11, 1991

## I. CRITICAL ITEM STATUS - YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP)

## A. Site Characterization Planning

## Midway Valley Trenching

The Readiness Review for Midway Valley Activities was reconvened on January 9, 1991, and is scheduled to close on January 10, 1991. A new revision of the time-phased logic network will be issued after the meeting.

The Yucca Mountain Site Characterization Project Office (YMPO) has accepted the construction/drawings and specifications for the Midway Valley Trenches in Area A.

#### Site Characterization Plan (SCP) Progress Report

A final draft of Progress Report 3 for the reporting period of April 1, 1990 - September 30, 1990, is complete. OGD awaits approval of a revised Office of Civilian Radioactive Waste Management concurrence chain for approval of the document prior to arranging for printing and issuance by the Office of Scientific and Technical Information at Oak Ridge, Tennessee.

#### SCP Comments

Work continues in preparation for the Comment Response Integration Group Meeting on January 29-31, 1991. OGD intends to send completed and reviewed draft responses to the Nuclear Waste Technical Review Board's (NWTRB) 20 recommendations (in their Second Report to the U.S. Congress) to the Office of Systems and Compliance before the end of January 1991. Continued response development for the State of Nevada's September 1989 comment package on the statutory SCP will be addressed during the meeting.

## SCP Study Plan Status

A minor revision (revision 1) of Study Plan 8.3.1.17.4.2, "Study Plan for Evaluating the Location and Recency of Faulting Near Prospective Surface Facilities," was approved, and controlled copies of the revision were issued.

A meeting was held to resolve outstanding, disputed YMP comments on Study Plan 8.3.1.2.2.3, "Characterization of Percolation in the Unsaturated Zone—Surface Based Study." All comments have now been resolved and verified for this study plan, and it will be ready for approval when a clean text is received from the U.S Geological Survey (USGS).

The comment resolutions have now been verified for all comments on Study Plan 8.3.1.5.1.4, "Analysis of the Paleoenvironmental History of the Yucca Mountain Region." The study plan is being readied for approval.

#### STUDY PLAN BREAKDOWN

In Revision After Screening Review	1
In YMPO and HQ Review	14
Awaiting Comment Resolution Meeting	9
Awaiting Author Revision	7
In YMPO/HQ Verification Audit	5
Verification Complete-Awaiting HQ Sign-off	2
Awaiting YMPO Approval	5
Approved and Awaiting Transmittal to NRC	3
NRC Acceptance Review	10
NRC Acceptance	4
Total	60

## Exploratory Shaft Facility (ESF) Alternatives and Calico Hills Risk Benefit Assessment

The YMPO has completed its review of the Sandia National Laboratories Executive Report, "Findings of the ESF Alternatives Study."

#### Testing Prioritization Task (TPT)

Core Team members continued to compile and draft their various sections of the Phase 1 final report.

The Core Team met on January 11, 1991, to coordinate plans for the next assessment meeting of the Integration Team to be held on January 17-19, 1991, in Las Vegas, Nevada.

The Quality Assurance Grading Report was submitted to the Quality Review Board for their review.

The TPT Implementation Plan underwent Quality Management Procedure 06-04 review, and a Conference Review was held January 11, 1991.

Records Package Segment II was submitted to the YMPO Local Records Center.

## B. Environmental and Transportation Programs

#### Environmental Compliance and Permitting

The Environmental Compliance staff participated in the review and comment resolution meetings for the ESF Alternatives Study Executive Summary. Environmental permitting and land access implications were presented to the study team and Project Managers.

### Environmental Field Programs

Construction is underway on the pipe handling system. A shakedown test of the LM-300 with the pipe handling system is tentatively scheduled for April 1991. Lang Exploratory Drilling will conduct the shakedown, and they are looking for a convenient test site at this time. With the recent resolution of funding, backup spare parts for the LM-300 are in the process of being ordered.

The preactivity surveying of 60 miles of washes for the USGS Hydrological Study was completed. Work continues in this area of approximately 180 miles total.

A site visit to Apache Leap, Arizona, was made to conduct a survey for developing site-specific reclamation stipulations.

Data collection, entry, and verification of vegetation is an ongoing environmental requirement. Small mammal data collected during December 1990 trapping was also entered.

### C. Field Operations

The Site Manager and his Field Operations support staff are making final preparations for the forthcoming Yucca Mountain Project Site Open House and Tour on February 9, 1991. Vehicular support

requirements, busing, meal arrangements, security, drivers, and briefers for the tour of the Yucca Mountain Site Office (YMSO), Building 4015, are the prime Field Operations tasks. This open house will demonstrate state of readiness by YMPO in preparation for the start of the Midway Valley Trenching field activities. The heavy equipment for the construction efforts and the required materials will be mobilized and staged in Area 25 in the proximity of Midway Valley on or about January 23, 1991, and will remain in place until February 11, 1991.

The field activity work on Job Package 90-1, Remedial Borehole Work, is nearing its completion. Raytheon Services Nevada and Reynolds Electrical & Engineering Co., Inc. (REECo), are working at Stations USW G-2 (running geophysical logs) and USW GU-3 (removing broken wireline, retrieving canister, and rigging down the Ideco 37 drill rig and equipment).

The Site Manager has instructed REECo's Yucca Mountain Project Division, Logistical Support Department, to have the modular furniture subcontractor commence setting up some other segments of furniture in the West Wing of the YMSO for some of the project participants (Science Applications International Corporation, REECo, and the U.S. Department of Energy (DOE)/YMPO) starting the week of January 14, 1991.

## D. Project Planning and Control

Site visits were made to USGS and Lawrence Livermore National Laboratory this week to discuss work on the project integrated schedule.

## E. Quality Assurance (QA) Implementation

No significant items to report this week.

## F. Major Oversight Group Meetings

There were no major oversight group meetings this week.

## G. Public Outreach Activities

YMPO staff gave presentations to the following:

CVT Sixth Grade Center	Las Vegas, NV	January 8, 1991
Daughters of the American Revolution	Las Vegas, NV	January 9, 1991
Nevada Legislative Committee on High-Level Radioactive Waste	Reno, NV	January 9, 1991

YMPO staff drafted a plan to increase outreach activities in the rural areas of Nevada and planned a public information product development schedule for 1991.

## H. Near Term Decision Plan

No significant change in milestone status from the last Program Management Meeting.

#### II. ANALYSIS & VERIFICATION DIVISION

Prepared a draft presentation for John Bartlett on "Management Plan for Early Assessment of Suitability of the Site" for presentation to the NWTRB on January 17, 1991.

Attended workshop in Las Vegas, Nevada, on the systems engineering functional analysis for the physical system function, "Dispose Waste."

Attended workshop in Richland, Washington, on the systems engineering functional analysis for the programmatic function, "provide suitable sites."

### III. SIGNIFICANT ACCOMPLISHMENTS/INFORMATION ITEMS

YMPO has completed resolution and verification of all comments associated with the management review of the Repository Plan Annotated Outline.

YMPO support for Management System Improvement Strategy included the Functional Analysis working group session convened in Las Vegas, Nevada, on January 7, 1991. There were 15 attendees.

#### IV. UPCOMING EVENTS CALENDAR

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A.	DOE/HQ Meetings			•
	Tuesday- Wednesday, January 15-16	Workshop-Strategic Policies and Principals	Washington, DC	C. Gertz, YMPO
	Wednesday, January 30	Program Management Meeting	Washington, DC	C. Gertz, YMPO

	Date	Event	Location	YMPO Contact	
в.	Internal and DOE/NV Meetings				
	Thursday, January 24	State of the Project to SNL	Albuquerque, NM	C. Gertz, YMPO	
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c.	State and Public	Interactions (P)			
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D.	Exhibits				
	Friday- Saturday, February 8-9	Southern Nevada Council for the Social Studies	Las Vegas, NV	M. Powell, YMPO	
E.	NRC Interactions				
	Friday, January 18	NRC Bimonthly QA Meeting	Rockville,	D. Horton, YMPO	
	Tuesday- Thursday, January 29-31	NRC Calico Hills Risk-Benefit Analysis ESF & TPT Meeting	Washington, DC	A. Simmons, YMPO	

	<u>Date</u>	Event	Location	YMPO Contact
E.	NRC Interactions	(continued)		
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	Tuesday- Thursday, October 8-10	NWTRB Full Board Meeting	TBD	A. Simmons, YMPO

Carl P. Geftz, Project Manager Yucca Mountain Site Characterization Project Office