



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

Reply to:
301 E. Stewart Ave., #203
Las Vegas, NV 89101

Tel: (702) 388-6125

TO: Joseph Holonich, Director, HLPD, M/S 4 H 3
FROM: Sr. On-Site Licensing Representatives Office, Las Vegas
DATE: JUNE 10, 1993
SUBJECT: OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE
WEEK ENDING MAY 28, 1993

Please find enclosed the above-referenced report.

There is nothing requiring specific management attention in the report.

cc: w/enc.: Charlotte Abrams, M/S 4 H 3
Rosetta Virgilio, M/S 3 D 23
Dean Kunihiro, Region 5

JSP:nan
Enclosure as stated

NOTE TO CHARLOTTE: Also enclosed please find: REEC Co May YMP Status Report, Sandia Monthly Highlights and Status Report, April 1993, and Los Alamos Monthly Activity Report, April 1993

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6/10/93*



Department of Energy
Yucca Mountain Site Characterization
Project Office
P. O. Box 98608
Las Vegas, NV 89193-8608
JUN 0 1 1993

WBS 1.2.9.2
QA: N/A

Lake H. Barrett, Acting Director, Civilian Radioactive Waste Management,
HQ (RW-1) FORS

OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING
MAY 28, 1993 (SCP: N/A)

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

A. Site Characterization Planning

Exploratory Studies Facility (ESF)

Construction

Excavation continues on the Tunnel Boring Machine (TBM) Starter Tunnel at the North Portal. The pilot drift is in approximately 30 meters and the north and south slashes are in approximately 9 meters each, as of May 25, 1993. Construction is continuing on surfacing (base course aggregate application) of the North Portal access road.

The following milestones represent the near-term plan for ESF activities:

Award TBM Contract	June 1, 1993
Award Subcontract for Underground Construction	June 1993
Begin 90 percent design review, Package 1B	July 19, 1993
Begin 90 percent design review, Package 2	August 11, 1993
Complete 60 meters of TBM Starter Tunnel	September 15, 1993

Design

The 50 percent management and independent technical reviews of Design Package 1B (Surface Facilities, North Portal) and Design Package 2 (North Ramp - Surface to Topopah Spring Level) are nearing completion. The final comment resolution process is in progress. Design continues on both packages for 90 percent reviews scheduled for July and August 1993.

102.

JUN 01 1993

Field Operations

On Job Package (JP) 92-17, UZ-14 drilling with the LM-300 drill rig, Reynolds Electrical & Engineering Co., Inc. (REECO), has cored to a depth of 552.51 feet with the 12 1/4-inch reamed hole down to 541.6 feet, as of May 21, 1993.

As of May 21, 1993, NRG-2A was completed with a cored depth of 265.74 feet and the five-inch casing at 159.09 feet. The CME-850 drill rig is being moved back to NRG-2 in order to deepen it. This is a 30-degree angle hole.

The following work was done on JP 92-20, ESF North Portal Pad and Facilities: PD-017 was drilled, loaded, shot, and mucked out; installation of rockbolts and mesh was begun in PD-017; geologic mapping was completed for PD-016 and PD-017; and shotcrete application was completed for PD-016 and PD-017. REECO began installing pattern bolts (ESF permanent support, three-meter [ten feet] cement-grouted bolts) in the pilot drift. Twenty-one are installed but not yet grouted. Installation of six-meter (20-foot) hollow-core cement grouted highwall rock bolts began, with 20 bolts installed and ten of these grouted.

On JP 93-02, NRG-4 Borehole Access Road, REECO began construction of the access road, removed the topsoil, and began plating the road with common fill.

The Site Manager and Field Operations Center staff participated in and provided logistical support for four major tours this reporting period.

Sample Management Facility (SMF)

Regarding UE25 NRG-2A, the contact of upper lithophysal zone of the Tiva Canyon was called at 254.0 feet. Drilling Support (DS) sampled and collected 132.4 feet of core.

The staff continued to support drilling of USW UZ-14. The borehole was cored and reamed from 361.7 feet to 552.2 feet. The DS sampled and logged 190.5 feet of core.

The SMF received 221.6 feet of core from Boreholes USW UZ-14 and UE25 NRG-2A, and 34.3 feet of cuttings from USW UZ-14.

The SMF processed 485.1 feet of core from UE25 NRG-2A, UE25 NRG-5, and USW UZ-14.

A total of 1,034 feet of core from UE25 NRG-3, UE25 NRG-2A, and USW UZ-16 were laid out for three examinations conducted by Sandia National Laboratories (SNL), the U.S. Department of Energy (DOE), and the U.S. Geological Survey.

A total of 454 specimens were removed from core and 17 specimens were shipped to Los Alamos National Laboratory (Los Alamos).

Site Investigations

The following is a listing of site characterization field activities that are currently active.

SCP ACTIVITY	TITLE	COMMENTS
8.3.1.3.2.1	Mineralogy, Petrology & Rock Chemistry of Transport Pathways	Outcrop sampling
8.3.1.3.2.2	Mineralogic & Geochemical Alteration	Outcrop sampling
8.3.1.4.2.2	Structural Features within Site Area	Surface mapping, ESF mapping
8.3.1.8.5.1	Characterization of Volcanic Features	Test pits, trenching
8.3.1.14.2	Soil & Rock Properties of Potential Location of Surface Facilities	Test pits, trenching, ramp exploration holes
8.3.1.17.4.2	Location & Recency of Faulting Near Prospective Surface Facilities	Trench mapping
8.3.1.17.4.3	Quaternary Faulting within 100 km of Yucca Mountain	Surface mapping
8.3.1.17.4.4	Quaternary Faulting in NE-Trending Fault Zones	Surface mapping
8.3.1.17.4.10	Geodetic Leveling	Traversing
8.3.1.17.4.6	Quaternary Faulting within Site Area	Trench mapping
8.3.1.2.1.1	Precipitation & Meteorological Monitoring for Regional Hydrology	Ongoing measurements
8.3.1.2.1.2	Runoff & Streamflow	Ongoing measurements
8.3.1.2.2.1	Unsaturated Zone Infiltration	Drilling/logging of neutron-access holes; ponding tests
8.3.1.2.2.2	Water Movement Tracer Tests	C1-36 measurements
8.3.1.2.2.3	Percolation in Unsaturated Zone	UZ drilling/testing
8.3.1.2.2.4	Characterization of YM Percolation in UZ-ESF Investigation	Perched water
8.3.1.2.2.6	Gaseous Phase Movement in Unsaturated Zone	UZ drilling/testing
8.3.1.2.2.7	Unsaturated Zone Hydrochemistry	UZ drilling/testing
8.3.1.2.3.1	Site Saturated Zone Groundwater Flow System	Ongoing monitoring
8.3.1.2.3.2	Saturated Zone Hydrochemistry	Ongoing sampling
8.3.1.15.1.8	In Situ Design Verification	Construction monitoring/testing

JUN 01 1993

Regulatory InteractionsSite Characterization Progress Report (PR)

Review comments on the draft PR 8 were received by the Yucca Mountain Site Characterization Project Office (YMPO) on May 21 and May 24, 1993. The PR is being revised based on these comments and will be sent to DOE/Headquarters (HQ) for concurrence on June 4, 1993.

Mined Geologic Disposal System (MGDS) Annotated Outline (AO)

The MGDS AO, Revision 2, has been delivered to YMPO for concurrence and transmittal to DOE/HQ. A comment status table has been attached showing U.S. Nuclear Regulatory Commission (NRC) technical comments. Also, consolidated comments on the NRC's Draft Regulatory Guide DG-3003, "Format and Content for the License Application for the High-level Waste Repository," will be transmitted to YMPO this week, with transmittal to the NRC expected in June 1993.

Advisory Committee on Nuclear Waste (ACNW) Interactions

Susan Jones, YMPO, gave presentations on the purpose and preparation of study plans (SP) and PRs to the ACNW at the May 20, 1993, meeting. Other topics of discussion included the NRC's License Application Review Plan and the NRC's research program.

Technical Analysis

Technical Analysis Branch staff participated in the "dry run" for and NRC technical exchange on volcanism, and in the National Academy of Sciences (NAS) Panel on the U.S. Environmental Protection Agency (EPA) Standards. The staff also worked on the summary of the Hydrologic Integration Task Force (HITF) report on the HITF meeting last week. The staff resolved comments on the Test and Evaluation Plan and the procedure for borehole logging, and provided comments on three procedures and two requirements documents.

Performance Assessment (PA) staff participated in meetings on extending the drill and blast segment of the ESF and, at Lawrence Livermore National Laboratory (LLNL), with participant staff working on the engineered barrier and near-field PA. They completed responses to three Site Characterization Analysis comments, and continued work on the PA section of the Fiscal Year (FY) 1994 Plan for Work Breakdown Structure (WBS) 1.2.5, Regulatory.

Site Characterization Plan (SCP)/SP Status

No new SPs were approved by YMPO this week.

STUDY PLAN BREAKDOWN

In Screening Review	0
In YMPO Review	3
Awaiting Comment Resolution	6
Awaiting Author Revision	0
In YMPO Verification Audit	10
Preparing to Submit or Awaiting YMPO Approval	1
Awaiting Submission to the NRC	0
NRC Phase 1 Review	11
NRC Acceptance	46
Total	77

SCP/SP Status:

Total SPs Assigned to Cover 106 Studies	104
SPs Not Yet Submitted for Review	40
SPs Submitted for Initial Review	64
Revised SPs Submitted for Review	5
Revised ESF SPs Submitted for Review	8
Total SPs Submitted for Review	77

State of Nevada Comments Status:

Received Comments from the State of Nevada	18
Responses Transmitted to the State of Nevada	18

NRC Comments Status:

Received Comments from NRC	21
Responses Transmitted from OGD to DOE/HQ	18

B. Project Planning and Control

The DOE Management books for April 1993 Planning and Control System (PACS) cost and schedule status data were produced.

Draft A comments from the PACS System Description reviewers were received. The comment resolution process has begun.

Variance Analysis Reporting input from all participants was coordinated.

Schedules were updated and generated to support the DOE monthly management meeting.

The mid-year review of participant cost/schedule information was completed. Results were reviewed with the Division Directors and a strategy was developed for revising the funding scenario for the remainder of FY 1993.

C. Quality Assurance Implementation

Requirements Traceability Network input on Raytheon Services Nevada (RSN) was received by the Yucca Mountain Quality Assurance Division (YMQAD). Verification of all RSN input is undergoing review by YMQAD staff. The verification stage serves to assess RSN's implementation to the Quality Assurance Requirements Document.

The YMQAD completed a review of the Management Agreement between YMPO and the DOE Nevada Operations Office.

The YMQAD staff has compiled information for a workshop on software verification and validation. When presented, this workshop will provide YMP participants with a global understanding of verification and validation relative to the Office of Civilian Radioactive Waste Management (OCRWM).

Audit YMP-93-11 of Los Alamos was conducted May 24-28, 1993.

Determination of Importance and Grading Enhancement

Quality (O)-List and O-List Procedure Development

Responsibility for Implementing Line Procedure 1.3/Office of the Project Manager (YMP Matrix of Controls, Development, and Maintenance) has been transferred to the Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O).

Implementation

Phase-out of Administrative Procedure 6.17Q continues with the emphasis on development and implementation of CRWMS M&O processes. Based on YMPO management direction to retain all natural barriers on the Q-List, identification of characteristics important to waste isolation for each barrier is in progress.

The Assessment Team (AT) continued support of ongoing YMP efforts, including modification of the Q-List to incorporate YMPO approved Q- and Management Control- items. They also continued support of monitoring of responses to AT comments on the ESF Starter Tunnel Determination of Importance Evaluations, RSN classification analyses of roads and pads, and comments on the ESF 50 percent design reviews.

D. Public Outreach and Institutional Activities

Effie Harle, Technical and Management Support Services (T&MSS), gave an educational presentation and April Gil, YMPO, gave a general project overview to 25 members of the President's Tea of the Sunrise Council group on May 22, 1993, in Henderson, Nevada. Todd Kaish, CRWMS M&O, and Chao-Hsiung Tung, T&MSS, also gave an educational presentation on electricity and radiology to 140 students at Pittman Elementary School on May 25, 1993, in Las Vegas, Nevada.

Richard Arnold, a consultant, gave a Native American Indian Culture presentation to 25 students at Greenspun Junior High School in Henderson on May 25, 1993.

JUN 01 1993

Lake H. Barrett

-7-

John Hartley, T&MSS, gave two Yucca Mountain presentations this week: to 200 students at McMillan Elementary School on May 26, 1993; and to 28 students at Martin Luther King, Jr. Elementary School on May 27, 1993, in Las Vegas.

Several general project overviews were given this week in Las Vegas. These included presentations by John Peck, T&MSS, to 94 students at Twin Lakes Elementary School on May 25, 1993; by Beatrice Reilly, T&MSS, and Jeanne Cooper, YMPO, to 15 members of the American Business Women's Association on May 27, 1993; by Doug Bradford, T&MSS, to 30 members of the Public Relations Society of America on May 28, 1993; and by April Gil to 150 members of Professional Analysis, Inc., on May 28, 1993.

Carl Gertz, Project Manager, gave a presentation on the technical basis for Yucca Mountain standards to approximately 35 members of the National Research Council on May 28, 1993, in Las Vegas.

The Yucca Mountain Lecture Series, "HAZMAT (Hazardous Materials): An Ounce of Prevention, A Pound of Cure," was presented on May 23, 1993, at the Beatty Yucca Mountain Information Office (YMIO) and on May 25, 1993, at the Las Vegas YMIO, by James M. Weigand, Inspector and Hazardous Materials Specialist, Hazardous Materials Unit of the Fire Prevention Bureau, Pomona, California. Total attendance for these presentations was approximately 50 people.

Tours to Yucca Mountain, Nevada, were conducted May 25-26, 1993, for approximately 35 guests of the NRC, and on May 25, 1993, for three guests of the U.S. Council on Energy Awareness (USCEA).

Institutional and External Affairs (IEA) staff accompanied YMP staff and Clark and Mineral County staff on a tour of the Braidwood Nuclear Power Plant in Chicago, Illinois, and the Illinois Department of Nuclear Safety in Springfield, Illinois, May 24-25, 1993.

The IEA staff attended the NAS meeting on the EPA Standard, May 27-29, 1993, in Las Vegas, and responded to media inquiries.

II. ANALYSIS & VERIFICATION DIVISION

The staff participated in the following: the NAS meeting on development of standards for Yucca Mountain under Section 801 of the Energy Policy Act May 27-29, 1993, in Las Vegas; the Business Management Review Self-Assessment, May 23-28, 1993; the NRC site visit to Yucca Mountain May 25-26, 1993; the "dry run" for NRC/DOE technical exchange on volcanism on May 27, 1993, in Las Vegas; and the Defense Waste Processing Facility and West Valley Demonstration Project Technical Review Group meeting May 25-27, 1993, in Buffalo, New York.

Verification review of SP 8.3.1.15.1.4, "Laboratory Determination of the Mechanical Properties of Fractures," was completed.

III. GENERAL INFORMATION ITEMS

LLNL

Regarding WBS 1.2.1.5 (Special Studies), D. McCright is serving as the team leader for the focus on thermal goals affecting the Engineered Barrier System (EBS). Other team members are from SNL, Los Alamos, CRWMS M&O, and LLNL. Some of the goals need to be changed to reflect the greater diversity of repository and waste package designs being considered in the Advanced Conceptual Design phase. The particular goals that the EBS team is taking the lead on for possible revision are:

1. the 350 degrees Celsius (C) limit on spent fuel cladding;
2. the 500 degrees C limit on glass;
3. the 275 degrees C limit on the borehole wall;
4. maximizing the time the borehole wall stays above boiling; and
5. the design basis for a thermal load less than the allowable thermal load.

Los Alamos

Bruce Crowe reported that field studies were conducted near Grants, New Mexico, to examine the geometry of magma conduit systems below basaltic scoria cones. Multiple sites where basalt plugs could be traced from surface vents downward into country rock were identified.

Bruce Crowe gave a presentation on the use of geophysical data for volcanism studies at the "dry run" of the June 1993 NRC technical exchange.

The volcanism staff completed a field trip to Lathrop Wells to observe and collect samples from the large trench and dig some shallow soil pits for mapping and chronology work.

David Vaniman reported that Los Alamos received 59 specimens of core from UE25 UZ-16 from the SMF. Staff are preparing these specimens for quantitative x-ray diffraction analysis. The specimens cover intervals from the near-surface to the upper vitrophyre of the Topopah Spring Member, and from the basal vitrophyre of the Topopah Spring Member to a 1305-foot depth. Additional samples that cover the rest of the core will be shipped later.

SNL

The staff continued construction monitoring activities in the ESF North Ramp Starter Tunnel. These activities are being conducted under SP 8.3.1.15.1.8, "In Situ Design Verification." The construction blasting seismometer and geophones were relocated to provide better coupling to the rock near the North Portal. Recordings of peak particle velocity and seismic wave forms are being made for each blast. The first rock bolt load cells will be installed this week upon completion of the installation of the permanent ground support in the first 100 feet of the top heading.

JUN 0 1 1993

As a result of concerns expressed by YMP personnel regarding possible movement of the rock mass in the highwall over the Starter Tunnel, SNL has been monitoring the vertical closure of the tunnel at four locations. As the top heading advances, we will install more temporary stations to monitor rock movement during construction. We will also install load cells to monitor load changes on rock bolts that will be installed in the highwall before the tunnel is excavated to full width. The intent of this activity is to provide data to the constructors so that they may make continuous evaluation of safety conditions as construction proceeds.

IV. UPCOMING EVENTS CALENDAR

Please note that the usage of "(P)" in the calendar indicates that the event is open to the public. Educational presentations and State and Public Interactions are coordinated by the Speakers Bureau; contact Jacqueline Brandt at (702) 794-7896 or Theresa Hirsch at (702) 794-7759 for additional information. Exhibits and Public Update Meetings are coordinated by Joanna Magruder at (702) 794-7056, and Tours are coordinated by Carleen Hill at (702) 794-7375.

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
A. <u>DOE/HO Meetings</u>			
Tuesday- Wednesday, June 8-9	OCRWM Quarterly Program Review	Televideo	C. Gertz
B. <u>CRWMS M&O/DOE Meetings</u>			
Wednesday, June 30	CRWMS M&O Quarterly Integration Meeting	Televideo	C. Gertz
C. <u>Internal and DOE Nevada Operations Office Meetings</u>			
Wednesday, June 16	NV Monthly Program Review	Las Vegas, NV	C. Gertz
D. <u>NRC Interactions</u>			
Monday, June 7	NRC Management Meeting for Interactions Scheduling (P)	Las Vegas, NV	T. Bjerstedt
Tuesday, June 8	Technical Exchange - Geophysics Integration (P)	Las Vegas, NV	T. Bjerstedt
Wednesday, June 9	Technical Exchange - Volcanism (P)	Las Vegas, NV	T. Bjerstedt
Wednesday, July 28	Technical Exchange - ESF Title II Design (P)	TBD	T. Bjerstedt

JUN 0 1 1993

Lake H. Barrett

-10-

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
E. <u>Nuclear Waste Technical Review Board (NWTRB) Interactions</u>			
Tuesday-Saturday, June 1-12	NWTRB International Trip	United Kingdom, France, Belgium	J. Cooper
Tuesday-Wednesday, July 13-14	NWTRB Full Board Meeting (P)	Denver, CO	J. Cooper
Tuesday-Thursday, September 28-30	NWTRB Joint T&S/EBS Panel Workshop (P)	TBD	J. Cooper
Tuesday-Friday, October 19-22	NWTRB Full Board Meeting (P)	Las Vegas, NV	J. Cooper
Monday-Wednesday, January 10-12, 1994	NWTRB Full Board Meeting (P) (Tentative)	Arlington, VA	J. Cooper
Monday-Wednesday, April 11-13, 1994	NWTRB Full Board Meeting (P) (Tentative)	Reno, NV	J. Cooper
Monday-Wednesday, July 11-13, 1994	NWTRB Full Board Meeting (P) (Tentative)	Denver, CO	J. Cooper
Wednesday-Friday, October 12-14, 1994	NWTRB Full Board Meeting (P) (Tentative)	Las Vegas, NV	J. Cooper
F. <u>ACNW Interactions</u>			
Wednesday-Thursday, July 21-22	ACNW 55th Meeting (P)	TBD	A. Gil
Wednesday-Thursday, August 25-26	ACNW 56th Meeting (P)	TBD	A. Gil
Wednesday-Thursday, September 22-23	ACNW 57th Meeting (P)	TBD	A. Gil
Wednesday-Thursday, October 27-28	ACNW 58th Meeting (P)	Las Vegas, NV	A. Gil

JUN 01 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
F. <u>ACNW Interactions</u> (Continued)			
Monday- Tuesday, November 22-23	ACNW 59th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, December 15-16	ACNW 60th Meeting (P)	TBD	A. Gil
G. <u>NAS Interactions</u>			
Thursday- Saturday, May 27-29	NAS Committee on Technical Bases for Yucca Mountain Standards (P)	Las Vegas, NV	A. Gil
Thursday, June 24	NAS Board on Radioactive Waste Management	Las Vegas, NV	C. Gertz
H. <u>State and Public Interactions</u>			
Thursday, June 3	NV Association of Fleet Managers	Las Vegas, NV	C. Gertz
Monday, June 14	Rapid Excavation & Tunneling Conference	Boston, MA	C. Gertz
Wednesday, June 16	Palo Verde Generating Station	Phoenix, AZ	G. Fasano E. Harle
Sunday, June 20	Vanishing Desert Greater Opportunity Group	Las Vegas, NV	A. Gil
Sunday, June 20	Yucca Mountain Lecture Series (P)	Pahrump, NV	W. Dickson
Tuesday, June 22	Yucca Mountain Lecture Series (P)	Las Vegas, NV	W. Dickson
Wednesday, June 23	Citibank Child Care	Las Vegas, NV	R. Arnold
Wednesday, June 23	American Nuclear Society (ANS)	San Diego, CA	C. Gertz
Friday, June 25	Diablo Canyon Nuclear Power Plant	Avila Beach, CA	G. Fasano
Wednesday, July 7	University of California, Santa Barbara	Santa Barbara, CA	C. Gertz

Lake H. Barrett

-12-

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
H. <u>State and Public Interactions (Continued)</u>			
Thursday, July 15	Spring Valley Library	Las Vegas, NV	T. Bjerstedt
Monday, August 2	USCEA Energy Information Centers	Chicago, IL	C. Gertz
Thursday, August 12	Second International New Avenues in Risk and Crisis Management Conference	Las Vegas, NV	C. Gertz
Tuesday, August 17	1993 American Institute of Chemical Engineers Summer National Meeting	Seattle, WA	C. Gertz
Wednesday, August 18	Second International Mixed Waste Symposium	Baltimore, MD	C. Gertz
Wednesday- Thursday, September 1-2	C.P. Squires Elementary	N. Las Vegas, NV	R. Arnold
Monday- Tuesday, September 6-7	C.P. Squires Elementary	N. Las Vegas, NV	R. Arnold
Friday, September 10	Public Gas Service Gas Company	TBD	C. Gertz
Sunday, September 26	Children's Discovery Museum	Las Vegas, NV	R. Arnold
Monday, November 15	ANS	San Francisco, CA	C. Gertz
Sunday, February 27, 1994	Waste Management Symposia	Tucson, AZ	C. Gertz

<u>Date</u>	<u>Event</u>	<u>Location</u>
I. <u>Exhibits Scheduled</u>		
Saturday, June 19	Public Open House (P)	Las Vegas, NV
Saturday, July 24	Public Open House (P)	Las Vegas, NV
Friday- Sunday, August 20-22	Home Show (P)	Las Vegas, NV

<u>Date</u>	<u>Event</u>	<u>Location</u>
I. Exhibits Scheduled (Continued)		
Saturday, August 21	Public Open House (P)	Las Vegas, NV
Tuesday- Monday, August 24-30	Nevada State Fair (P)	Reno, NV
Thursday- Tuesday, September 2-7	Elko County Fair (P)	Elko, NV
Saturday, September 25	Public Open House (P)	Las Vegas, NV
Tuesday- Saturday, September 28- October 2	Nevada Library Association	Elko, NV
Friday- Monday, October 1-11	Jaycee State Fair (P)	Las Vegas, NV
Saturday, November 6	Boy Scouts Expo	Las Vegas, NV
<u>Date</u>	<u>Event</u>	<u>Escorts</u>
J. Tours Scheduled		
Saturday, June 19	Public Open House (P)	Various Escorts
Monday, June 21	Girl Scouts Wider Opportunity Program	TBD
Tuesday, June 22	NAS	TBD
Friday, June 25	NAS	TBD
Tuesday, July 6	University of Georgia	TBD
Friday, July 16	International Safeguards Group	TBD
Saturday, July 24	Public Open House (P)	Various Escorts
Friday, August 6	Military Order of Laos	P. Karmic

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<u>Date</u>	<u>Event</u>	<u>Escorts</u>
J. <u>Tours Scheduled</u> (Continued)		
Saturday, August 21	Public Open House (P)	Various Escorts
Monday, September 13	Senior Tripsters	TBD
Thursday, September 23	Waste Package Development Workshop	R. Fish
Saturday, September 25	Public Open House (P)	Various Escorts
Thursday, September 30	League of Women Voters	TBD

for  Carl P. Gertz
Project Manager

YMP:VFI-4405

INFORMATION COPY



Reynolds Electrical & Engineering Co., Inc.

Post Office Box 98521 • Las Vegas, NV 89193-8521

IN REPLY REFER TO:
580-01-472

WBS 1.2.9.1
QA: N/A

June 4, 1993

Carl P. Gertz, Project Manager
Yucca Mountain Site Characterization
Project Office
U.S. Department of Energy
Post Office Box 98608
Las Vegas, NV 89193-8608

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP) STATUS REPORT (SCP: N/A)

Attached is the May YMP Status Report for Reynolds Electrical & Engineering Co., Inc.'s participation in the YMP.

If further information is required, please contact Rene' R. Knott at 794-7193.

R. F. Pritchett, Manager
Yucca Mountain Project Division
YMP Technical Project Officer

RFP:RRK:mab

Enclosure
Status Report (3 pages)

cy: See page 2

TOTAL QUALITY IS OUR BUSINESS

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AN EG&G COMPANY

Carl P. Gertz
580-01-472
Page 2
June 4, 1993

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Information Services Center, M/S 408

L. M. Smith, DOE/NV, M/S 505
M. B. Blanchard, DOE/YMP, M/S 523
W. R. Dixon, DOE/YMP, M/S 523
J. R. Dyer, DOE/YMP, M/S 523
C. E. Hampton, DOE/YMP, M/S 523
D. J. Harrison, DOE/YMP, M/S 523
B. D. Hutchinson, DOE/YMP, M/S 523
V. F. Iorii, DOE/YMP, M/S 523
S. B. Jones, DOE/YMP, M/S 523
E. H. Petrie, DOE/YMP, M/S 523
W. B. Simecka, DOE/YMP, M/S 523
D. R. Williams, DOE/YMP, M/S 523
W. A. Wilson, DOE/YMP, M/S 717
L. D. Foust, M&O, M/S 423
M. M. Martin, M&O, M/S 423
R. L. Robertson, M&O/Fairfax, VA
P. Justus, NRC/Las Vegas, NV
R. C. Furtek, REECO, M/S 235
B. R. Gardella, REECO, M/S 408
W. J. Glasser, REECO, M/S 408
J. L. Henze, REECO, M/S 751
S. L. Hughes, REECO, M/S 408
D. L. Knight, REECO, M/S 408
D. L. Koss, REECO, M/S 408
R. B. Land, REECO, M/S 585
T. M. Leonard, REECO, M/S 751
K. L. Limon, REECO, M/S 408
C. J. Mason, REECO, M/S 751
S. O. Straub, REECO, M/S 408
J. R. Trujillo, REECO, M/S 590
M. Brodeur, SAIC, M/S 517/T-23
J. J. Brogan, SAIC, M/S 517/T-12
R. D. Hutton, SAIC, M/S 517
S. C. Smith, SAIC, M/S 517/T-10
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**REYNOLDS ELECTRICAL & ENGINEERING CO., INC.
(REECo)**

YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT (YMP)

MAY 1993 - STATUS REPORT

Reeco has no reportable Level 0 or Level 1 Milestones.

SITE (1.2.3)

WBS 1.2.3.2

Task: USGS Integrated Data Acquisition System (IDAS)

Continued support of IDAS to include technical support, equipment testing, maintenance and repairs.

WBS 1.2.3.5

Task: Capital Equipment to support Drilling Programs

Prepared requisitions for tubing tongs, breakout table/rotary tool service and dust collector. Items were approved in Capital Equipment Requirements Plan but funding transfer of \$100,000 has not occurred.

Task: Quaternary Trenching (Job Package 92-12)

Completed Quaternary Trench at Bare Mountain.

Task: USW UZ-14 Drilling (Job Package 92-17)

Continued drilling/coring operations. Borehole was continuously cored to a depth of 669.97 feet. The 12 1/4 inch reamed hole was advanced to 661.64 feet. Scheduled total depth of UZ-14 is 2,000 feet.

Task: UE-25 NRG-2 North Portal Ramp Borehole (Job Package 92-19)

Received Field Change Request (FCR) to deepen original borehole from 215 feet to approximately 315 feet May 27, 1993. Presently coring at 228.61 feet.

Task: UE-25 NRG-4 Access Road (Job Package 93-2)

Completed rough grade on NRG-4 Borehole Access Road.

Task: UE-25 NRG-5 North Portal Ramp Borehole (Job Package 93-3A)

Reached total depth of 955 feet on May 10, 1993. Received FCR to deepen hole to approximately 1,300 feet on May 27, 1993. Presently coring at 971.38 feet.

Task: UE-25 NRG-2A, North Portal Ramp Borehole (Job Package 93-05)

Utilizing the CME-850 drill rig, continuously cored from surface to total depth of 220 feet with 5 1/2 inch odex casing to 159 feet. Received FCR to deepen borehole on May 20, 1993. Completed deepening to 265.74 feet on May 23, 1993.

Procurement Actions

Services of Central Fishing Tool, Inc. were required on May 7, 1993, to initiate fishing activities to resolve problems encountered in the USW UZ-14 borehole.

Developed Special Conditions for the Technical Support Services Subcontractor to provide onsite technical expertise to repair, modify and calibrate the prototype Caltrol Gas Injection System built for use on the LM-300 Drill Rig.

REGULATORY (1.2.5)

WBS 1.2.5.2.4

Task: Site Characterization Plan (SCP) Reference Library and Database

Continued distribution and database maintenance for the SCP and Progress Reports. Distributed two SCP sets during this reporting period.

EXPLORATORY STUDIES (1.2.6)

WBS 1.2.6.1

Task: Exploratory Studies Facility (ESF)

Continued administrative support for ESF activities to include planning, scheduling and management. Participated in RSN Design Reviews for Rotary Drill Rig and C-Well Complex; completed 50% Title II Package 2 Design Review; and performed Facility Manager Environmental Inspection.

Task: Technical Support and Underground Excavation for the ESF (RFP 1-DH-92)

Completed a manpower and audit review on RFP 1-DH-92 and conducted a Fact Finding on May 17, 1993. Reduced the scope of work for Fiscal Year 1993 due to funding limitations, and transmitted new scope to the Subcontractor on May 28, 1993.

Task: Procurement of a Tunnel Boring Machine (RFP 2-DH-93)

Concluded Procurement Review Cycle and awarded on May 27, 1993, to Construction and Tunneling Services, Inc.

Task: ESF North Portal Pad & Facilities (Job Package 92-20)

Completed first lift of aggregate base course on North ESF Portal Access Road; began rework of North Portal ESF Drainage Channel; drilled and blasted 31 rounds; advanced Pilot Drift to Construction Station (CS) 0+99; advanced the North and South Slashes to CS 0+50; pull-tested 12 split set rock bolts; installed 34 split set rock bolts; installed 45 Williams patten rock bolts; installed 20 Tital rock bolts; and installed lattice girders.

RFP 7-DH-93, Arch Structure, was started through the procurement review process.

RFP 12-DH-93, Prefabricated Switchgear Building, closed on May 4, 1993, with thirteen proposals received. Awarded May 14, 1993.

Request for Quotation (RFQ) 4-RFQ-DH-93 for Rockbolts issued on May 4, 1993 and closed May 10, 1993. Award has been delayed due to a pending specification change.

TEST FACILITIES (1.2.7)

Task: Field Operations Support

Continued logistical and tour support for DOE Yucca Mountain Site (YMSO) staff. Seventeen tours were held during this period with 617 people attending. Support included but was not limited to arrangements for buses, registration of guests, coordination of lunches/beverages, medical service, furniture, and mechanical service. Continued preparations for upcoming tours.

Continued support services to participants and maintenance of YMP utilized facilities, utilities, equipment and roads in Area 25. Resumed installation of new chiller unit and auxiliary units for Building 4015, Area 25 Field Operations Center, which was suspended in May due to funding limitations. Installed two additional 13-ton portable air-conditioning units. Due to lack of capacity and higher ambient temperatures, rented and installed a 200-ton portable chiller pending completion of permanent chiller system.

PROJECT MANAGEMENT (1.2.9)

WBS 1.2.9

Task: Technical Project Office Management/Project Control

Continued normal administrative level of effort support. Continued status and update of Planning and Control System (PACS); supported ESF Construction activities, drilling activities and completed cost estimates as required.

QUALITY ASSURANCE (1.2.11)

WBS 1.2.11

Task: Quality Assurance

Continued normal administrative level of effort support. A response to the Corrective Action Report (CAR) identifying a significant condition adverse to quality in the area of Control of Material was received and determined to be unacceptable. A revised response is to be submitted in early June.

The responses to the CARs issued as a result of the March 1993 YMP Inspection Audit have been evaluated as acceptable. Actions are in progress to implement the planned corrective actions.

ENVIRONMENT, SAFETY & HEALTH (1.2.13)

WBS 1.2.13

Task: Safety & Occupational Health

Provided medical, occupational safety, industrial hygiene and fire protection support.

SUPPORT SERVICES (1.2.15)

WBS 1.2.15

Task: Administrative Support and Training

Continued to provide procurement, logistical, and information management administrative level of effort support; continued support services to various YMP participants.

Staffed the Technical Information Display at the combined Rocky Mountain and Cordilleran sections of the Geological Society of America annual meeting in Reno, Nevada.