



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: MARCH 31, 1993

SUBJECT: OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING MARCH 19, 1993 and YUCCA MOUNTAIN SITE OFFICE (YMSO) FIELD ACTIVITY REPORT FOR THE WEEKS ENDING MARCH 5 AND MARCH 12, 1993

Please find enclosed the above-referenced reports.

There is nothing requiring specific management attention in the reports.

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

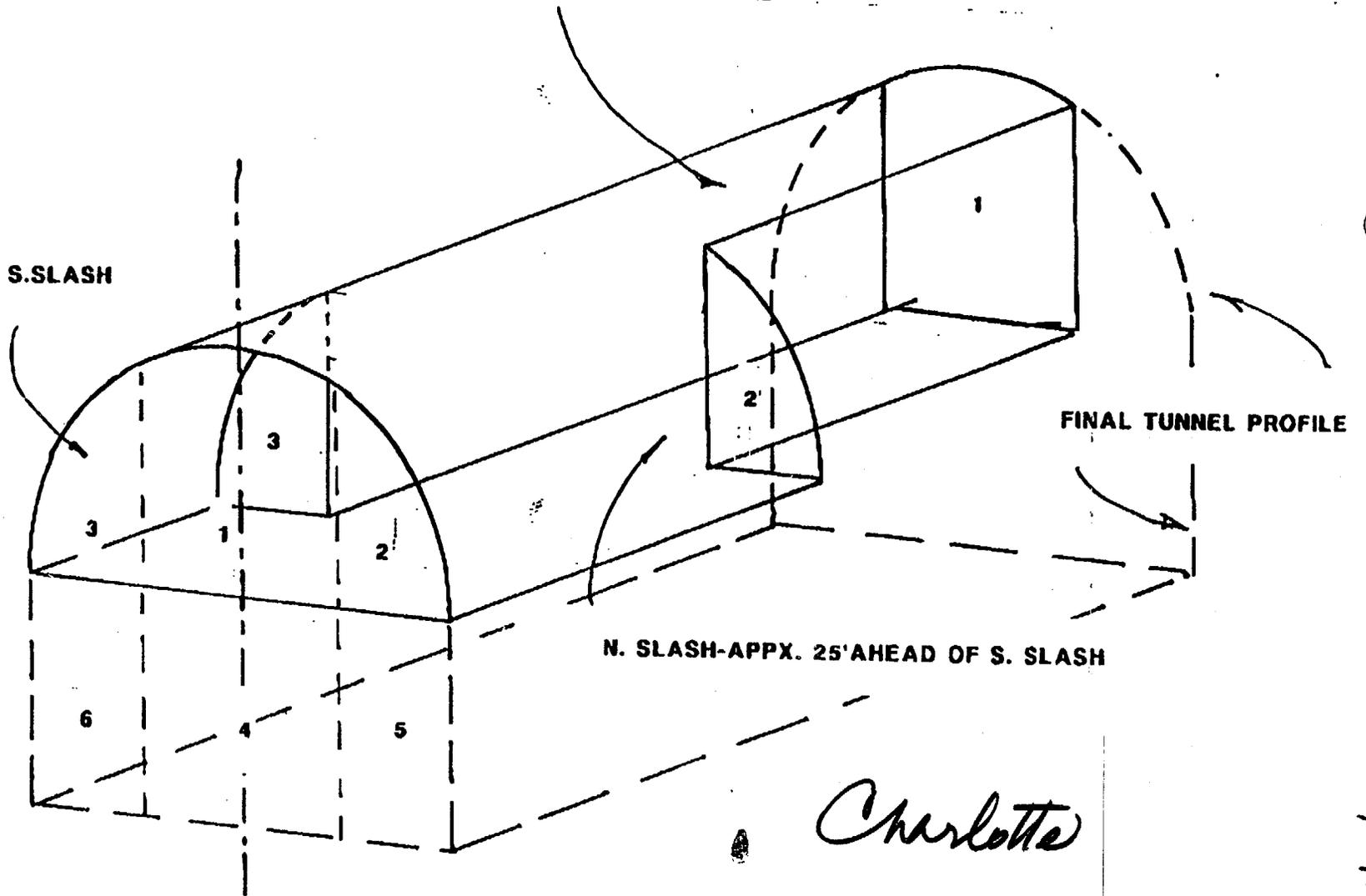
NOTE TO CHARLOTTE: Also enclosed is an "ESF Starter Tunnel Excavation Sequence" drawing

050094

9304060105 930331
PDR WASTE
WM-11 PDR

102
WM-11
N403

PILOT DRIVE-APPX. 50' AHEAD OF N. SLASH



N. SLASH-APPX. 25' AHEAD OF S. SLASH

Charlotte

rev'd 3/25/53 PJ

ESF STARTER TUNNEL EXCAVATION SEQUENCE



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

WBS 1.2.9.2
QA: N/A

MAR 23 1993

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

OFFICE OF GEOLOGIC DISPOSAL (OGD) WEEKLY HIGHLIGHTS FOR THE WEEK ENDING
March 19, 1993

I. CRITICAL ITEM STATUS - YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT

A. Site Characterization Planning

Field Operations

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

On Job Package (JP) 92-3, UZ-16, drilling was completed with the LM-300 drill rig on March 11, 1993. The total depth cored is 1686.16 feet. The 12 1/2-inch ream is at 1658.90 feet. The principal investigator is running the gyro and logging work.

The current depth cored at NRG-3 is 89 feet with the 5 1/2-inch Odex casing at 83.82 feet. The scheduled total depth of this 30-degree angle hole is 330 feet.

Reynolds Electrical & Engineering Co., Inc. (REECO), completed neutron access borehole UZN-62 to a total depth of 60 feet on March 10, 1993. This is the 23rd neutron access borehole of a series of 24 boreholes.

The Site Manager received the Notice to Proceed from Project Manager Carl Gertz to refurbish the existing access road to UZ-1. The Site Manager is preparing the work authorization letter to REECO for this work. He gave verbal authorization to REECO on March 15, 1993, to commence grading the road, and to remove the rocks and level the road. This road is needed to mobilize the LM-300 drill rig in preparation for the start-up of work on the next UZ borehole (USW UZ-14) under JP 92-17, Drilling and Testing.

MAR 23 1993

On JP 92-20, Exploratory Studies Facility (ESF) North Portal Pad and Facilities, REECo continues the following activities: excavation of the box cut, excavation of the north drainage channel with the removal of rocks from the area, and hauling of fill from Borrow Pit 1 to the ESF pad to obtain grade.

Sample Management Facility

Core logging and sampling of UE25 UZ-16 and USW UZN-62 were completed.

Borehole prognosis was completed on SRG-5.

Drilling operations were supported for UE25 UZ-16 and USW NRG-6. Processing of core and cuttings from UE25 UZ-16 and USW NRG-6 continued.

The staff is constructing a Northwest-Southeast oriented geologic cross section along Drill Hole Wash. Cross sections include planned holes USW UZ-14 and UE25 NRG-5.

One hundred boxes of core were laid out for view.

Regulatory Interactions

Issue Resolution

The Issue Resolution Steering Group (IRSG) met on March 11, 1993, in Las Vegas, Nevada. Topics discussed included "lessons-learned from the Erosion Topical Report," the status of all issues, and information on current budget needs. The next IRSG meeting will be a videoconference scheduled for April 15, 1993.

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

Internal Civilian Radioactive Waste Management System Management and Operating Contractor (CRWMS M&O) review of the MGDS AO, Revision 2, is scheduled to be completed this week. The document will be transmitted via InfoSTREAMS for U.S. Department of Energy (DOE) review on March 30, 1993.

Site Characterization Progress Report (PR)

The guidance letter requesting input for PR 8 was sent to the participants and DOE/Headquarters (HQ) on March 4, 1993; input is due on March 30, 1993. The director of the Office of Civilian Radioactive Waste Management (OCRWM) has determined that PR 8 can contain acronyms except for the Executive Summary.

MAR 23 1993

Environmental Field Programs

The Nevada Division of Environmental Protection approved the use of the tracer Lithium Bromide in the construction water for the ESF North Portal Ramp.

ESF Task Force Activities

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

Award Tunnel Boring Machine (TBM) Contract	April 1993
Start Excavating TBM Launch Chamber	April 2, 1993
Award Subcontract for Underground Construction	June 1993

Site Characterization Plan (SCP)/Study Plan (SP) Status

Two SP revisions for work in the ESF were received. These included SP 8.3.1.2.2.4, Revision 2, "Characterization of the Yucca Mountain Unsaturated Zone in the ESF"; and SP 8.3.1.15.1.5, Revision 1, "Excavation Investigations." Also, a rewrite of SP 8.3.1.3.6.1, "Dynamic Transport Column Experiments," was received. This SP was originally submitted to the Yucca Mountain Site Characterization Project Office (YMPO) in July 1989. The current version is so extensively rewritten that it will be treated as a new submission for review purposes by YMPO.

STUDY PLAN BREAKDOWN

In Screening Review	3
In YMPO Review	0
Awaiting Comment Resolution	13
Awaiting Author Revision	4
In YMPO Verification Audit	3
Preparing to Submit or Awaiting YMPO Approval	1
Awaiting Submission to the U.S. Nuclear Regulatory Commission (NRC)	1
NRC Phase 1 Review	19
NRC Acceptance	37
Total	81

SCP/SP Status:

Total SPs Assigned to Cover 106 Studies	104
SPs Not Yet Submitted for Review	36
SPs Submitted for Initial Review	68
Revised SPs Submitted for Review	5
Revised ESF SPs Submitted for Review	8
Total SPs Submitted for Review	81

State of Nevada Comments Status:

Received Comments from the State of Nevada	18
Responses Transmitted to the State of Nevada	12

NRC Comments Status:

Received Comments from NRC	19
Responses Transmitted from OGD to DOE/HQ	18

B. Project Planning and Control

The project-level data base of February 1993 cost and schedule data was rolled.

Analyses of February 1993 cost and schedule status data were prepared for the Division Directors and project work breakdown structure (WBS) element managers.

The February 1993 cost and schedule performance report booklets were compiled and distributed for Carl Gertz, the Division Directors, project WBS element managers, and CRWMS M&O functional managers.

Budget estimates for the ESF test functions were provided to Ronald Oliver, Los Alamos National Laboratory (Los Alamos). These estimates included geologic mapping, perched water, construction monitoring, and consolidating sampling. This delivery concludes a series of correspondence and discussions, and satisfies an assigned action item.

Participant Capital requirements for fiscal year (FY) 1993 were forwarded to Clyde Hough, DOE/HQ, to validate requested Approved Funding Program changes.

C. Quality Assurance (QA) Implementation

Technical Directives supporting WBS 1.2.11, QA, were submitted for formal review.

MAR 23 1993

Software required to support the consolidated OCRWM Quality Supplier List (QSL) activities was developed, and the administrative procedures (AP) governing QSL interfaces were drafted.

A preliminary review of draft OCRWM QA Procedures 5.1, Revision 5, and 6.2, Revision 1, was performed by the Yucca Mountain QA Division. Comments are under resolution.

A draft FY 1994 budget for WBS 1.2.11 was developed.

The OCRWM Office of QA has re-evaluated the audit schedule and plans to continue with limited scope audits through the end of FY 1993. The audit schedule for FY 1994 will be based on evaluations of each participant's QA Program.

Determination of Importance and Grading Enhancement

Implementation

The Assessment Team (AT) commented on the draft Natural Barriers Performance Assessment Plan provided by the CRWMS M&O.

The letter identifying review comments and recommendations on the first four CRWMS M&O Determination of Importance Evaluations (DIE) packages for ESF was transmitted to YMPO.

Development of the basis for operation of the AT following cancellation of AP 6.17Q continues.

The AT is reviewing the ESF Starter Tunnel DIE which recommends its inclusion on the Q-List.

D. Public Outreach and Institutional Activities

Tours to Yucca Mountain, Nevada, were conducted on March 16, 1993, for 50 guests of the National Congress of American Indians; on March 18, 1993, for 90 students from Gabbs Junior High School; and on March 19, 1993, for 20 engineering students from the University of Nevada, Las Vegas (UNLV). A. C. Robison, YMPO, gave a pretour briefing to guests of the National Congress of American Indians; and Ronald Ruth, CRWMS M&O, gave an introduction to nuclear energy pretour briefing to the students from Gabbs Junior High School.

On March 17, 1993, students from Gordon McCaw Elementary School visited the Yucca Mountain Information Office (YMIO); and on March 18, 1993, students from Charlotte Hill Elementary School visited the YMIO. Both groups visited the YMIO to participate in an educational outreach program. Approximately 200 students who toured the YMIO during the two days learned about electricity, radiation, and geology.

Several educational presentations were provided this week. Tom Pysto, Technical and Management Support Services (T&MSS), gave an environmental presentation to 450 sixth grade students at Thurman White Middle School in Henderson, Nevada, on March 15, 1993. These students will be going on a tour to Yucca Mountain on March 24, 1993. Tom Pysto also gave a general overview with an emphasis on environmental and health issues to 50 members of the Nevada Environmental Health Association in Las Vegas on March 17, 1993, as part of an educational conference. April Gil, YMPO, gave a life sciences/fossils presentation to 120 seventh grade students at Kenny C. Guinn Junior High School in Las Vegas on March 18, 1993. Effie Harle, T&MSS, gave an educational presentation to 17 students at James Gibson Elementary School in Las Vegas on March 19, 1993.

Other presentations given included a geologic presentation by David Merritt, T&MSS, to 21 members of the Spring Mountain Docent in Las Vegas on March 13, 1993; and a Native American Indian cultural presentation by Richard Arnold, a consultant, to 20 students at David M. Cox Elementary School in Henderson on March 19, 1993.

General overview presentations were given on March 17, 1993, in Fallon, Nevada, by Christopher Binzer, T&MSS, to 20 members of the Fallon Optimists; and by April Gil to three members of the Churchill County Commission.

Institutional and External Affairs staff attended a presentation, "Unsafe at Any Depth: Scientific and Ethical Failures at Yucca Mountain," at UNLV on March 15, 1993. The presentation was provided by Kristin Shrader-Frechette, Professor, Department of Philosophy, University of South Florida. The staff also attended the Lincoln County Impact Alleviation Committee meeting in Caliente, Nevada, on March 17, 1993.

MAR 23 1993

II. ANALYSIS & VERIFICATION DIVISION

The staff attended the Energy Materials Coordinating Committee meeting on March 16, 1993, in Germantown, Maryland.

Review of the West Valley Waste Qualification Report, Package 3, was initiated. Comments are due to Argonne National Laboratory on April 15, 1993.

Reviews of Monitored Retrievable Storage Annotated Outline Plans were initiated on (a) Transportation Physical Protection and (b) Material Control and Accountability. Comments are due April 14, 1993.

Comments on NRC's proposed revisions to 10 CFR Part 100, Appendix A, and supporting guidance were submitted to NRC on March 15, 1993.

MGDS

The Occurrence Reporting Processing System Bi-weekly Reports Numbers 11 and 12 were prepared and distributed.

Development of the Executive Summary and Introduction of PR 8 was initiated.

The staff reviewed preliminary comment responses on YMPO's Site Design and Test Requirements Document.

III. GENERAL INFORMATION ITEMSCRWMS M&O

A draft thermal loading decision roadmap was prepared after conferring on potential decision resolution strategies with contributors to the thermal loading issue, including staff from CRWMS M&O, Los Alamos, and Sandia National Laboratories (SNL).

The staff is researching the usage of geophysical methods for detection of ground condition ahead of TBM construction at the request of YMPO.

Lawrence Livermore National Laboratory (LLNL)

Regarding WBS 1.2.2.2.1, Chemical and Mineralogical Properties of the Waste Package Environment, representatives from New Zealand visited LLNL to discuss potential sites for conducting EQ3/6 validation activities. Several sites were identified as likely locations, based on data availability, observable or inferred processes at the sites, and accessibility. Plans were developed to have LLNL researchers visit

these sites in late March 1993 to go through the available data to determine if the data are complete enough to actually start the simulations. The group had also visited the YMPO and the Yucca Mountain site.

Los Alamos

Technical Project Officer Julie Canepa, one of eight women technical managers at Los Alamos, was featured in a display entitled, "Shattering the Glass Ceiling," which highlighted the women's backgrounds and current responsibilities.

David Bish met with Anthony Lasaga at Pennsylvania State University and Hugh Barnes at Yale University to discuss plans for thermodynamic and kinetic experiments that will address the effects of long-term elevated temperatures on mineral stabilities at Yucca Mountain.

Trenching at Lathrop Wells volcanic center took place March 15-16, 1993. Bruce Crowe received new results from cosmogenic helium studies that confirm an age of about 50,000 years for the main cone.

SNL

As part of the systematic data acquisition task, additional surface sampling transects have recently been completed. The resulting samples have been processed for bulk property determination. Three transects sampled the shardy base microstratigraphic unit of the basal Tiva Canyon Member. These transects, together with earlier work, describe essentially the entire lateral dimension of the Tiva Canyon ash-flow sheet. A fourth transect sampled the lithologically similar shardy base of the Topopah Spring Member. Data from all transects are being used to develop and refine geostatistically-based models of the spatial variability of physical properties.

T&MSS

The staff is nearing completion with the revision of the first group of QA Program implementing procedures that required revision to comply with the OCRWM QA Requirement and Description document. The first group of procedures include those required for preparation and control of procedures, work instructions, and forms; control of documents; records management; training; review of technical documents; and the graded application of QA requirements. This work is being performed according to the transition plan accepted by the Yucca Mountain QA Division.

U.S. Geological Survey (USGS)

Personnel from the past discharge project spent the week visiting springs in the greater Death Valley flow system. About 15-20 sites were visited and at least one-third were found to be dry. Water samples and

microorganism data were collected from the active sites. While many of the dry sites were higher elevation sites, some valley springs were found to be dry. It was not clear whether the dry sites were a result of the prolonged drought or nearby development. During the same trip, staff field-checked vegetation maps produced with remote sensing techniques. Maps generally appeared correct.

The USGS staff met with personnel from DOE, REECo, and Raytheon Services Nevada to discuss the use of a steel tape to measure the final water level in UZ-16. An agreement was reached regarding procedures to use to minimize the possibility that the tape again would be lost down the hole. Records indicate that, in the last three years, a significant amount of tape was lost downhole approximately four times in approximately 1,400 trips; further precautions still appear to be in order.

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 are coordinated by Genevieve McNeill at (702) 794-7116, Public Update Meetings are coordinated by Joanna Magruder at (702) 794-7056, and tours are coordinated by Carleen Hill at (702) 794-7375 or Bradley Bush at (702) 794-5347.

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
A. <u>DOE/HO Meetings</u>			
No significant meetings.			
B. <u>CRWMS M&O/DOE Meetings</u>			
<u>CANCELLED</u> Wednesday, March 24	CRWMS M&O Review	Vienna, VA	C. Gertz
C. <u>Internal and DOE Nevada Field (DOE/NV) Office Meetings</u>			
Wednesday, March 24	DOE/NV Monthly Program Review	Las Vegas, NV	C. Gertz
D. <u>NRC Interactions</u>			
Monday, May 3	Management Meeting on Topical Report (P)	Las Vegas, NV	T. Bjerstedt

MAR 23 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
D. <u>NRC Interactions</u> (Continued)			
Monday, May 17	Technical Exchange - Program Planning and Integration (P)	Video- Conference	T. Bjerstedt
Tuesday, May 18	Technical Exchange - OCRWM Technical Baseline Documents (P)	Video- Conference	T. Bjerstedt
Tuesday- Wednesday, May 25-26	NRC Site Visit (P)	Las Vegas, NV	T. Bjerstedt
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
E. <u>Nuclear Waste Technical Review Board (NWTRB) Interactions</u>			
Monday April 19	NWTRB Environment and Public Health Panel - Site Tour (P)	Las Vegas, NV	J. Cooper
Wednesday- Thursday, April 21-22	NWTRB Full Board Meeting (P)	Reno, NV	J. Cooper
May TBD	NWTRB Environment and Public Health Panel (P)	Las Vegas, NV	J. Cooper

MAR 23 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
E. <u>NWTRB Interactions</u> (Continued)			
Tuesday- Saturday, June 1-12	NWTRB International Trip	TBD	J. Cooper
Monday- Thursday, July 12-15	NWTRB Full Board Meeting (P)	Denver, CO	J. Cooper
Tuesday- Friday, October 19-22	NWTRB Full Board Meeting (P)	Las Vegas, NV	J. Cooper
F. <u>Advisory Committee on Nuclear Waste (ACNW) Interactions</u>			
Wednesday- Thursday, March 24-25	ACNW 52nd Meeting (P)	Bethesda, MD	A. Gil
Wednesday- Thursday, April 28-29	ACNW 53rd Meeting (P)	Bethesda, MD	A. Gil
Wednesday- Thursday, May 19-20	ACNW 54th Meeting (P)	Bethesda, MD	A. Gil
Wednesday- Thursday, June 23-24	ACNW 55th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, July 21-22	ACNW 56th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, August 25-26	ACNW 57th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, September 22-23	ACNW 58th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, October 27-28	ACNW 59th Meeting (P)	TBD	A. Gil

MAR 23 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>YMPO Contact</u>
F. <u>ACNW Interactions</u> (Continued)			
Monday- Tuesday, November 22-23	ACNW 60th Meeting (P)	TBD	A. Gil
Wednesday- Thursday, December 15-16	ACNW 61st Meeting (P)	TBD	A. Gil

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
G. <u>State and Public Interactions</u>			
Saturday, March 20	Frontier Girl Scouts Council	Las Vegas, NV	R. Arnold
Monday, March 22	Derfelt Elementary	Las Vegas, NV	J. Hartley
Tuesday, March 23	Dave Rossin, President, American Nuclear Society (ANS)	Las Vegas, NV	C. Gertz
Tuesday, March 23	Texas Tech	Lubbock, TX	K. Beall
Tuesday, March 23	Henderson Community College	Henderson, NV	G. Fasano
Wednesday, March 24	Brownie Troop 562/ Junior Troop 362	Las Vegas, NV	R. Arnold
Wednesday, March 24	Thurman White Middle School	Las Vegas, NV	T. Kaish
Thursday, March 25	Vail Pittman Elementary	Las Vegas, NV	J. Hartley
Friday, March 26	Reserve Officers Association	Las Vegas, NV	G. Fasano
Monday, March 29	Sandy Valley Elementary	Sandy Valley, NV	J. Cooper
Monday, March 29	Burkholder Junior High School	Henderson, NV	K. Wirtz

MAR 23 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
G. <u>State and Public Interactions</u> (Continued)			
Monday, March 29	Walter Bradkin Elementary	Las Vegas, NV	R. Arnold
Wednesday, March 31	Henderson Community College	Henderson, NV	G. Fasano
Friday, April 2	Joe Mackey Sixth Grade Center	Las Vegas, NV	A. Gil
Sunday, April 4	YMIO Family Day	Las Vegas, NV	T. Kaish
Tuesday, April 6	Orr Junior High School	Las Vegas, NV	W. Wilson
Saturday, April 10	Girl Scouts Geology Workshop	Las Vegas, NV	E. Harle
Monday, April 12	Cactus Water & Energy Conservation Society	Las Vegas, NV	P. Standish
Tuesday, April 13	Sandy Valley Elementary	Sandy Valley, NV	A. Gil
Thursday, April 15	Teamsters Local 14	Las Vegas, NV	K. Beall
Thursday, April 15	Sandy Valley Elementary	Sandy Valley, NV	J. Blink
Thursday, April 15	ANS/American Society of Mechanical Engineers	New York, NY	C. Gertz
Thursday, April 15	Fay Herron Elementary	North Las Vegas, NV	J. Hartley
Friday, April 16	Mt. Charleston Elementary	Mt. Charleston, NV	J. Cooper
Friday, April 16	Tonopah Elementary	Tonopah, NV	J. Blink

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
G. <u>State and Public Interactions</u> (Continued)			
Monday, April 19	Orr Junior High School	Las Vegas, NV	A. Gil
Thursday, April 22	DOE 20th Annual Science Now	Las Vegas, NV	A. Robison
Saturday, April 24	Boy Scouts Atomic Energy Merit Badge Workshop	Las Vegas, NV	E. Harle
Tuesday, April 27	Ruthe Deskin Elementary	North Las Vegas, NV	R. Arnold
Friday, April 30	Mt. Charleston Elementary	Mt. Charleston, NV	T. Geer
Tuesday, May 4	Underground Structures, Colorado School of Mines	Golden, CO	C. Gertz
Saturday, May 8	Girl Scouts	Las Vegas, NV	T. Pysto
Saturday, May 8	Boy Scouts Atomic Energy Merit Badge Workshop	Las Vegas, NV	E. Harle
Wednesday, May 19	International Right of Way Association	Las Vegas, NV	G. Fasano
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

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Speaker</u>
G. <u>State and Public Interactions</u> (Continued)			
Tuesday- Friday, August 17-20	Second International Mixed Waste Symposium	Baltimore, MD	C. Gertz
Monday- Wednesday, September 27-29	Industrial & Engineering Symposium	Atlanta, GA Chemistry Division	C. Gertz

<u>Date</u>	<u>Event</u>	<u>Location</u>
H. <u>Exhibits Scheduled</u>		
Saturday, March 27	Public Open House (P)	Las Vegas, NV
Thursday- Sunday, April 15-18	Clark County Fair (P)	Logandale, NV
Sunday- Wednesday, April 18-21	B&W Fuel Company Industry Conference	Williamsburg, VA
Saturday, April 24	Public Open House (P)	Las Vegas, NV
Saturday, April 24	Earth Day/Earth Fair	Las Vegas, NV
Wednesday, May 19	Public Open House (P)	Las Vegas, NV
Wednesday- Friday, May 19-21	Geological Society of America 1993 Combined Cordilleran & Rocky Mountain Section Meeting	Reno, NV
Saturday, June 19	Public Open House (P)	Las Vegas, NV
Saturday, July 24	Public Open House (P)	Las Vegas, NV

MAR 23 1993

<u>Date</u>	<u>Event</u>	<u>Location</u>
H. <u>Exhibits Scheduled</u> (Continued)		
Saturday, August 21	Public Open House (P)	Las Vegas, NV
Saturday, September 25	Public Open House (P)	Las Vegas, NV

<u>Date</u>	<u>Event</u>	<u>Escorts</u>
I. <u>Tours Scheduled</u>		
Tuesday, March 23	Dave Rossin, President, ANS, and Guy Arlotto, NRC	TBD
Wednesday, March 24	Thurman White Middle School	TBD
Wednesday, March 24	Norman Rasmussen, Massachusetts Institute of Technology	TBD
Thursday, March 25	LLNL	J. Blink
Saturday, March 27	Public Open House (P)	Various Escorts
Monday, March 29	Eureka/White Pine Counties	TBD
Wednesday, March 31	Local Talk Show Hosts	S. Patrick
Thursday, April 1	Orr Junior High School	TBD
Thursday, April 1	French Rad Waste Regulatory Agency Representatives	TBD
Tuesday, April 6	Desert Newcomers	TBD
Tuesday, April 6	Barry Gale and Andrew Gray, DOE/HQ	TBD

<u>Date</u>	<u>Event</u>	<u>Escorts</u>
I. <u>Tours Scheduled</u> (Continued)		
Wednesday, April 7	Mineral County	TBD
Tuesday, April 13	Kenny Guinn Junior High School	TBD
Friday, April 16	Our Lady of Las Vegas	TBD
Friday, April 16	University of Nevada, Reno- Mackey School of Mines	M. Powell
Monday, April 19	NWTRB	TBD
Tuesday, April 20	Round Mountain High School	TBD
Friday, April 23	OCRWM Field Test Teachers	TBD
Saturday, April 24	Public Open House (P)	Various Escorts
Monday, April 26	High-Level Waste (HLW) Conference	TBD
Monday, April 26	Hydrology Field Trip	A. Flint
Tuesday, April 27	HLW Conference Spouses	TBD
Wednesday, May 5	USGS Headquarters	B. Craig
Thursday, May 6	Pahrump Junior High	TBD
Monday, May 10	Los Alamos	TBD
Wednesday, May 19	Public Open House (P)	Various Escorts

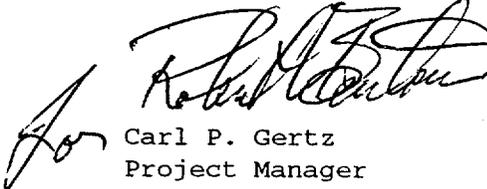
MAR 23 1993

Lake H. Barrett

-18-

<u>Date</u>	<u>Event</u>	<u>Escorts</u>
I. <u>Tours Scheduled</u> (Continued)		
Saturday, June 19	Public Open House (P)	Various Escorts
Monday, June 21	Girl Scouts Wider Opportunity Program	TBD
Saturday, July 24	Public Open House (P)	Various Escorts
Tuesday, August 17	Senior Tripsters	TBD
Saturday, August 21	Public Open House (P)	Various Escorts
Saturday, September 25	Public Open House (P)	Various Escorts

YMP:VFI-3141


For Carl P. Gertz
Project Manager



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

WBS 1.2.7.3
QA: N/A

MAR 18 1993

Carl P. Gertz, Project Manager, NV

YUCCA MOUNTAIN SITE OFFICE (YMSO) FIELD ACTIVITY REPORT

The following are the significant field activities for the weeks ending March 5, 1993 and March 12, 1993:

1. Field Operations Center, (YSMO)

A. Management and Administration

- a. The Site Manager and FOC staff participated in and provided operational and logistical support to several tours conducted during this period. These were: University of Goteborg; SERS Students; Breakfast Exchange Club; National Conference of State Legislatures; Waste Management 93; University of Colorado; Lake Barrett, Act'g Dir. OCRWM; Paul Scherrer Institute; Yerington High School; and Meadows School.
- b. Provided operations and administrative support to the Yucca Mountain Site Manager and his DOE staff.
- c. Provided operations support for field site characterization activities in the field.
- d. Completed paperwork, signatures and other administrative procedures for issuing vehicles, first aid kits, fire extinguishers, and other necessary equipment to personnel performing field duty.
- e. Processed nineteen (19) work order requests.
- f. Prepared and transmitted daily operations report to NORSOC, and bi-weekly reports to HQ OCRWM. Included was a report of a fire at HRF (not ORPS reportable.)
- g. Provided review of FY 94 Short Range Plans, Reviewed System Studies Digest.
- h. Provided interested SAIC personnel with a list of capital equipment items for FY 94 and FY 95.

- i. Site Manager renewed as a Facility Representative on the ORPS System, effective 3/12.
- j. Set up and continued to coordinate video tape training session at North.
- k. Continued work on monthly ESF video progress reports.
- l. Reviewed Job Package, JP 93-02 from an operations standpoint.
- m. The Bullfrog Planning Commission continuing with development Plan committee.
- n. Attended bi-weekly meeting of the Site Development Plan committee.
- o. Primary topic of weekly meeting was discussion on HQ Real Property concerns on establishing facilities off site in Amargosa Valley.

B. Project Safety and Health, (DOE/SAIC)

- a. Completed matrix of comparison study of California Tunneling Regulations and OSHA and MSHA Regulations.
- b. Providing restricted access control of ESF Pad worksite by controlling access at the "H" road turnoff.
- c. Attended regular monthly meeting of S&H Advisory Committee.
- d. Continued work for the Tunnel Boring Machine Technical Review Team.
- e. Worked with Project Training on Underground Training lesson plan.
- f. Occurrence Reports - four waiting for FM Signature.
 - 1. REECo - 8 outstanding: 2 awaiting FM Signature; 1 rejected (09/33/92); 1 - notification (03/01/93); 4 - 10 day notification (11/23/92, 12/28/92, and 2 on 2/16/93.)
 - 2. SAIC - 2 outstanding: 2 awaiting FM Signature.
- g. Continued monitoring ESF access to pad as requested by Site Manager.

MAR 18 1993

- h. Staff assigned to perform H&S functional appraisal of REECo, as requested by Site Manager.
- i. Reviewed two (2) Occurrence Reports and submitted comments to the Facility Representative.
- j. Four (4) surveillance: NRG-6 = 1; UZ-16 = 1; SMF Saw Room Operation = 1; and Area 25 REECo Medical = 1.

2. Raytheon Services Nevada, (RSN)

A. Field Support

- a. Geologic mapping survey of Ghost Dance Fault, Phase II scheduled for April 1993.
- b. GSF test pits have been surveyed. Calculation and plotting remain.
- c. Survey for Geologic Mapping of North Portal Box Cut, Phase III, is completed. Calculations remain.
- d. Re-survey of Trench CF-1 and Trench 8 started 3/9.
- e. Field Engineering continues to check Trench 14 daily to ensure suitability for operations.
- f. Issued five (5) work initiations (WI's) in support of ongoing and upcoming job packages.
- g. Field Engineering continues to provide support to JP-9/Rev 3, JP 92-2, JP 92-5, JP 92-8, JP 92-12, JP 92-19,, JP 92-20 and JP 93-01.
- h. Survey and calculations complete for NRG-2 Drill Pad for as-built.
- i. Survey crew continuing to work on Area 25 Survey Control Net.
- j. Survey of UZ-1 pad, as-built, is complete.
- k. Resurveyed Drill Pad corners, alignment and north grid stake on NRG-3.

B. Quality Control

- a. Completed verification of activities on UZ-16 borehole utilizing the LM-300 Drill Rig. Logging to be performed.
- b. Completed verification activities on NRG-6.
- c. Completed surveillance on N-62 Neutron Borehole.
- d. Performed video camera survey on NRG-2.
- e. Performed surveillance inspection on Trenches in Stagecoach Road (SCR-T1, T2, and T3) and in Crater Flats (SCF-T1, CF-1 and Trench 8). All acceptable.

3. Sample Management Facility, (SMF/SAIC)

- a. Continued supporting drilling operations and processing core and cuttings from UZ-16 and NRG-6. Completed UZ-16, total depth 1686 feet.
- b. Constructing Northwest-Southeast oriented geologic cross section along Drill Hole Wash. Cross sections include planned holes USW-UZ-14 and UE25 NRG-5.
- c. Laid out 100 boxes of core for viewing.
- d. Completed core logging and sampling of N-62, total depth 60 feet.
- e. Completed borehole prognosis on SRG-5.
- f. Started processing specimens from NRG-6 for USGS and M&O.
- g. Specimens shipped to New England Research Institute.
- h. Completed internal T&MSS Safety review of SMF.

4. YMP Hydrologic Research Facility, (USGS)

The following activities were accomplished by USGS Staff:

- a. Continued to cleaning exposures and conduct mapping of Trench 14, also conduct fault mapping and evaluate Quaternary Faults.

MAR 18 1993

- b. Collect ground-water samples from Amargosa Farms, Resting Spring Range, Nopah Range.
 - c. Conduct field work in Beatty.
 - d. "Wet cycle" measurement of soil gas concentrations; collection of soils, soil gases and soil moisture for stable isotope studies; and installation of permanent probes for ongoing soil gas and near-surface infiltration monitoring.
 - e. Conduct field trip on the results of surficial deposits mapping in Yucca Mounting Area.
 - f. Rephotograph and survey vandalized trenches in Crater Flats.
 - g. Collect precipitation data in Yucca Mountain Area.
 - h. Conduct geodetic leveling studies.
 - i. Clean exposures and map trenches in Busted Butte.
 - j. Monitor tracer gas injection at UZ-16 and NRG-6.
 - k. Calibrated Well USW G-2 and H-5, conduct water level measurements on Wells J12, UE-25WT #6, #16, #4, #11, #1, USW G-2 and H-5.
 - l. Calibrated Well USW H-6, water level measurements on Well J11, J12, J13, WT15, WT14, UT4, WT18, WT12 and VH1.
 - m. Conduct Mapping of Ghost Dance Fault.
 - n. Continued mapping ESF North Portal Boxcut.
5. Reynolds Electrical and Engineering Co., Inc., (REECO)

Activities conducted during week ending March 5, 1993:

A. Drilling

- a. JP 92-3, UZ-16, LM-300, cored to 1,629.06 feet, reamed to 1,623.65 feet. No deviation surveys.
- b. JP 92-11, NRG-6, JOY #1, cored to 1100 feet (total depth). Deviation survey at 1092 feet - 1 degree 30 minutes.

MAR 13 1993

- c. JP 91-9, UZN-62, CME-550, started moving equipment on location.

B. Logistics

- a. Continued requisitioning supplies, materials and services for YMP Field Operations Center.
- b. Supported ongoing tours during the week.
- c. Supported Construction efforts in Area 25.

C. Construction

- a. JP 92-20, ESF North Portal pad and Facilities.... REECo continued hauling and compacting fill from Borrow Pit #1 to the ESF pad; continued excavation of north drainage channel; completed cleanup of face and sidewalls at the boxcut; and began installation of rockbolts and wire mesh at Phase III of the boxcut.
- b. JP 93-04, Remediation UZ-1 Drill Pad....REECo began hauling, placing and compacting fill in the excavated area at UZ-1 pad.

Activities conducted during week ending March 12, 1993:

A. Drilling

- a. JP 92-3, UZ-16, LM-300, cored to 1,668.16 feet, reamed to T.D. of 1,659.91 feet. No deviation surveys. Hole completed 3/11.
- b. JP 93-01, NRG-3, moved in, rigged up. Cored to 81.91 feet, reamed to 54.28 feet. No deviation surveys.
- c. JP 91-9, UZN-62, CME-550, finished rigging up, cored to T.D. of 60.00 feet, reamed to T.D. of 60.00 feet. No deviation surveys. Hole completed 3/10.

B. Logistics

- a. Continued requisitioning supplies, materials, and services for YMP Field Operations Center.
- b. Supported four (4) tours during the week.
- c. Supported construction efforts in Area 25.

MAR 18 1993

- d. Arraigned for amenities for the Official Opening of Engineering Research Center, located in FOC.

C. Construction

- a. JP 92-20, ESF North Portal Pad and Facilities.... REECo continued excavation of north ESF drainage channel and Phase IV of the boxcut. Continued fill work at the pad.
- b. JP 93-04, Remediation, UZ-1 Drill Pad.... REECo completed backfill and compaction of excavation at drill pad and completed grading of the pad for proper drainage.

6. Los Alamos National Laboratory, (LANL)

- a. Coordinating mapping by USBR/USGS and continued construction at the North Portal box cut.
- b. Third Phase of Geological Mapping of boxcut completed.
- c. Completed coordinating new miner training classes.
- d. Rock bolt testing on south wing was done concurrently with mapping.
- e. Refinalized prioritized list of personal for mining training, this was needed due to proposed multiple shifts.

7. Document and Records Center, (CRWMS M&O)

Activities during week ending March 5, 1993:

- a. Received and Issued the following Controlled Documents:

FCRS

FCR 93/177, Rev. 0, "Changes to JP 93-01; Incorporation of Environmental Approval of Land Access and Environmental Compliance for Activities at Borehole NRG-3."

FCR 93/154, Rev. 0, "UE-25 UZ-16 Procedure for Running a Sample Bailer."

FCR 93/163, Rev. 0, "Change Testing Requirements to Section 02165."

FCR 93/164, Rev. 0, "Addition of Compaction Requirements to Specifications."

FCR 93/166, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."

FCR 93/167, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."
FCR 93/168, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."
FCR 93/169, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."
FCR 93/170, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."
FCR 93/171, Rev. 0, "Modification of Gradation Requirements for Pipe Bedding Material."
FCR 93/174, Rev. 0, "Typical 20 ft. Rockbolt."
FCR 93/156, Rev. 1, Reissue
FCR 93/181, Rev. 0, "Additional Approval of Land Access and Environmental Compliance for Neutron Access Hole N-62."
FCR 93/182, Rev. 0, "Replacing Typical Road Section."

b. Reproduction:

13,493 pages copied (1,320 REECO Copier).
740 square feet of drawings.

c. Documents Issued:

827 controlled documents.
1 uncontrolled documents.

d. DTAR logoffs: 309.

Activities during week ending March 12, 1993:

a. Received and Issued the following Controlled Documents:

FCRs

FCR 93/188, Rev. 0, "Use of SFRS Packaged Mix Shotcrete for Portal Face."
FCR 93/191, Rev. 0, "Specification SP09 Section 02313 Drilling & Blasting (Subsurface)."

b. Reproduction:

12,790 pages copied.
595 drawings copied.

c. Documents Issued:

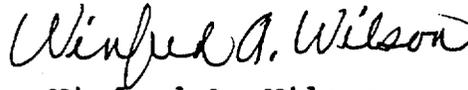
483 controlled documents.
295 uncontrolled documents.

MAR 18 1993

d. DTAR logoffs: 117.

8. Field Training, (SAIC)

- a. 4 GET 1.5 exams were given. All examines passed.
- b. Standard First Aid Training conducted. A total of 11 people attended.
- c. GET 1.1 (GERT) training was conducted. A total of 8 people attended.



Winfred A. Wilson
Site Manager

YMP:93/73

cc:

R. M. Cameron, CRWMS M&O/YMSO, Mercury, NV
R. R. Schneider, SAIC/YMSO, Mercury, NV
M. D. Voegele, SAIC, Las Vegas, NV
G. K. Beall, SAIC, Las Vegas, NV
J. H. Peck, SAIC, Mercury, NV
C. J. Cotten, SAIC, Las Vegas, NV
I. R. Cottle, SAIC, Las Vegas, NV
G. D. Milligan, SAIC/YMSO, Las Vegas, NV
M. B. Blanchard, YMP, Las Vegas, NV
R. V. Barton, YMP, Las Vegas, NV
J. R. Dyer, YMP, Las Vegas, NV
S. B. Jones, YMP, Las Vegas, NV
D. R. Williams, YMP, Las Vegas, NV
J. T. Sullivan, YMP, Las Vegas, NV
R. B. Baumeister, YMP/YMSO, Las Vegas, NV
R. J. White, YMP/YMSO, Las Vegas, NV
W. R. Tunnell, YMP/YMSO, Las Vegas, NV
Phil Justus, NRC, Las Vegas, NV
Dean Stucker, HQ (RW-22) FORS

bcc:

A. C. Bonk, REECO, Las Vegas, NV