

# NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

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MEMOR/	NDOM	FOR:
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Robert E. Browning, Director Bolivision of Waste Management

FROM:

Tilak R. Verma, Senior On-Site Licensing Representative Salt Repository Project (SRP)

SUBJECT:

SRP SITE REPORT FOR THE MONTH OF JUNE, 1986.

#### 1. GEOLOGY:

- 1. A working group meeting to finalize seismic criteria for shaft design was held at Fluor in Irvine, California. The meeting (June 9-13, 1986) was attended by technical staff from Fluor/MKE, PB/PB-KBB, WCC, ONWI and SRPO. The working group is also getting help from four outside consultants (Robert P. Kennedy, Christopher M. St. John, John Lysmer and E.J. Cording). A copy of the agenda (Attachment No. 1) is provided for your information.
- 2. Surface Base Test Plan (SBTP) has a new name now. It is called "Surface Investigation Plan" (SIP). SIP will provide a basis for controlling the Site Study Plans and Technical Procedures. SIP will also contain a listing and a brief description of the Site Study Plans. It will also give activity schedules, hold/decision points and interference potential with other activities. I also have some additional details on SIP that I will discuss with John Trapp.
- 3. I have received a controlled copy of the "Synthetic Geotechnical Design Reference Data for the Deaf Smith Site." This document can be reviewed in my office under Appendix 7.
- 4. Texas Bureau of Economic Geology has the following "Well Summary Reports":

G. Friemel No. 1
Rex White No. 1
Grabbe No. 1
Sawyer No. 1
Mansfield No. 1
Zeeck No. 1
J. Friemel No. 1
Detten No. 1
Harman No. 1
Woods-Holtzclaw No. 1

WM Record File

WM Project 16
Docket No.

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5. John Ellenberger has started working flished  $\frac{REB}{N}$ 

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6. Palo Duro Microearthquake Network Operation Reports for the periods of April-July, 1984, August-December, 1984, and January-June, 1985 are available.

### 2. QUALITY ASSURANCE:

- SRP has issued a final audit report (Attachment No. 2) for the QA audit of PB/PB-KBB.
- 2. ONWI and SRPO staff conducted a three day QA surveillance of PNL to verify implementation of selected technical procedures and instructions pertaining to corrosion testing activities at PNL. As a result of the surveillance, three observations were noted relative to receipt inspection, recording of samples in laboratory notebooks, and an operation being performed during the repressurizing of autoclaves that is not documented in the procedure.
- 3. M. Kowaleski, Terry Dunn and Don Patterson are three CER-QA staff members that are assisting Jerry Reese in his QA activities.
- 4. An ONWI/SRPO audit of Brookhaven National Laboratories (BNL) to verify implementation of BNL's QA plan for activities pertaining to the Salt Radiation Effects study was conducted on June 11-12, 1986. Four deficiencies relative to documentation, measuring and test equipment and follow-up of internal corrective actions were identified.
- 5. A surveillance of RE/SPEC Inc.'s work on long-term creep testing in salt was conducted by ONWI. Several concerns regarding equipment calibration, personnel training records, core storage and inventory logging were identified.
- 6. ONWI and SRPO conducted an audit of TBEG Core Research Center on June 24-25, 1986. I have requested a copy of their audit report.
- 7. A QA audit of INTERA Technologies was also conducted by ONWI on June 24-25, 1986. INTERA is an ONWI contractor working on Performance Assessment in the area of groundwater flow modeling.

#### 3. IN-SITU TESTING:

1. A revised draft of "Underground Test Plan for Site Characterization and Testing in an Exploratory Shaft Facility in Salt" (Revision 1) is available. This document is specific to the Deaf Smith County Site. In discussions with Golder Associates, I am told that all major comments provided by various reviewers of the March, 1985 "Draft Underground Test Plan" have been incorporated in this plan.

We should make a formal request to SRPO for getting this document released to NRC for our review and comments.

- 2. I attended a Planning and Management meeting on Underground Testing. The meeting was held on June 17-18, 1986 (Attachment No. 3), in Seattle, Washington. I also spent time discussing the details of underground testing with Golder Associates. Golder Associates wants to take advantage of WIPP experience in developing their detail test procedures. There was a considerable discussion on needs for off-site testing before and during site characterization.
- There is a proposal for holding an "International Conference on Geotechnical Instrumentation." SRPO and ONWI are discussing the possibilities with WIPP and FRG.

#### 4. PERFORMANCE ASSESSMENT:

1. ONWI has completed two FORTRAN programs for the WAPPA (a computer code) preliminary sensitivity study. One of the programs reads a heat-load file and creates a Statistical Analysis System that models the heat load for BRINETEMP (a computer program). The other program reads the output of the Statistical Analysis System and writes out the completed heat load model for BRINETEMP.

#### 5. ENVIRONMENTAL FIELD PROGRAM:

 I have received some details of Environmental Field Program being proposed by SRPO. Study Plans dealing with the following topical areas are being prepared:

Cultural Resources
Meteorology/Air Quality
Aquatic and Terrestrial Ecology
Water Resources
Utilities/Solid Waste
Background Environmental Radioactivity
Aesthetics
Acoustics
Land Use
Transporation
Soils
Salt

Each of these disciplines will have a "Site Study Plan", a Management Plan and Procedures.

Site Study Plans are to provide a description of the tests. Management Plans will contain schedule, resources, performing organization, qualifications, reporting plans of data collection and synthesis of the data base. Procedures will contain explicit "how to" instructions. Attachment No. 4 provides the review schedule for recommendations of Study Plan submittals to State.

#### 6. MISCELLANEOUS:

- 1. SRPO has tentative plans to open a temporary office near Vega, sometime near the end of July, 1986, relocating 3-4 DOE staff and 10-12 contractor staff and a start-up team to begin establishing a presence in the local area and to carry out the early program activities that do not require access to the site. More permanent offices will then be located in Hereford and/or Amarillo, and eventually on the ESF; and the remaining project staff will be relocated to the site.
- 2. R. Wagner of RE/SPEC presented a paper, "An Evaluation of Constitutive Models for Salt Creep" at the Second International Symposium on Numerical Models in Geomechanics in Hannover, West Germany. Wagner also visited with Belgian geotechnical people in Ghent, Belgium. I have received a copy of his trip report that also includes the paper he presented (Attachment No. 5).
- 3. SRPO/NRC management meeting was held here in Columbus on June 9-10, 1986. Representatives from Texas, Mississippi, Utah, DOE-HQ and ONWI attended the meeting. I have already discussed some of the key points raised during the management meeting. We should hold these management meetings every two to three months. Next management meeting should be held in Washington, so that you and/or Dr. Bell could attend the meeting.

Filax R. Verong

Tilak R. Verma
Senior On-Site
Licensing Representative
Salt Repository Project

NRC:TRV:max:1458JD

Enclosures: As Stated

cc: M. Bell

- J. Bunting
- J. Greeves
- J. Linehan
- P. Justus
- R. Johnson
- S. Bilhorn
- P. Prestholt
- F. Cook
- J. Knight
- J. Neff
- G. Appel
- A. Avel
- S. Frishman

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# Attachment No. 2

#### AGENDA

#### SHAFT SEISMIC DESIGN GUIDE

#### WORKING GROUP MEETING

#### JUNE 9 & 10, 1986

Location:
Fluor Technology Inc./Adv. Tech. Div.
3333 Michelson Drive
Irvine, CA 92730
Room B4-11

Participating Organizations:
DOE/ONWI
Fluor Technology Inc.
Parsons Brinckerhoff/PB-KBB
Woodward-Clyde
Morrison-Knudsen Engrs., Inc.
Special Consultants

#### Objectives:

(1) Provide overview to consultants

(2) Obtain comments on draft sections (including consultants)

(3) Resolve comments on drafts

(4) Plan details for seismic profile runs (tasks)

(5) Define any other changes to seismic design section

#### June 9

8:00-8:15 Introductions

8:15-8:45 Overview for consultants

8:45-12:00 Review and resolve comments on Section 6.6-Seismological Information

12:00-1:00 Lunch

1:00-4:30 Review and resolve comments on Section 8.9-Seismic Input

4:30-5:00 Summarize discussions of the day

#### June 10

8:00-12:00 Review and Resolve Comments on Section 10.4-Seismic Design Analysis

12:00-1:00 Lunch

1:00-2:30 Plan details for seismic profile runs (Task 5)

2:30-3:00 Define any other changes to seismic design sections

3:00-4:00 Prepare Meeting understandings

4:00-5:00 Make any future plans and sign understandings

# SHAFT DESIGN GUIDE REVIEW MEETINGS

# **AGENDA**

# JUNE 11-13, 1986

orticipating Organizations: DE/ONWI Luor Technology Inc. Derrisons Brinckerhoff/PB-KBB Derrison-Knudsen Engrs., Inc.		
Objectives: (1) Review and resolve comments on draft guide sections		
(2) Discuss seismic sections (3) Prepare plans of editing and publishing for submittal (4) Define other remaining actions and responsibilities		
June 11		
1-3 4-5		
6 (except 6.6) i integration 7		
June 12		
8 (except 8.9) integration		
9		
10 (except 10.4) d integration ll guide ure action		

# Attachment No. 2



Department of Energy Chicago Operations Office Salt Repository Project Office 505 King Avenue Columbus, Ohio 43201-2693 Commercial (614) 424-5916 F.T.S. 976-5916

June 13, 1986

Mr. R.H. Janowski Project Manager Parsons Brinckerhoff/PB-KBB 11767 Katy Freeway, Suite 700 Houston, TX 77079

Dear Mr. Janowski:

SUBJECT: DOE AUDIT OF PARSONS BRINCKERHOFF/PB-KBB

AUDIT NO. PB-86-3-E APRIL 23-25, 1986

Attached is the DOE/SRPO Audit Report for the above subject audit. The report presents the results of the audit conducted at your Houston facility. These results were discussed with Parsons Brinckerhoff/PB-KBB personnel at the post-audit meeting held on April 25, 1986.

The cooperation, responsiveness and courtesies extended by your personnel during the conduct of the audit and during the post-audit meeting were greatly appreciated. A problem area identified in this audit was the effectiveness of the QA program being weakened by the manpower limitations of the QA staff and its involvement in day-to-day in-line work activities. The QA program must be in place and capable of functioning effectively without the direct involvement of the QA staff. This will become more imperative as the volume of work activities increase and QA personnel become less directly involved in the day-to-day in-line work activities. I suggest that PB/PB-KBB address this area and provide SRPO with the action planned for solution.

It is requested that you reply to this report within 20 working days of receipt. Your reply should be addressed to the Chief, Quality Assurance, DOE/SRPO and shall identify (1) the actions to be taken to correct the reported findings and observation, (2) the root cause, (3) the corrective action to preclude the recurrence of similar deficiencies, and (4) a schedule for completion of all involved actions. Please document your responses directly on the attached Audit Action Reports.

If you have any questions, please feel free to contact me at (614) 424-5916.

Sincerely,

T.J. Reese

Chief

Quality Assurance

Salt Repository Project Office

SRPO:TJR:max:1150JD

Enclosure: As Stated

cc: J. Neff, SRPO

R. Lahoti, SRPO

S. Webster, SRPO E. Langston, DOE-HQ, RW-43

C. Newton, DOE-HQ, RW-23

M. Flannigan, DOE-CH

E. Sulek, Weston
T. Verma, NRC
V. Lepardo, PB/PB-KBB

R. Nolin, PB/PB-KBB

F. Hood, BPMD

J. Lefman, BPMD

H. Nunes, BPMD

M. Gildner, BPMD

QA# 139-86