



See Pocket for  
Enclosure

WM DOCKET CONTROL  
CENTER

Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201

'83 AUG 29 P3:32

August 24, 1983

WM Record File  
10611

WM Project 16  
Docket No. \_\_\_\_\_

PDR   
LPDR

Hubert Miller, Chief  
HLW Technical Development Branch  
Division of Waste Management  
Nuclear Regulatory Commission  
7915 Eastern Avenue  
Silver Springs, MD 20910

Distribution: DM	HM
REG	RM
JOB	JS
(Return to WM, 623-SS)	Wkerr C2

Dear Mr. Miller:

MINUTES OF MEETING WITH SALT STATE REPRESENTATIVES AND NRC, JULY 19-20, 1983

Enclosed is your copy of the minutes of the meeting with salt state representatives and NRC, held July 19-20, 1983, in Columbus, OH. These minutes reflect the changes and additions made by the states and NRC.

As discussed at the July meeting, the next state meeting will be September 20-21, 1983, in Columbus. A draft agenda for this meeting has been sent to you as an attachment to the letter of invitation to our guest speaker, Hassell Hunter. Please phone your comments on the draft agenda to your usual contact person on my staff so that a final agenda can be prepared and mailed to you prior to the meeting.

I look forward to seeing you at the September 20-21 meeting.

Sincerely,

J.O. Neff  
Program Manager  
NWTS Program Office

NPO:LAC:kgh

Enclosure: July 19-20, 1983 Meeting Minutes

cc: with enclosure  
Meeting attendees  
W. Bennett, DOE-HQ  
R. Johnson, NRC

ST# 518-83

8402010001 830824  
PDR WASTE  
WM-16 PDR

00133



Department of Energy  
 National Waste Terminal  
 Storage Program Office  
 505 King Avenue  
 Columbus, Ohio 43201

WM DOCKET CONTROL  
 CENTER

'83 AUG 26 P3:41

WM Record

126.11

WM Project

Docket No.

PDR

LPDR

Distribution:

DMATTSON

B JOHNSON

HM

(Return to WM, 623-SS)

LS

August 23, 1983

Dr. L. Hall Bohlinger  
 Louisiana Nuclear Energy Division  
 Office of Environmental Affairs  
 P.O. Box 14690  
 Baton Rouge, LA 70898

Dear Dr. Bohlinger:

MINUTES OF MEETING WITH SALT STATE REPRESENTATIVES AND NRC, JULY 19-20, 1983

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Sincerely,

  
 J.O. Neff  
 Program Manager  
 NWS Program Office

NPO:LAC:kgh

Enclosure: July 19-20, 1983 Meeting Minutes

cc: with enclosure  
 Meeting attendees  
 W. Bennett, DOE-HQ

ST# 518-83

~~126.11~~



Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201

August 24, 1983

Gary R. Tomsic  
Department of Community & Economic Dev.  
State Office Building, Room 6290  
Salt Lake City, Utah 84114

Dear Mr. Tomsic:

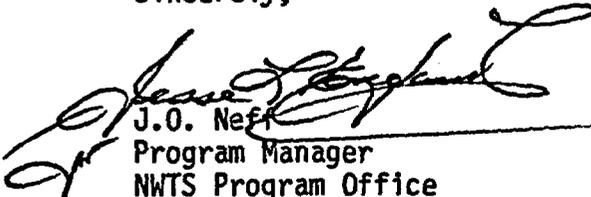
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Program Manager  
NWTS Program Office

NPO:LAC:kgh

Enclosure: July 19-20, 1983 Meeting Minutes

cc: with enclosure  
Meeting attendees  
W. Bennett, DOE-HQ

ST# 518-83



Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201

August 24, 1983

Steve Frishman, Director  
Nuclear Waste Projects Office  
Sam Houston Office Building, Room 204  
200 East 14th Street  
Austin, TX 78711

Dear Mr. Frishman:

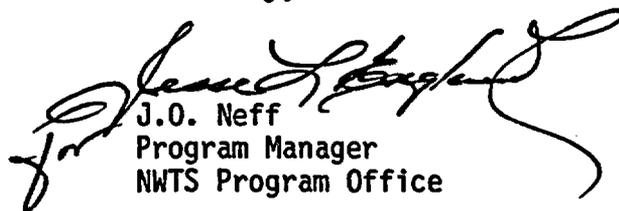
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Sincerely,

  
J.O. Neff  
Program Manager  
NWTs Program Office

NPO:LAC:kgh

Enclosure: July 19-20, 1983 Meeting Minutes

cc: with enclosure  
Meeting attendees  
W. Bennett, DOE-HQ

ST# 518-83



Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201

August 24, 1983

Ron Forsythe  
MS Department of Energy  
510 George Street  
Jackson, MS 39202

Dear Mr. Forsythe:

MINUTES OF MEETING WITH SALT STATE REPRESENTATIVES AND NRC, JULY 19-20, 1983

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Sincerely,

  
J.O. Neff  
Program Manager  
NWTs Program Office

NPO:LAC:kgh

Enclosure: July 19-20, 1983 Meeting Minutes

cc: with enclosure  
Meeting attendees  
W. Bennett, DOE-HQ

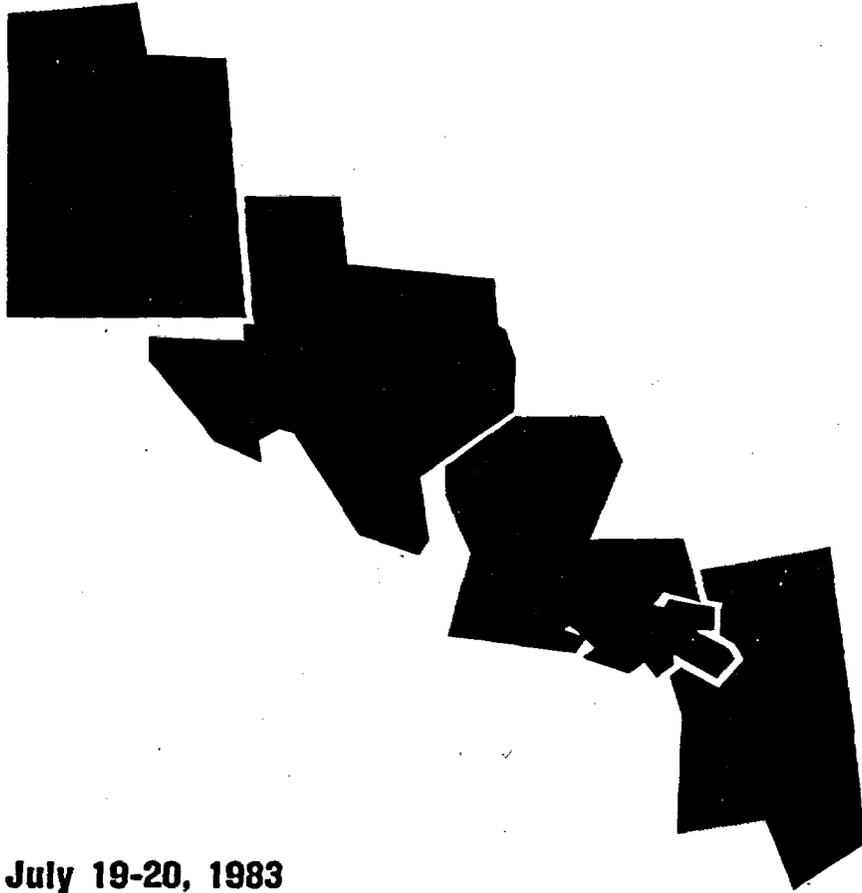
ST# 518-83

*Enclosure  
to 8/20/83 memo  
from Neff to Miller*

**U.S. Department of Energy**

**National Waste  
Terminal Storage Program**

**Meeting with  
Salt State Representatives**



**July 19-20, 1983  
Columbus, Ohio**

MINUTES OF  
JULY MEETING WITH SALT STATE REPRESENTATIVES AND NRC

JULY 19-20, 1983

BATTELLE MEMORIAL INSTITUTE  
COLUMBUS, OHIO

CONFERENCE ROOM "G"  
BY THE 505 KING AVENUE LOBBY

A complete listing of all attendees is attached. (Attachment 1)

July 19, 1983

Jeff Neff opened the state meeting by explaining its purposes. He indicated that state representatives would have time later in the agenda (Attachment 2) to make plans (or changes) for future state meetings. Jeff reviewed the NPO organization chart and the target dates in the salt studies program.

(Attachment 3)

Stan Goldsmith presented background on Battelle and the ONWI organization.

(Attachment 4)

Don Keller reviewed public information activities. As a part of the discussion of proposed public outreach activities, there was discussion of the effectiveness of the information fair in Texas. (Attachment 5)

Leslie Casey, designated DOE representative available to assist in the flow of data/information to interested parties, reviewed the State Working Group requests on data flow. (Attachment 6)

Bev Rawles described ONWI's system for managing the flow of technical information. States and NRC were given copies of the reports bibliography (ONWI-200 DRAFT), the catalog and procedures manual (enclosures to Attachment 6). State and NRC input was requested on the procedures being developed for the manual. Bev offered to demonstrate how the records management system works. State and NRC representatives may wish to view this demonstration at a future meeting. The possibility of state hook-up with the ONWI computer and availability of drill logs was also discussed.

Matt Golis discussed the ONWI Technical Data Management System (TDMS), which is now being developed. This system will make the "best" data available to persons in the project. The selection of key data and the availability of a history in case of revision was discussed. (Attachment 7 was distributed.)

Linda McClain discussed progress on the siting guidelines. Written comments on the Task Force draft were received from 25 groups or organizations and 28 individuals. This does not include the 1,756 postcards from the Texas Pan-handle. Approximately 1,100 issues were mentioned. The next meeting for state and federal agency representatives to review the guidelines is to be held in August.

Hub Miller, NRC liaison with DOE on waste repository activities, presented an overview of NRC activities. The minutes from the June 26-27 meeting between NRC and DOE/NPO were given to state representatives. A discussion followed on plans for and the effect on the program of timely interaction between NRC and the states

(Attachment 8)

Engineering studies were discussed by Dick Kingsley and Hassan Farzin.

(Attachments 9 and 10)

Geologic activities were summarized by George Heim. A discussion followed on "adequate" information that would lead to the selection of one site over all the others.

An update on socioeconomic studies was presented by Suzanne Gray. Economic issues in the four states that were of greatest concern in the comments received from the April and May public hearings were discussed.

(Attachment 11)

Analysis of environmental issues was described by Bill McIntosh. Copies of the Summary of Issues and Concerns Expressed During the April-May, 1983, U.S. Department of Energy Public Hearings on Proposed Nomination of Sites for Site Characterization and Recommendation of Issues for Environmental Assessments and Site Characterization Plans (ONWI-505) were distributed.

(Attachment 12)

Environmental Assessment Process was presented by Bob Wunderlich. A discussion followed concerning what would be covered in the EAs and when the drafts would be available.

(Attachment 13)

July 20, 1983

State representatives met in the Lecture Hall to hear remarks by Tom Pigford of the National Academy of Sciences. Following his presentation, Dr. Pigford met with the state representatives to answer their questions.

Following a state caucus during the lunch hour, Jeff Neff turned the floor over to the states for suggestions and comments. Ron Forsythe presented the state consensus and recommendations:

1. State meetings

- These meetings are useful.
- States would like to have agenda more than one week before meetings and will inform DOE of attendees within one week of receiving agenda.
- Format of meetings: structure sessions to encourage dialogue, not monologue.
- Agenda items at each meeting should include: (1) schedule of meetings for the next two months, (2) outside speaker on a common interest, (3) state caucus at lunch time, and (4) issues to be discussed at the next state meeting.
- Appropriate state people could attend, depending on topics to be discussed.
- Prefer summary minutes, not recorded minutes; to be sent to states for review and approval.
- Meeting purpose is discussion, not making commitments (either states or DOE).

ACTION: Provide states with an information calendar of meetings approximately two months in advance. (NPO)

2. Frequency of meetings

- Bimonthly is fine. Columbus is appropriate meeting site.
- States reserve right to continue having technical meetings as needed.

3. Technical Data System

- Should be useful to salt states, but there was some concern about timeliness of automated systems. Stressed a need to be able to meet whenever a state desired information on a technical topic.

ACTION: States should be given copy of ONWI Work Breakdown Structure (WBS) with the explanatory dictionary of terms. (ONWI)

4. Agenda for next meeting - September 20-21 (to be held in Columbus, Ohio)
  - EA methodology - would like to hear from contractor who is writing EAs.
  - Mission Plan
  - '84 budget
  - Speaker on big hole drilling - would prefer someone other than a prime contractor.
5. Public Information Office concept
  - State prefer to discuss individually with NPO.
6. Information Exchanges
  - DOE should be sponsor. Interest groups can have their own meetings and invite DOE participation.
  - Consensus of states was they would attend exchanges, but did not want a role.

States agreed with the need for public information efforts. There was a general discussion of sponsorship, panel members, and meeting logistics.

Hubert Miller of NRC presented the following conclusions:

- NRC's precise role with respect to the EA process is presently undergoing review by NRC; it is expected that the Commission's position will be incorporated in new regulations implementing NHPA.
- Present resource limitations and uncertainty over future staff increases make the timing and depth of NRC's review of the Salt Repository Project during the current site screening stage unclear at the present time.
- NRC is interested in attending the DOE/state meetings. The bimonthly, DOE/state meetings would be opportunities to satisfy the regular management meetings between NRC and DOE specified in the Morgan/Davis Agreement.
- NRC will continue planning general workshops with DOE during the upcoming months. Care will be taken to avoid conflicts with other meetings; however, it was explained that these workshops are highly technical and as such, are not likely to conflict with DOE/NRC/state policy meetings. Meeting agendas will be completed two weeks before the meeting. The states will be invited to all NRC/DOE

meetings as called for by the Morgan/David Agreement. The state representatives expressed agreement that this was a proper way to proceed.

- NRC is preparing a letter to establish points of contact between NRC and the states.
- At DOE/s written request NRC will give DOE comments on the proposed information management and transfer system which was presented during the meeting.

Submitted by: Debra Halliday, ONWI

List of Attachments to  
July 19-20 Meeting Minutes

1. Meeting Attendees
2. Meeting Agenda
3. J. O. Neff's viewgraphs
4. S. Goldsmith's viewgraphs
5. D. Keller's viewgraphs
6. July 19, 1983 letter to state representatives and NRC from J. O. Neff, "Implementation of State Working Group Recommendations Relative to the Salt Repository Project," with enclosed ONWI-200 (bibliography), June 29, 1983 RFP distribution recommendations (with RFP E512-10000R as an example), and Catalog.
7. July 19, 1983 letter to state representatives and NRC from J. O. Neff, "Technical Data Management System (TDMS) for the Salt Repository Project," with enclosed products, index, borehole summaries and system description.
8. H. Miller's viewgraphs (June 26-27 minutes supplied to states, but not attached to these minutes.)
9. R. Kingsley's viewgraphs
10. M. H. Farzin's viewgraphs
11. S. Gray's handout
12. W. McIntosh's viewgraphs
13. R. Wunderlich's viewgraphs

ATTACHMENT 1

ATTENDEES

MEETING WITH SALT STATE REPRESENTATIVES  
JULY 19-20, 1983

<u>Name</u>	<u>Affiliation</u>	<u>Address</u>
Renwick DeVille	Louisiana Geological Survey	P.O. Box G Baton Rouge, LA 70896
Narenda Dave	Louisiana Department of Natural Resources	P.O. Box G Baton Route, LA 70896
Sheila Conway	High-Level Nuclear Waste Policy Group - Utah	6290 State Office Bldg. Salt Lake City, UT 84116
Steve Frishman	Texas Governor's Office/ General Counsel	Box 12428 Austin, TX 78711
Dan Smith	Texas Governor's Office/ General Counsel	Box 12428 Austin, TX 78711
Alvin Bicker	Mississippi Bureau of Geology	P.O. Box 5348, 2525 N. West S Jackson, MS 39216
Ronald Forsythe	Mississippi Energy & Transportation Board	300 Walkins Bldg, 510 George Jackson, MS 39202
Hubert Miller	NRC-Division of Waste Management	Washington, D.C. 20555
Robert Johnson	NRC-Division of Waste Management	Washington, D.C. 20555
Donna Mattson	NRC-Division of Waste Management	Washington, D.C. 20555
Daryl Trotter	BLM-Utah	P.O. Box 920 Moab, UT 84532
Virgil Lowery	DOE-HQ	Germantown, MD
Jeff Neff	DOE-Columbus	505 King Avenue Columbus, OH 43201
Linda McClain	DOE-Columbus	505 King Avenue Columbus, OH 43201
Leslie Casey	DOE-Columbus	505 King Avenue Columbus, OH 43201
Bob Wunderlich	DOE-Columbus	505 King Avenue Columbus, OH 43201

<u>Name</u>	<u>Affiliation</u>	<u>Address</u>
Alan Handwerker	DOE-Columbus	505 King Avenue Columbus, OH 43201
Tom Baillieul	DOE-Columbus	505 King Avenue Columbus, OH 43201
Albert LaSala, Jr.	USGS	505 King Avenue Columbus, OH 43201
Gary Marmer	Argonne National Lab	505 King Avenue Columbus, OH 43201
Victor Montenyohl	Weston	2301 Research Blvd. Rockville, MD 20850
Robert Schuler	Weston	2301 Research Blvd. Rockville, MD 20850
Larry White	Weston	2301 Research Blvd. Rockville, MD 20850
Stan Goldsmith	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Don Keller	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Hassan Farzin	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Beverly Rawles	Battelle-BPMD	505 King Avenue Columbus, OH 43201
Matt Golis	Battelle-ONWI Systems/TDMS	505 King Avenue Columbus, OH 43201
Richard Kingsley	Battelle-ONWI Engineering	505 King Avenue Columbus, OH 43201
Bill McIntosh	Battelle-ONWI Environmental Assessment	505 King Avenue Columbus, OH 43201
Colleen Nissl	Battelle-Legal Counsel	505 King Avenue Columbus, OH 43201
George Heim	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Suzanne Gray	Battelle-ONWI	505 King Avenue Columbus, OH 43201

<u>Name</u>	<u>Affiliation</u>	<u>Address</u>
Larry Anderson	Battelle-BPMD	505 King Avenue Columbus, OH 43201
Helen Latham	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Diane Cattran	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Bill Merriman	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Ralph Henricks	Battelle-BPMD	505 King Avenue Columbus, OH 43201
Debra Halliday	Battelle-ONWI	505 King Avenue Columbus, OH 43201
Anna Adams	Battelle-ONWI	505 King Avenue Columbus, OH 43201
John T. Suchy	Battelle-ONWI	505 King Avenue Columbus, OH 43201
George Loudder	Battelle Advisor- Texas	P.O. Box 15047 Amarillo, TX 79105
Charles Killgore	Battelle Advisor- Louisiana	506 Hundred Oaks Drive Ruston, LA 71270
Arlie Howell	Battelle Advisor- Mississippi	Route 6, Box 540 Lucedale, MS 39452

ATTACHMENT 2

AGENDA  
 MEETING WITH SALT STATE REPRESENTATIVES  
 JULY 19-20, 1983  
 BATTELLE MEMORIAL INSTITUTE  
 COLUMBUS, OHIO  
 CONFERENCE ROOM "G"  
 BY THE 505 KING AVENUE LOBBY

Tuesday, July 19

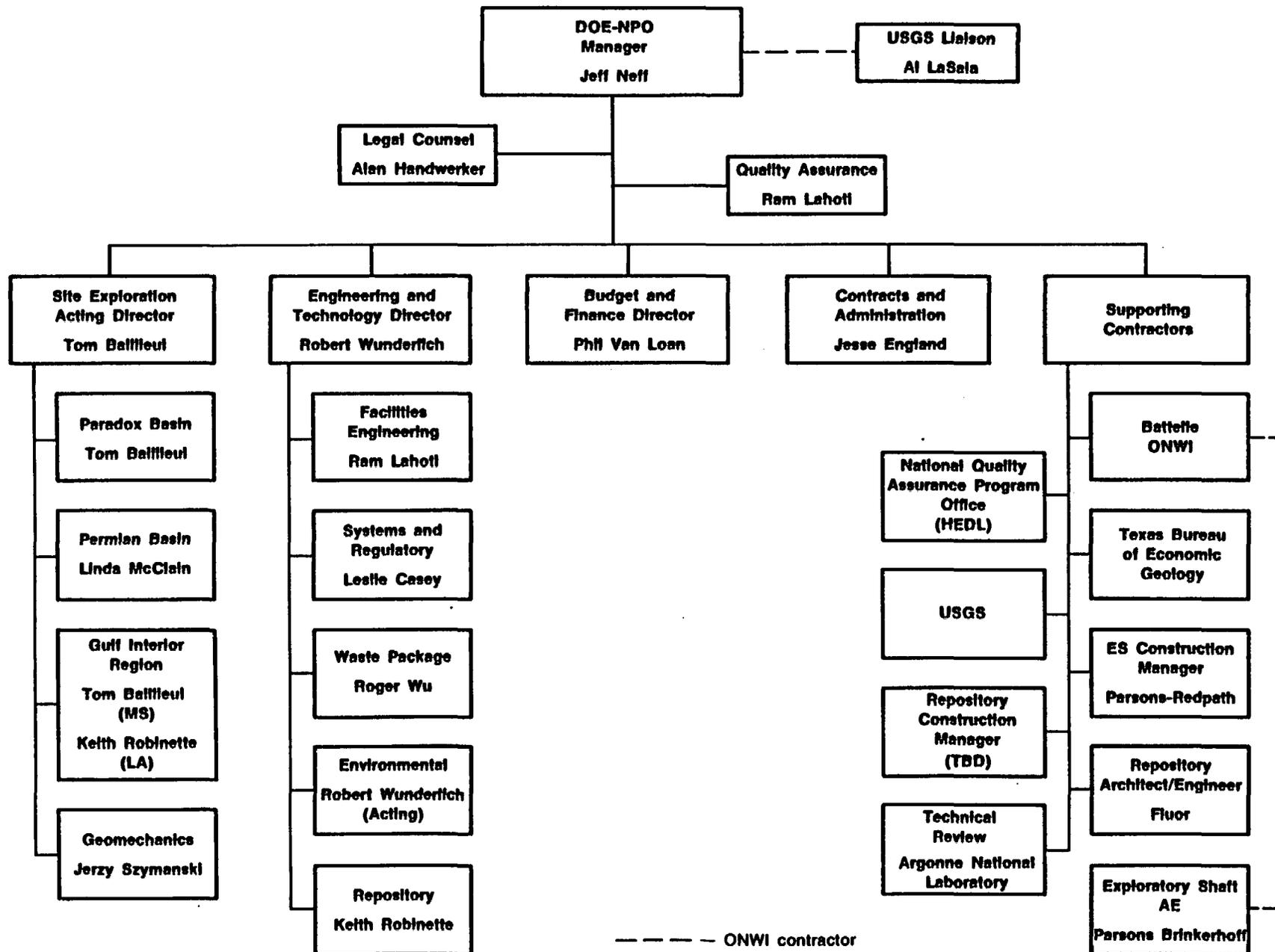
		<u>Speaker</u>
9:00 - 9:15 a.m.	Opening Remarks	Jeff Neff
9:15 - 9:30 a.m.	ONWI Organization	Stan Goldsmith
9:30 - 10:00 a.m.	Public Information Activities	Don Keller
10:00 - Noon	Implementation of State Working Group Recommendations Relative to the Salt Repository Project	Leslie Casey Beverly Rawles Matt Golis
Noon - 1:15 p.m.	Lunch - Cafeteria Room 6	
1:15 - 1:45 p.m.	Siting Guidelines	Linda McClain
1:45 - 2:15 p.m.	Status of NRC Activities	Hubert Miller Bob Johnson
2:15 - 2:45 p.m.	Engineering Studies	Richard Kingsley Hassan Farzin
2:45 - 3:15 p.m.	Geologic Studies	George Heim
3:15 - 3:45 p.m.	Socioeconomic Studies	Suzanne Gray
3:45 - 4:15 p.m.	Environmental Studies	Bill McIntosh
4:15 - 4:45 p.m.	Environmental Assessment Process	Bob Wunderlich

Wednesday, July 20

9:00 - 11:00 a.m.	National Academy of Sciences Seminar (Lecture Hall)	Tom Pigford
11:00 - Noon	State Meeting with T. Pigford - Room G	
Noon - 2:00 p.m.	Lunch - State Representatives Caucus - Room G	
2:00 - 4:00 p.m.	Open Discussion Questions and Answers Future Meetings: Frequency, Location, Topics	Jeff Neff
4:00 p.m.	Closing Remarks	

ATTACHMENT 3

# DOE National Waste Terminal Storage Program Office Columbus, Ohio



## **Interim Target Dates in Salt Studies**

- **Issue final siting guidelines—October, 1983**
- **Nominate salt site(s) for site characterization—  
Spring, 1984**
- **Recommend salt site(s) for site characterization—late  
Spring, 1984**

ATTACHMENT 4

**PRESENTATION BEFORE  
SALT STATE REPRESENTATIVES**

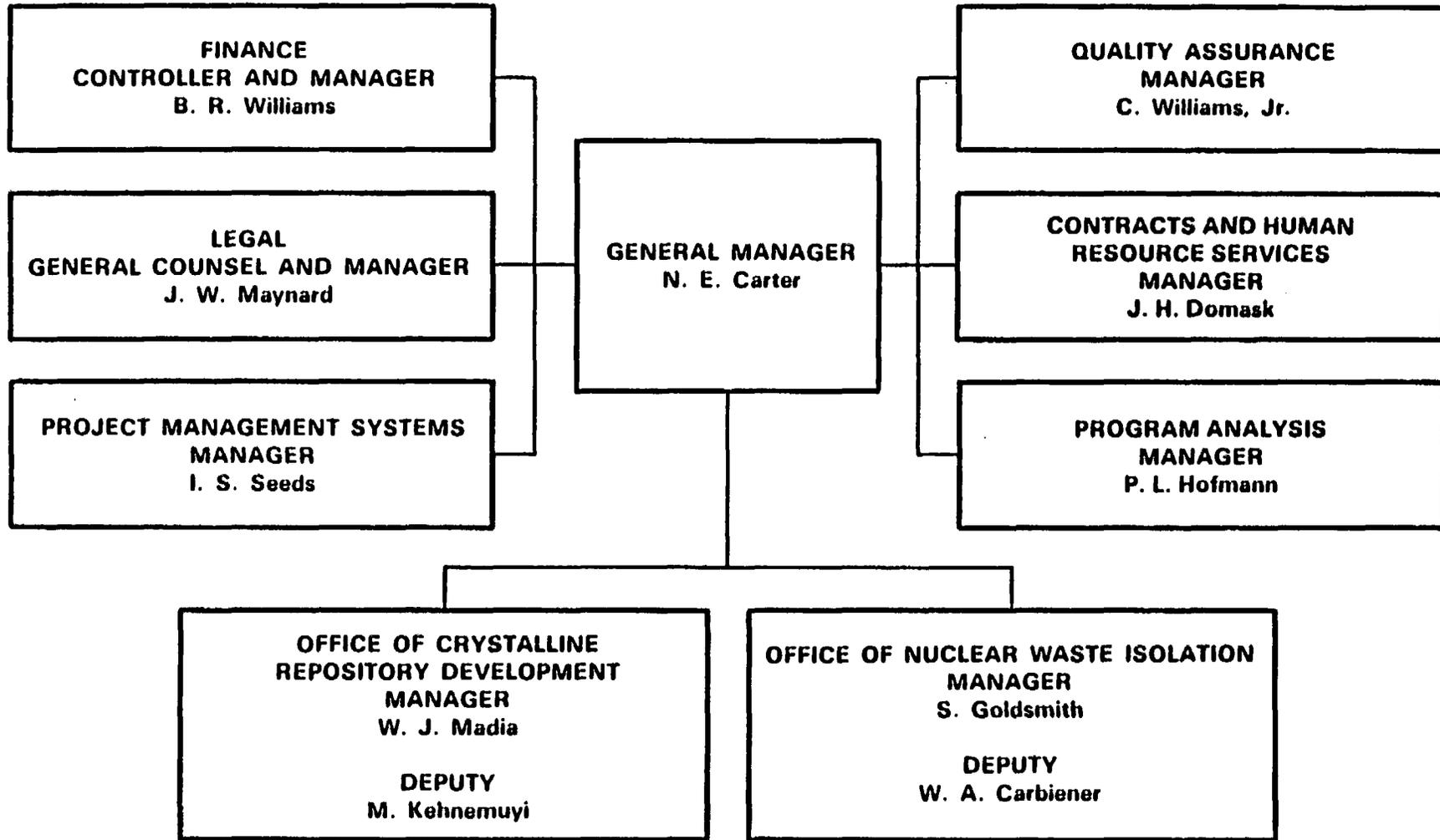
**JULY 19, 1983**

**S. GOLDSMITH  
MANAGER  
ONWI**

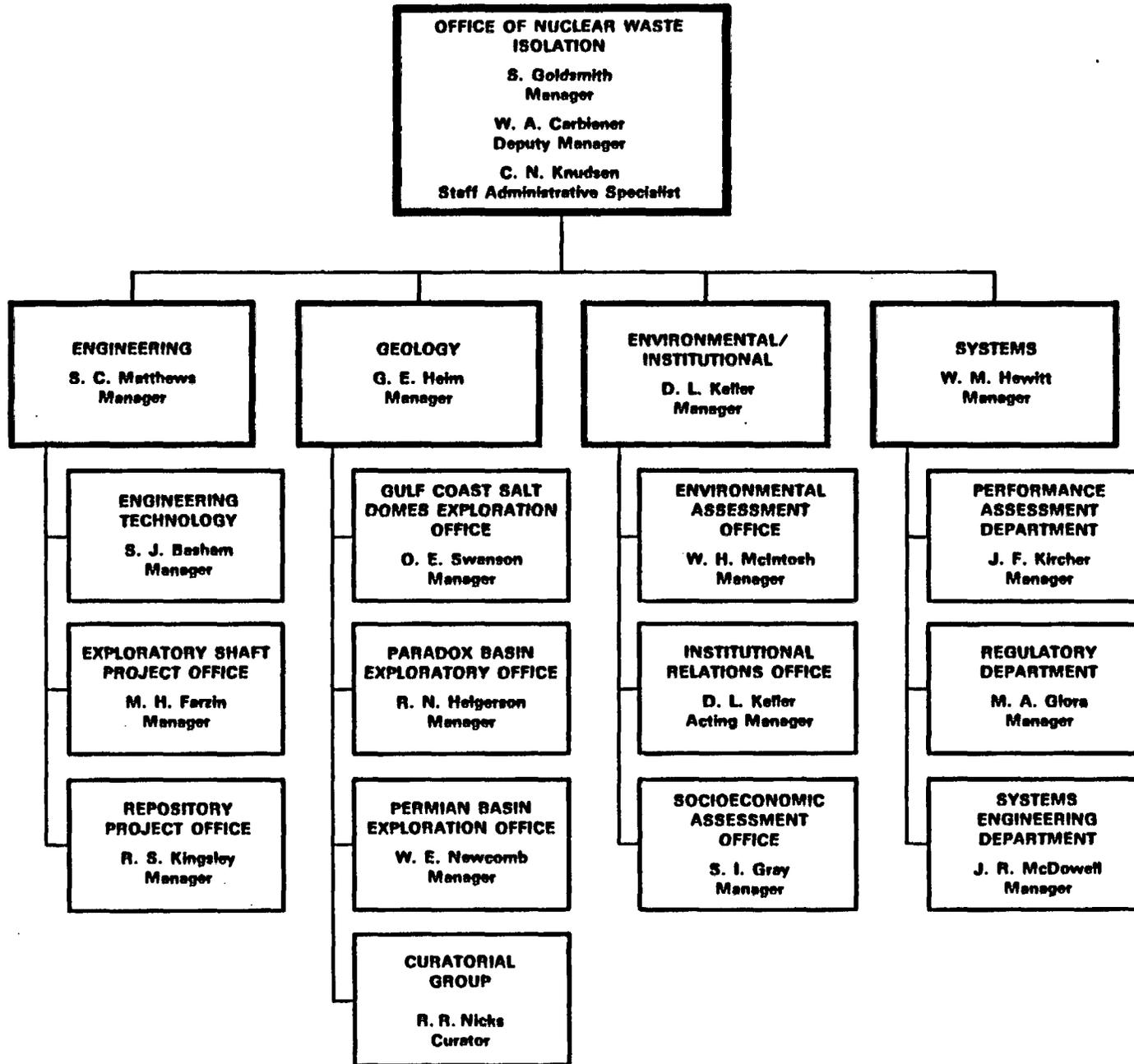
**ONWI**  
*Office of Nuclear Waste Isolation*

**BATTELLE Project Management Division**

**BATTELLE PROJECT MANAGEMENT DIVISION**



7/1/83



# ENGINEERING FUNCTION

- WASTE PACKAGE DESIGN AND FABRICATION
- WASTE FORM AND BARRIER MATERIAL TESTING
- ROCK MECHANICS TESTING AND ANALYSES
- EXPLORATORY SHAFT DESIGN
- REPOSITORY DESIGN
- SEAL DESIGN AND TESTING
- IN SITU TESTING
- FIELD TESTING

SG: 7/19/83

**ON/WI**  
Office of Nuclear Waste Isolation

BATTELLE Project Management Division

## **GEOLOGY FUNCTION**

- **FIELD GEOLOGIC SURVEY**
- **FIELD HYDROLOGIC SURVEY**
- **ENGINEERING GEOLOGY ANALYSES**
- **HYDROLOGIC ANALYSES**
- **GEOPHYSICAL ANALYSES**
- **GEOCHEMICAL RESEARCH AND ANALYSES**

# **ENVIRONMENTAL/INSTITUTIONAL FUNCTION**

- **ENVIRONMENTAL ACTIVITIES**
  - **FIELD SURVEYS**
  - **ENVIRONMENTAL ASSESSMENTS**
- **SOCIOECONOMICS**
  - **SURVEYS**
  - **IMPACT ANALYSIS**
  - **MITIGATION APPROACHES**
- **INSTITUTIONAL**
  - **PUBLIC OUTREACH**
  - **STATE & LOCAL GOVERNMENTAL LIAISON**
  - **CONSULTATION AND COOPERATION**

# SYSTEMS FUNCTION

- TECHNICAL BASELINE
- TECHNICAL DATA BASE
- SYSTEMS REQUIREMENTS
- SYSTEMS ANALYSIS/ENGINEERING
- MODEL DEVELOPMENT, VERIFICATION AND VALIDATION
- PERFORMANCE ASSESSMENT
- REGULATORY INTERACTIONS
- LICENSING DOCUMENT PREPARATION
- NEPA DOCUMENT PREPARATION
- REPOSITORY SAFETY ANALYSES

## ONWI PRINCIPAL SUPPORT COMPONENTS

### SUBCONTRACTORS

- BECHTEL
- D'APPOLONIA
- ERTEC
- INTERA
- INTERNATIONAL SALT
- NUS
- PARSONS-BRINCKERHOFF
- RE/SPEC
- SOIL & ROCK, INC.
- STEARNS-ROGER
- STONE & WEBSTER
- TERRA TEK
- WESTINGHOUSE
- WOODWARD-CLYDE

### UNIVERSITIES

- ARIZONA STATE
- COLORADO SCHOOL OF MINES
- COLUMBIA
- IDAHO
- LOUISIANA STATE
- OHIO STATE
- PENNSYLVANIA STATE
- UNIVERSITY OF CALIFORNIA,  
RIVERSIDE

### GOVERNMENT AGENCIES

- USGS
- US ARMY CORPS OF  
ENGINEERS

SG: 7/19/83

**ONWI**  
Office of Nuclear Waste Isolation

BATTELLE Project Management Division

**ONWI PRINCIPAL SUPPORT COMPONENTS  
(Continued)**

**DOE PRIMES**

- DECISION PLANNING CORP
- FLUOR
- PARSONS-REDPATH
- TEXAS BUREAU OF ECONOMIC GEOLOGY
- STATE GRANTS

**INTEGRATED LABORATORIES**

- ANL
- AGNS
- BNL
- GJO—BENDIX
- SANDIA
- LBL
- LLNL
- ORNL
- PNL

**NWTS AND ONWI FUNDING  
\$, MILLIONS**

<u>FY</u>	<u>NWTS</u>	<u>ONWI</u>
PRE-76	5.0	
76	6.0	
77	44.8	
78	122.3	39.6*
79	133.7	66.4
80	155.3	86.5
81	173.3	87.7
82	192.3	84.1
83	257.7	69.5

\*BATTELLE ASSUMED RESPONSIBILITY FOR ONWI IN MAY 1978.  
BATTELLE COSTED \$16.1M IN 1978.

SG: 7/19/83



BATTELLE Project Management Division

ATTACHMENT 5

PRESENTATION BEFORE SALT STATES REPRESENTATIVES

JULY 19, 1983

D. L. KELLER

MANAGER, ENVIRONMENTAL/INSTITUTIONAL

## OBJECTIVES OF PUBLIC INFORMATION PROGRAM

- KEEP VARIOUS AUDIENCES INFORMED
- EXPLAIN STUDIES IN NONTECHNICAL TERMS
- DISPEL MISCONCEPTIONS
- ENCOURAGE ENLIGHTENED PUBLIC PARTICIPATION
- ASSIST IN STATE CONSULTATION
- COMPLY WITH NUCLEAR WASTE POLICY ACT

## PUBLIC INFORMATION VEHICLES

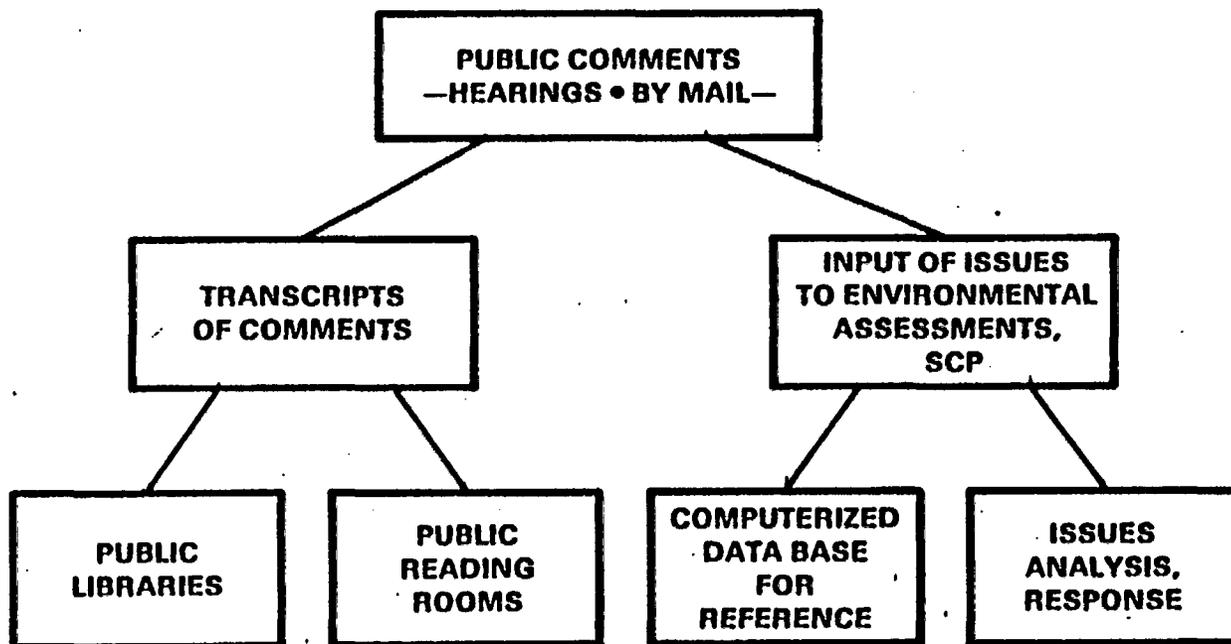
- PUBLICATIONS, FACT SHEETS, REPRINTS
- AUDIOVISUALS
- EXHIBITS
- MEDIA COOPERATION
- INFORMATION OFFICES
  - IN OPERATION IN UTAH
  - BEING PLANNED IN MISSISSIPPI
  - UNDER DISCUSSION IN TEXAS, LOUISIANA - BEING KEPT INFORMED
- PUBLIC OUTREACH ACTIVITIES
  - PUBLIC MEETINGS
  - MATERIALS IN LIBRARIES
  - SPEAKERS' BUREAU
  - MAILINGS
- BRIEFINGS, HEARINGS

## PUBLIC HEARINGS

<u>Date</u>	<u>Place</u>	<u>Attendees</u>	<u>Speakers</u>
April 28	Richton, Mississippi	250	58
April 29	Jackson, Mississippi	48	29
May 3	Monticello, Utah	188	32
May 4	Salt Lake City, Utah	45	17
May 10	Minden, Louisiana	100	26
May 12	Gulfport, Mississippi	200	55
May 16	Hereford, Texas	550	33
May 17	Tulia, Texas	350	26
May 18	Austin, Texas	108	35
	Totals	<u>1,839</u>	<u>311</u>

390 WRITE-IN COMMENTS RECEIVED

3,000 PAGES IN TRANSCRIPTS



## SOURCES OF INPUT ON PUBLIC INFORMATION NEEDS

- STATE AND LOCAL CONTACTS
- COMMENTS FROM PUBLIC VIA LETTERS, AT MEETINGS, HEARINGS
- IMPRESSIONS FROM MEDIA COVERAGE
- LOCAL ADVISORS
- ONWI PROGRAM REVIEW COMMITTEE
- DOE/ONWI EVALUATIONS

RECOMMENDED EXPANSION DESCRIBED IN PUBLIC INFORMATION PLANS (DRAFTS TO STATES)

- NUCLEAR WASTE INFORMATION EXCHANGES (DETAILS IN HANDOUT)
- ADDITIONAL PUBLIC OUTREACH
  - EXPANDED MAILING LISTS
  - ADDITIONAL REPORTS TO LIBRARIES, MORE LIBRARIES
  - PLACEMENT OF SPEAKERS
- INFORMATION OFFICES IN OTHER STATES
- PRINTED AUDIOVISUAL AND EXHIBIT MATERIALS SPECIFIC TO EACH STATE
- ATTENTION TO SPECIFIC AUDIENCES (I.E., SPANISH-AMERICANS IN TEXAS)
- ADDITIONAL MEDIA SUPPORT

DRAFT AGENDA

U.S. DEPARTMENT OF ENERGY  
NUCLEAR WASTE INFORMATION EXCHANGE

Saturday, September 24, 1983  
Starr Hall/Moab Middle School  
12 noon - 8:00 p.m.

- 12:00 - 1:00 INTRODUCTION - Tom Baillieu, DOE
- 1:00 - 2:00 REPOSITORY ENGINEERING -
- 2:00 - 3:00 GEOLOGY -
- 3:00 - 4:00 GROUND WATER -
- 4:00 - 5:00 TRANSPORTATION -
- 5:00 - 6:00 ENVIRONMENT -
- 6:00 - 7:00 SOCIOECONOMICS -
- 7:00 - 8:00 PANEL: QUESTIONS AND ANSWERS - All speakers

Presentations: Each presentation will address major concerns expressed by people at the hearings conducted by DOE in May. The presentation will last approximately one-half hour, allowing time for any questions you may have on that particular topic. The presentations and panel discussion will take place in Starr Hall.

Exhibits: Each general topic will also be represented by a table display and printed handouts in the outside mall area. Please feel free to look at the displays and discuss any concerns or questions you have with the speakers. Speakers will be at the tables except during their scheduled presentation time.

Films: A number of films and other audiovisuals relating to the topic of nuclear waste isolation will be shown throughout the day in Room \_\_\_\_\_ in the Middle School. See the attached list for descriptions, titles, and schedule.

Participants: Also attached is information about each of the participants.

## CONCEPT OF NUCLEAR WASTE INFORMATION EXCHANGE

Purpose. (1) To respond to requests from state and local officials and the public for DOE to increase public information being provided about the NWTS program, particularly in communities near potential sites; (2) to enable people in the communities to discuss personally with DOE and contractor personnel issues and concerns; (3) to assure routine updates about the program for residents; and (4) to provide an open forum for exchanges of information.

Frequency: Every other month in all four states. Plans now being considered would call for meetings in Richton August 20; Tulia and Hereford, August 26-27; Minden, September 17; and Moab, September 24.

Sponsorship: DOE will sponsor the first meeting, since it will focus on issues raised at the hearings. ONWI will work with local communities to seek co-sponsorship for future meetings, to foster nonpartisan participation and the open information approach.

Format: (1) A formal program, chaired by a community leader, with NWTS presenters and speakers representing other organizations and opinions (the first meeting would focus on issues raised at the hearings); (2) tables ("booths") in an outer area, where people could talk directly to those conducting the studies, view tabletop displays, and obtain printed material; and (3) a film festival, with NWTS films and other films shown continually throughout the day.

Time: For convenience of residents, Saturdays are preferred; hours noon to 8 p.m. preferred.

Locations: Scheduled in communities in the vicinity of potential sites, rotated as possible considering community desires and facilities.

Panelists: DOE, ONWI, subcontractors, and outside speakers would participate, depending upon the focus, topics, and availability. Battelle would work with co-sponsoring groups to identify outside speakers and subjects.

Publicity: All meetings would be publicized via news releases, mailings, and posters.

ATTACHMENT 6



**Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201**

July 19, 1983

H. Miller  
Nuclear Regulatory Commission  
Wilste Building  
7915 Eastern Avenue  
Silver Springs, MD 20910

Dear Mr. Miller:

- REF: 1) February 16, 1983 letter from J. Gervers to R. Morgan, Transmittal of State Working Group Recommendations
- 2) March 14, 1983 letter from R. Morgan to J. Gervers, Response to State Working Group Recommendations

**IMPLEMENTATION OF STATE WORKING GROUP RECOMMENDATIONS RELATIVE TO THE SALT REPOSITORY PROJECT**

The eight recommendations made in reference 1 were generally agreed to by R. Morgan in reference 2. This letter therefore discusses implementation of these recommendations from the perspective of the Salt Repository Project. The attached Catalog and Procedures set forth DOE/NPO's plan to facilitate the selection of which reports should receive state review in draft form and to make primary data easily available. The Catalog was developed to be directly responsive to the State Working Group's (SWG) recommendations numbered 3, 5, 6, and 7 (reference 1):

**SWG Recommendations**

- No. 3 - Notify states in advance of forthcoming draft or final documents and send documents promptly for state review.
- No. 5 - Discuss with states the expected contents and conclusions of draft contractor reports.
- No. 6 - Discuss with states the documents they might wish to see in draft form, and provide access to reports (including draft contractor reports) which are of particular value to the state's review process.
- No. 7 - Provide access to raw data requested by states prior to evaluation by contractors (e.g. well drilling logs).

To implement SWG Recommendation #7 NPO will utilize a policy of publishing data separate from analysis. This will result in much more rapid availability of the data to interested parties. With respect to the SWG Recommendations 3, 5, or 6, the DOE has provided draft reports to the states for comment routinely in the past particularly for the main programmatic documents.

However, the states are not fully satisfied that they see enough of the reports of interest to them at the draft stage. The issue then appears to be one of selection of which reports are appropriate to send to the states and at what stage. We feel we can best address these State Working Group recommendations by producing key reports indexes and discussing them at regular meetings with the states and NRC. This would allow the states and NRC to discuss with DOE what data and reports are in the system so that specific reports can be requested and discussion can take place on a report by report basis.

We, therefore, plan to publish as part of the catalog data/information sheets for both data reports and analysis reports which are in preparation. In addition we will be publishing indexes to analysis reports which have been published, including ONWI-200, Bibliography of Studies for the Salt Repository Office of the Nuclear Waste Terminal Storage Program, April 1978- and other indexes as needed. The combination of ONWI-200 and the Catalog are intended to provide a listing of all reported finished and in production respectively. We then would have a complete basis from which to discuss which reports interested parties are interested in receiving at what stage of preparation. We also have the capability to produce specialized indexes through use of our computerized information system (see Procedure 4 of the Catalog).

Please review the catalog and provide NPO your comments and suggestions on its format, content, and procedures. We expect to discuss this approach at the July 19 and 20 meeting in Columbus and request your formal comments on this approach by August 15 in order to have the system operational by the time of our next meeting.

SWG RECOMMENDATION No. 4

No. 4 - Inform states simultaneously with contractors of all requests for proposals, contracts and subcontracts issued for repository siting activities within their boundaries, and provide copies of the proposed scope of work and a listing of deliverables within a reasonable period of time.

This recommendation has been implemented (see enclosure) effective July 18, 1983.

OTHER SWG RECOMMENDATIONS

- No. 1 - Lay out the decision process for selection of sites for characterization and for repository construction, including documents required for the evaluation and comparative analysis of sites.
- No. 2 - Provide flow charts indicating major milestones, decision points, and document schedules for the site qualification process.
- No. 8 - Include provisions in state/federal agreements which guarantee access to information in the manner proposed above.

These SWG recommendations (No. 1, 2 and 8) are being addressed through the guidelines, the Mission Plan and the agreements required by the NWPA. NPO will be interacting with the states through all three of the mechanisms.

J.O. Neff  
Program Manager  
NPTS Program Office

NPO:LAC:kgh

- Enclosures:
- 1) ONWI-200, Bibliography of Studies for the Salt Repository Office of the Nuclear Waste Terminal Storage Program, April 1978 - April 1983 (Example)
  - 2) June 29, 1983 letter to J. Neff from S. Goldsmith  
Implementation of State Working Group Recommendation  
Concerning Notification of RFP's
  - 3) Catalog

ST# 443-83

cc: R. Johnson, NRC, w/enclosures

**ONWI**  
Office of Nuclear Waste Isolation  
Battelle  
505 King Avenue  
Columbus, Ohio 43201  
Telephone (614) 424-6424  
Telex 24-5454

REC'D JUL 05 1983

June 29, 1983

J.O. Neff, Program Manager, NPO

**IMPLEMENTATION OF STATE WORKING GROUP RECOMMENDATION CONCERNING NOTIFICATION OF RFP'S**

Reference R.C. Wunderlich's letter dated June 16, 1983, same subject as above.

Effective July 18, 1983, the BPMD Contracts and Procurement Department will make available to DOE/NPO for transmittal to the States (Louisiana, Mississippi, Texas and Utah) copies of BPMD contract documentation specific to the ONWI project as follows:

(1) Requests For Proposal (RFP), Invitations For Bid (IFB), and Requests For Quotation (RFQ) issued by BPMD will be provided at the same time they are mailed to prospective contractors.

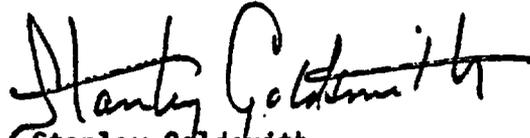
(2) Statements of Work (SOW) for BPMD contracts and the associated Deliverable Data and Reporting Requirements (listing of deliverables) will be provided at the same time fully executed contracts are mailed to the successful contractor. It is also our intent to provide revised SOW's and listings of deliverables when modifications to existing contracts are fully executed and distributed.

(3) Subcontract SOW's and listing of deliverables written by BPMD contractors for their subcontracts will be provided for those procurements made available to BPMD as required by our CPFF SUBCONTRACTS clause (BPMD version of FPR 1-7.402-8, SUBCONTRACTS).

Regarding DOE Prime Contracts, Interagency Agreements, DOE Grants and Integrated Laboratory documentation, we recommend that NPO acquire these through DOE channels. BPMD is not provided, nor does it have access to all procurement and procurement related documents specific to the ONWI project.

RFP's issued by DOE and subcontracts written by DOE Prime Contractors are examples where BPMD/ONWI has no direct involvement relative to execution and/or distribution.

Detailed procedures associated with the State Working Group Recommendation #4 are being finalized by BA Rawles and will be provided by separate submittal in the very near future.

  
Stanley Goldsmith  
Manager

SG:JRK:cd

In triplicate

ATTACHMENT 7



**Department of Energy  
National Waste Terminal  
Storage Program Office  
505 King Avenue  
Columbus, Ohio 43201**

July 19, 1983

Dr. L. Hall Bohlinger  
Louisiana Nuclear Energy Division  
Office of Environmental Affairs  
P.O. Box 14690  
Baton Rouge, LA 70898

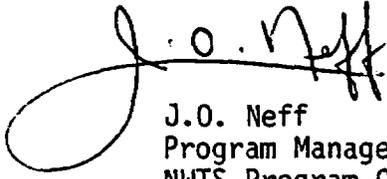
Dear Dr. Bohlinger:

**TECHNICAL DATA MANAGEMENT SYSTEM (TDMS) FOR THE SALT REPOSITORY PROJECT**

Under the direction of the Department of Energy, the Office of Nuclear Waste Isolation (ONWI) project has begun the design and development of a computerized technical data base that is planned to be a key element of the ONWI Technical Data Management System (TDMS). This data base will contain the most current data which has been analyzed, evaluated and approved by the ONWI technical staff. The Technical Data Management System is expected to be on line by the close of this calendar year.

The purpose of this letter is to request your suggestions and opinions on potential system uses that would most benefit you, while the TDMS is still in the planning stages. Thus your ideas and insights can be incorporated into the data base at an early stage of the design and construction phase. Attached for your review is a list of potential reports for which the TDMS is expected to provide data or produce the report in its entirety. Also enclosed is background information including a description of the TDMS and sample data summary presentation formats.

Please advise L. Casey of the DOE/NPO staff (FTS 976-5916) of your preferred formats for the listed reports or suggest other reports that you feel would be of use to you and the organization to which you are responsible. This can be accomplished by our meeting with you individually or as part of our next group meeting of state representatives as you prefer.



J.O. Neff  
Program Manager  
NWS Program Office

NPO:LAC:kgh

- Enclosures:
- 1) Products Planned to be Generated or Supported by TDMS
  - 2) Example Index to TDMS
  - 3) Example Borehole Summaries for MRIG-9, Zeeck #1, and Gibson Dome #1
  - 4) A brief description of the ONWI Technical Data Management System (TDMS) and Sample Data Source Documents

ST# 447-83

ATTACHMENT 8

ATTACHMENT 9

# NRC/DOE PROCEDURAL AGREEMENT

## GENERAL

- IMMEDIATE ACCESS TO DATA
- TIMELY CONSULTATION ON PLANS
- OPENNESS

## SPECIFIC

- TECHNICAL MEETINGS
- MANAGEMENT MEETINGS
- MEETINGS DOCUMENTED, OPEN
- STATE/TRIBE NOTIFICATION-PARTICIPATION
- ON SITE REPS
- PROJECT SPECIFIC AGREEMENTS

PROCEDURAL AGREEMENT BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
AND THE U.S. DEPARTMENT OF ENERGY IDENTIFYING GUIDING PRINCIPLES FOR  
INTERFACE DURING SITE INVESTIGATION AND SITE CHARACTERIZATION

This Procedural Agreement outlines procedures for consultation and exchange of information which the Commission (NRC) and the Department (DOE) will observe in connection with the characterization of sites for a geologic repository under the Nuclear Waste Policy Act of 1982. The purpose of these procedures is to assure that an information flow is maintained between the two agencies which will facilitate the accomplishment by each agency of its responsibilities relative to site investigation and characterization under the National Waste Policy Act (NWPA). The agreement is to assure that NRC receives adequate information on a timely basis to enable NRC to review, evaluate, and comment on those DOE activities of regulatory interest in accordance with DOE's project decision schedule and thereby facilitate early identification of potential licensing issues for timely staff resolution. The agreement is to assure that DOE has prompt access to NRC for discussions and explanations relative to the intent, meaning and purpose of NRC comments and evaluations on DOE activities and so that DOE can be aware, on a current basis, of the status of NRC actions relative to DOE activities.

This Procedural Agreement shall be subject to the provisions of any project decision schedule that may hereafter be established by DOE, and any regulations that may hereafter be adopted by NRC, pursuant to law. In particular, nothing herein shall be construed to limit the authority of the Commission to require the submission of information as part of a general plan for site characterization activities to be conducted at a candidate site or the submission of reports on the nature and extent of site characterization activities at a candidate site and the information developed from such activities.

1. NRC On-Site Representatives

As early as practicable, following area phase field work, NRC on-site representatives will be stationed at each site undergoing investigation principally to serve as a point of prompt informational exchange and consultation and to preliminarily identify concerns about such investigations relating to potential licensing issues.

2. Meetings

From the time this agreement is entered into, and for so long as site characterization activities are being planned or are in

progress, DOE and NRC will schedule and hold meetings periodically as provided in this section. A written report agreed to by both DOE and NRC will be prepared for each meeting including agreements reached.

- a. Technical meetings will be held between BOE and NRC-technical staff to: review and consult on interpretations of data; identify potential licensing issues; agree upon the sufficiency of available information and data; and agree upon methods and approaches for the acquisition of additional information and data as needed to facilitate NRC reviews and evaluations and for staff resolution of such potential licensing issues.
- b. Periodic management meetings will be held at the site-specific project level whenever necessary, but at least quarterly, to review the summary results of the technical meetings; to review the status of outstanding concerns and issues; discuss plans for resolution of outstanding items and issues; to update the schedule of technical meetings and other actions needed for staff resolution of open items regarding site characterization programs; and to consult on what generic guidance is advisable and necessary for NRC to prepare. Unresolved management issues will be promptly elevated to upper management for resolution.
- c. Early technical meetings will be scheduled to discuss written NRC comments on DOE documents such as Site Characterization Plans, DOE's semi-annual progress reports, and technical reports to foster a mutual understanding of comments and the information or activities needed for staff resolution of the comments.
- d. In formulating plans for activities which DOE will undertake to develop information needed for staff resolution of potential licensing issues, DOE will meet with NRC to provide an overview of the plans so that NRC can comment on their sufficiency. These discussions will be held sufficiently early so that any changes that NRC comments may entail can be duly considered by DOE in a manner not to delay DOE activities.
- e. Schedules of activities pertaining to technical meetings will be made publicly available. Potential host States and affected Indian tribes will be notified and invited to attend technical meetings covered in this section (Section 2, Meetings). The notification will be given on a timely basis by the DOE. These technical meetings will be open meetings with members of the public being permitted to attend as observers.

3. Timely Release of Information

- a. Data collected during site investigations will be made available to NRC on a current, continuing basis after the DOE (or DOE contractor) quality assurance checks that are inherent in determining that the data has been obtained and documented properly.
- b. DOE's analyses and evaluations of data will be made available to NRC in a timely manner.

4. Site Specific Samples

Consistent with mutually agreed on procedures, DOE will provide NRC with site specific samples to be used by NRC for independent analysis and evaluation.

5. Agency Use of Information

It is understood that information made available to either Agency under this agreement may be used at that Agency's option in carrying out its responsibilities.

6. Project Specific Agreements

Project specific agreements to implement the above principles will be negotiated within 120 days of the time this agreement is entered into. These project specific agreements will be tailored to the specific projects to reflect the differences in sites and project organizations.

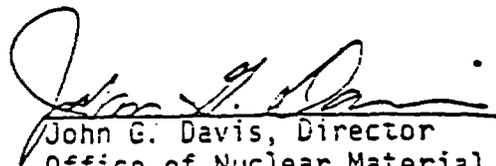
7. Nothing in this agreement shall be construed as limiting forms of informal consultation not mentioned in this agreement (for example, telephone conversation or exchanges of reports). These other consultations will be documented in a timely manner.



Robert L. Morgan, Project Director  
Nuclear Waste Policy Act  
Project Office  
U.S. Department of Energy

Date:

6/27/83



John G. Davis, Director  
Office of Nuclear Material  
Safety and Safeguards  
U.S. Nuclear Regulatory  
Commission

Date:

6/17/83

MEETING WITH SALT STATE REPRESENTATIVES

REPOSITORY DESIGN STUDIES

R. S. KINGSLEY

JULY 19, 1983

**ONWI**  
Office of Nuclear Waste Programs

BATTELLE Project Management Division

## REPOSITORY DESIGN STUDIES

- BACKGROUND STUDIES
- CURRENT STUDIES
- SUPPORTING STUDIES
- STATUS
- CONCEPTUAL DESIGN
- FUTURE ACTIVITIES

RSK: 7/19/83

**REPOSITORY DESIGN STUDIES**  
**(BACKGROUND)**

- 1978 - DESIGN STUDIES
  - R-1: HLW IN DOMED SALT
  - R-2: SPENT FUEL IN BEDDED SALT
  
- 1981 - DESIGN STUDY
  - CRRD: SPENT FUEL IN DOMED SALT

RSK: 7/19/83

## CURRENT REPOSITORY DESIGN STUDIES

- SITE SPECIFIC
  - DEAF SMITH/SWISHER COUNTIES, TEXAS
  - DAVIS CANYON, UTAH
  - RICHTON DOME, MISSISSIPPI
  
- OBJECTIVES
  - FEASIBILITY STUDIES
  - DEVELOP SITE SPECIFIC LAYOUTS
  - IDENTIFY RESOURCE REQUIREMENTS
  - SUPPORT ENVIRONMENTAL ASSESSMENT ACTIVITIES
  
- WASTE FORMS
  - HLW
  - SPENT FUEL
  - TRU
  - DHLW

RSK: 7/19/83

## SUPPORTING DESIGN STUDIES

- SITE SPECIFIC SCHEMATIC SEALING DESIGNS

RSK: 7/19/83

## REPOSITORY DESIGN STATUS

- A/E TEAM SELECTED FOR NEGOTIATIONS
  - FLUOR ENGINEERS, INC.
  - MORRISON-KNUDSEN
  - ESD CORPORATION
  - WOODWARD CLYDE
  - SAI
  
- DESIGN PHASES
  - CONCEPTUAL DESIGN
  - TITLE I
  - TITLE II
  - TITLE III

RSK: 7/19/83

## REPOSITORY CONCEPTUAL DESIGN

- TWO YEAR PROGRAM
  
- OBJECTIVES
  - IDENTIFY TECHNICAL APPROACH
  - ESTABLISH A TECHNICAL DATA BASE
  - EVALUATE ALTERNATIVE DESIGN CONCEPTS
  - PREPARATION OF CONCEPTUAL DESIGN DRAWINGS
  - COST ESTIMATES
  - TITLE I PLAN
  - LICENSING SUPPORT STUDIES

RSK: 7/19/83

## FUTURE ACTIVITIES

- FINALIZE REPOSITORY CONCEPTUAL DESIGN STATEMENT OF WORK
- COMPLETE SCHEMATIC SEALING STUDIES
- COMPLETE RICHTON DOME DESIGN STUDY
- COMPLETE GENERIC GASSY MINE STUDY
- COMPLETE GENERIC MINE LAYOUT STUDIES

RSK: 7/19/83

**ONWI**  
Office of Nuclear Waste Isolation

BATTELLE Project Management Division

**SITE SPECIFIC ENGINEERING  
STUDY DOCUMENTS IN PREPARATION**

1. **Engineering Factors and Costs for NWS Repository Site Selection - Deaf Smith/Swisher County, Texas**
2. **Engineering Factors and Costs for NWS Repository Site Selection - Davis Canyon, Utah**
3. **Engineering Factors and Costs for NWS Repository Site Selection - Richton Dome, Mississippi**
4. **Schematic Designs for Penetration Seals for a Repository in the Paradox Basin**
5. **Schematic Designs for Penetration Seals for a Repository in the Permian Basin**
6. **Schematic Designs for Penetration Seals for a Repository in Richton Dome**

ATTACHMENT 10

DESIGN OF EXPLORATORY SHAFT

IN

SALT FORMATIONS

BY

M. H. FARZIN

OFFICE OF NUCLEAR WASTE ISOLATION  
BATTELLE PROJECT MANAGEMENT DIVISION  
COLUMBUS, OHIO

SHAFT FUNCTION

PROVIDE ACCESS TO REPOSITORY HORIZON FOR PERSONNEL,  
EQUIPMENT, AND SUPPORT SERVICES AND MATERIAL TO  
CONDUCT TESTING IN APPROXIMATELY 1500' FEET OF DRIFT.

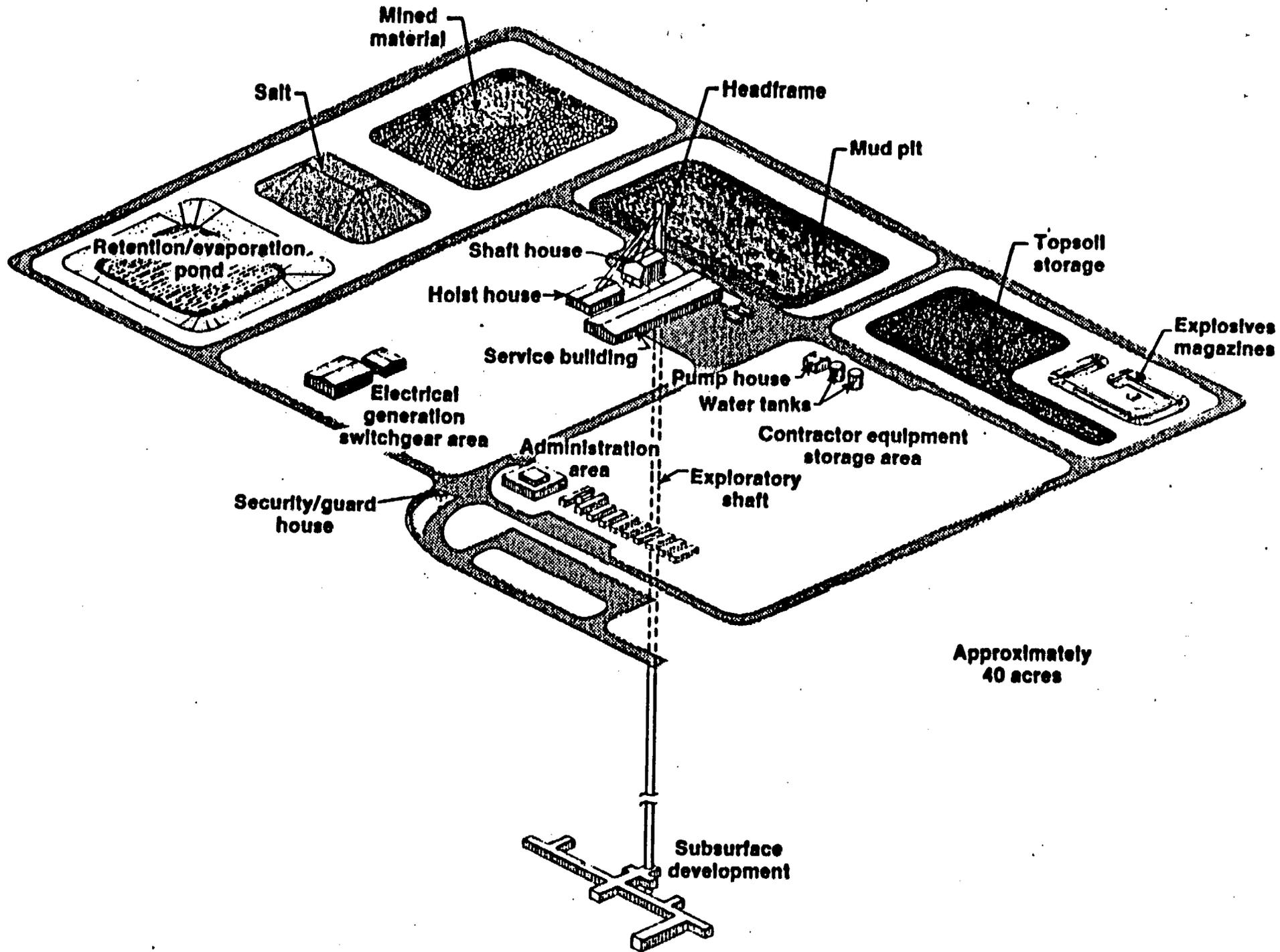
EXCAVATION METHOD  
DRILLED VS MINED SHAFT

A TRADE-OFF STUDY WAS CONDUCTED TO SELECT THE  
BEST SUITABLE METHOD.

THE "BIG-HOLE" DRILLING METHOD WAS SELECTED  
BECAUSE OF SCHEDULE AND SAFETY ADVANTAGES.

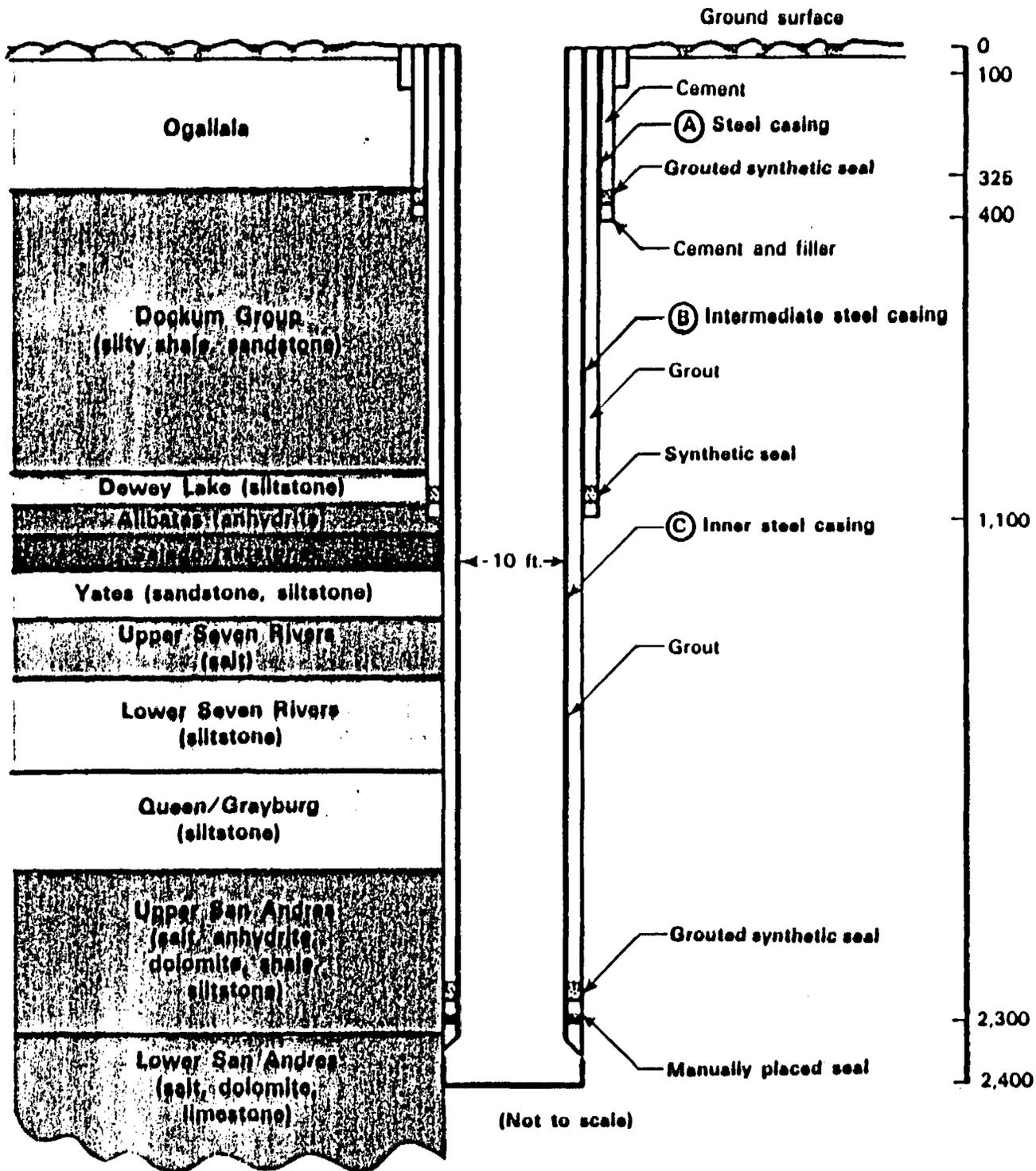
PROMINENT FEATURES OF DRILLED SHAFT DESIGN  
PERMIAN

- AUGER TO 100 FT AND INSTALL CONDUCTOR CASING
- DRILL TO 400 FT AND INSTALL CASING TO SUPPORT OGALLALA (UNCONSOLIDATED), PLACE CHEMICAL SEAL AT BOTTOM OF CASING
- DRILL TO 1100 FT AND INSTALL CASING TO SUPPORT DOCKUM AND DEWEY LAKE SILTSTONE, INSTALL CHEMICAL SEAL AT BOTTOM OF CASING.
- DRILL TO BOTTOM OF SHAFT (2400 FT), CEMENT FINAL CASING TO 2300 FT, INSTALL FINAL SEAL MANUALLY.
- SUPPORT SHAFT WALLS FROM 2300 FT TO 2400 FT WITH WIRE MESH AND RESIN GROUTED ROCK BOLTS



Approximately  
40 acres

**Exploratory Shaft Facility**



Ogallala

Dockum Group  
(silty shale, sandstone)

Dewey Lake (siltstone)

Albatras (anhydrite)

Yates (sandstone, siltstone)

Upper Seven Rivers  
(salt)

Lower Seven Rivers  
(siltstone)

Queen/Grayburg  
(siltstone)

Upper San Andres  
(salt, anhydrite,  
dolomite, shale,  
siltstone)

Lower San Andres  
(salt, dolomite,  
limestone)

Cement

(A) Steel casing

Grouted synthetic seal

Cement and filler

(B) Intermediate steel casing

Grout

Synthetic seal

(C) Inner steel casing

Grout

Grouted synthetic seal

Manually placed seal

- 10 ft. -

ATTACHMENT 11

111

## ONWI SOCIOECONOMIC REPORTS

1. Socioeconomic Data Base Report for Mississippi, (in progress).
2. Socioeconomic Data Base Report for Louisiana, (in progress).
3. Methods for Assessing the Socioeconomic Impacts of Large-Scale Resource Developments: Implications for Nuclear Repository Siting, ONWI-266, March 1983.
4. Socioeconomic Analysis Report for the Paradox Basin - Data Base, Draft ONWI-471, February, 1983.
5. Citizen Participation in Nuclear Waste Repository Siting, ONWI-267, December, 1982.
6. Socioeconomic Analysis Report for the Permian Basin - Data Base, Draft ONWI-461, December, 1982.
7. Possible Approaches to Community Development for Nuclear Waste Isolation, ONWI-269, October, 1982.
8. Socioeconomic Analysis of Repository Siting (SEARS), Draft Users Manual, Technical Description, Guide to Data Base Preparation, July, 1982.
9. ONWI Socioeconomic Program Plan, Draft ONWI-276, February, 1982.
10. Framework for Community Planning Associated with Nuclear Waste Repository Siting, Draft ONWI-254, October, 1981.

ATTACHMENT 12

ENVIRONMENTAL STUDIES

W. H. MCINTOSH

July 19, 1983

**ON/WI**  
Office of Nuclear Waste Isolation

BA11111 Project Management Division

**ENVIRONMENTAL STUDIES  
(PROVIDE DATA FOR)**

- **INPUT TO DECISION-MAKING**
- **ESTABLISH AMBIENT CONDITONS**
- **INPUT TO DESIGN PROCESS AND REVIEW**
- **IMPACT ASSESSMENT**
- **PERMITTING AND STATUTORY COMPLIANCE**

ENVIRONMENTAL STUDIES  
EXAMPLE LEVELS OF ANALYSIS

- AIR -- EPA WORKBOOK ANALYSIS; COMPUTER MODEL
- NOISE -- AMBIENT MEASUREMENTS; COMPUTER MODEL
- THREATENED/ENDANGERED SPECIES -- FIELD SURVEYS/REASONED ARGUMENTS/EXPERT CONSULTATIONS
- CULTURAL RESOURCES -- SHPO APPROVED SURVEYS; LITERATURE AND FILE SEARCHES
- WATER -- DRAWDOWN CALCULATIONS; QUANTITY ESTIMATES
- PRIME FARMLAND -- PUBLISHED MAPS; AIR PHOTOGRAPHY; GROUND TRUTH
- VISUAL AESTHETICS -- VIEWSHED ANALYSIS; SENSITIVE LOCATIONS
- BIOTA -- LITERATURE SEARCH; AGENCY DATA
- LAND USE -- AIR PHOTOS; GROUND TRUTH; PLANNING AGENCY DATA

WHM:7/19/83

ENVIRONMENTAL DATA OBTAINED  
JANUARY-MAY 1983

GULF

- AERIAL PHOTOGRAPHY OVER RICHTON DOME
- US FOREST SERVICE ENVIRONMENTAL ASSESSMENT FOR CYPRESS CREEK DOME
- THREATENED/ENDANGERED SPECIES AND CULTURAL RESOURCES REPORTS FOR CYPRESS CREEK DOME
- LOCATION OF PRIME FARMLAND

PARADOX

- CULTURAL (ARCHAEOLOGICAL) RESOURCES SITE SURVEY

PERMIAN

- LOCATION OF PRIME FARMLAND FOR DEAF SMITH COUNTY AND SWISHER COUNTY LOCATIONS

WHM:7/19/83

## ENVIRONMENTAL STUDIES/DATA

- IMPACTS OF SALT MANAGEMENT ON SITE
- IDENTIFICATION OF OFFSITE DISPOSAL SITES
- IDENTIFICATION OF PREFERRED TRANSPORTATION ROUTES AND TRANSPORTATION IMPACTS
- STUDY OF WATER AVAILABILITY/WATER USAGE
- ARCHAEOLOGICAL AND THREATENED/ENDANGERED SPECIES STUDY
- SUPPLEMENTAL STUDY ON METEOROLOGY, AIR QUALITY, AND AMBIENT SOUND MEASUREMENTS
- IMPACT OF EXPLORATORY SHAFT/REPOSITORY ON NATIONAL PARK

WHM:7/19/83

REPORTS  
PUBLISHED OR IN PROCESS

- SCREENING DOCUMENTS  
(CHARACTERIZATION AND RECOMMENDATION REPORTS)
- DATA/TOPICAL REPORTS

WHM:7/19/83



## EXAMPLE DATA/TOPICAL REPORTS IN PROCESS

- **GEOLOGIC: WELL COMPLETION, PUMPING TEST RESULTS, GEOCHEMICAL**
- **ENGINEERING: FUNCTIONAL DESIGN CRITERIA, DESIGN CONCEPT REPORTS, SPECIAL STUDIES, SALT PROPERTIES HANDBOOK**
- **PERFORMANCE ASSESSMENT: MODEL VERIFICATIONS, HUMAN INTERFERENCE**
- **SOCIOECONOMIC: COMMUNITY PLANNING, DATA SUMMARY**
- **ENVIRONMENTAL: NOISE, AIR, WATER, LAND USE, ARCHAEOLOGIC, THREATENED AND ENDANGERED SPECIES**

WHM:7/19/83

**ONWI**  
Office of Nuclear Waste Isolation  
BATTLES Project Management Division

ATTACHMENT 13

ENVIRONMENTAL ASSESSMENT PROCESS

STATUTORY EA PURPOSE

SUPPORT NOMINATION OF A SITE FOR CHARACTERIZATION

R.C. WUNDERLICH

July 19, 1983

## EA DEVELOPMENT PROCESS

- 0 ONGOING AGENCY CONSULTATION
- 0 ONGOING STUDY/ANALYSIS
- 0 TECHNICAL ISSUE MEETINGS
- 0 SCOPING HEARINGS
- 0 SITING GUIDELINE FINALIZATION
- 0 DRAFT EAS FOR PUBLIC COMMENT
- 0 FINAL EAS
- 0 SITE NOMINATION
- 0 SITE RECOMMENDATION

## EA OUTLINE

### STATEMENT OF BASES FOR NOMINATION

1.0 INTRODUCTION

2.0 SITE IDENTIFICATION PROCESS (v)\*

3.0 SITE DESCRIPTION AND AFFECTED ENVIRONMENT

4.0 PROPOSED ACTIVITIES

5.0 SITE SUITABILITY FOR SITE CHARACTERIZATION (i)

6.0 SITE SUITABILITY FOR REPOSITORY (ii)

7.0 IMPACTS ON PUBLIC HEALTH, SAFETY, AND ENVIRONMENT FROM  
FIELD STUDIES AND SITE CHARACTERIZATION (iii)

8.0 REGIONAL AND LOCAL IMPACTS OF REPOSITORY (vi)

9.0 COMPARATIVE EVALUATION OF SITES TO BE NOMINATED (iv)

APPENDIX A -- STATE, PUBLIC, AND AGENCY INTERACTION

APPENDIX B -- COMPARATIVE EVALUATION METHODOLOGY

\* Roman numerals refer to section of EA specified in NWPA.

REQUIRED CONTENT OF ENVIRONMENTAL  
ASSESSMENTS FOR EACH SITE NOMINATED

EA  
CHAPTER

0	A DETAILED STATEMENT OF THE BASIS FOR THE SITE NOMINATION AND THE PROBABLE IMPACTS OF THE SITE CHARACTERIZATION ACTIVITIES	INTRO
0	A DISCUSSION OF ALTERNATIVE ACTIVITIES TO AVOID SUCH IMPACTS	7
0	AN EVALUATION OF SITE SUITABILITY UNDER THE GUIDELINES	5
0	AN EVALUATION OF SITE SUITABILITY FOR DEVELOPMENT AS A REPOSITORY UNDER EACH GUIDELINE THAT DOES NOT REQUIRE SITE CHARACTERIZATION AS A PREREQUISITE	6
0	AN EVALUATION OF SITE CHARACTERIZATION IMPACTS ON PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT	7
0	A REASONABLE COMPARATIVE EVALUATION VERSUS OTHER SITES AND LOCATIONS THAT HAVE BEEN CONSIDERED	9
0	A DESCRIPTION OF THE DECISION PROCESS	2
0	AN ASSESSMENT OF THE REGIONAL AND LOCAL IMPACTS OF LOCATING A REPOSITORY AT THE SITE	8

ENVIRONMENTAL ISSUE CATEGORIES FOR  
SITE CHARACTERIZATION AND REPOSITORY IMPACT ASSESSMENTS

- 0 LAND USE
- 0 UTILITIES
- 0 GEOLOGY/SOILS/MINERAL RESOURCES
- 0 WATER RESOURCES AND WATER QUALITY
- 0 AIR QUALITY
- 0 SOUND LEVELS
- 0 VISUAL AESTHETICS
- 0 CULTURAL/HISTORICAL/ARCHAEOLOGICAL RESOURCES
- 0 SOCIOECONOMICS
- 0 BIOTA
- 0 CREDIBLE ACCIDENTS

EA CONTENT:

BASIS FOR NOMINATION AND RECOMMENDATION OF SITES FOR STUDY

- O SETS FORTH RATIONAL BASIS FOR DECISIONS
- O DETAILS ARE SUFFICIENT TO ALLOW CRITICAL EXAMINATION OF RATIONALE
- O JUSTIFY CONCLUSIONS RELATIVE TO ALTERNATE TECHNICAL INTERPRETATIONS

## PUBLIC HEARINGS ANALYSIS

- O COPIES OF PUBLIC RECORD SENT TO STATE AGENCIES,  
LOCAL LIBRARIES, AND ARE AVAILABLE FOR PUBLIC  
PURCHASE
- O ISSUES AND CONCERNS DIGESTED AND CATEGORIZED  
INTO TOPICAL AND SUBJECT AREAS
- O COMPUTER TAPE OF PUBLIC RECORD CODIFIED TO PERMIT  
VARIOUS SEARCHES AND SORT ROUTINES USING BATTELLE'S  
BASIS SYSTEM
- O DIGEST WILL ASSIST IN FORMULATION OF EA DOCUMENTS  
AND SITE CHARACTERIZATION PLANS

EXAMPLE ISSUES FROM PUBLIC HEARINGS  
GENERIC TO ALL SALT STATES

- 0 ACCURACY AND QUANTITY OF AVAILABLE DATA FOR COMPARATIVE EVALUATION OF SITES AND TO SUPPORT SITE NOMINATION
- 0 IMPORTANCE BETWEEN HUMAN, ECONOMIC, POLITICAL, GEOLOGICAL, SAFETY, ENVIRONMENTAL, AND OTHER FACTORS IN SITE SELECTION PROCESS
- 0 SOCIOECONOMIC IMPACTS ON EXISTING ECONOMY AND COMMUNITY LIFE-STYLES
- 0 ALTERNATIVE SITES/WASTE MANAGEMENT CONCEPTS
- 0 PUBLIC HEALTH AND SAFETY RELATED TO RADIATION EXPOSURE FROM WASTE STORAGE, TRANSPORT, REPOSITORY OPERATIONS AND ACCIDENTS
- 0 POTENTIAL HEALTH AND SAFETY EFFECTS ON FUTURE GENERATIONS
- 0 POTENTIAL CONTAMINATION OF AQUIFERS AND SURFACE WATER RESOURCES

EXAMPLE ISSUES FROM PUBLIC HEARINGS  
GENERIC TO ALL SALT STATES (CONT'D)

- O SURFACE SALT MANAGEMENT PLANS
- O REQUIREMENTS FOR ADDITIONAL PUBLIC SERVICES AND FACILITIES AND LOCAL COMMUNITY FINANCES
- O ACCIDENT RESPONSE, LIABILITY AND COMPENSATION
- O POTENTIAL FOR FUTURE HUMAN INTERFERENCE
- \*O SCHEDULING OF HEARINGS AND CONDUCT OF STUDIES PRIOR TO FINALIZATION OF GUIDELINES

\* OUTSIDE OF EA SCOPE

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## LOUISIANA

### EXAMPLE ISSUES FROM PUBLIC HEARINGS OF MAJOR PUBLIC CONCERN

- O CONTAMINATION OF WATER SUPPLIES
- O TRANSPORTATION ROUTES
- O LIMITATIONS OF FUTURE HYDROCARBON AND MINERAL DEVELOPMENT
- \*O AGREEMENT BETWEEN LOUISIANA AND DOE --  
"PRINCIPLES OF UNDERSTANDING"

\* OUTSIDE OF EA SCOPE

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## MISSISSIPPI

### EXAMPLE ISSUES FROM PUBLIC HEARINGS OF MAJOR PUBLIC CONCERN

- 0 PROXIMITY TO POPULATED AREAS
- 0 QUALITY OF EXISTING TRANSPORTATION
- 0 TRANSPORTATION ROUTES THROUGH POPULATION CENTERS
- 0 GEOLOGIC STABILITY OF REGION
- 0 PROBABILITY AND EFFECTS OF SEVERE WEATHER ON REPOSITORY OPERATIONS
- 0 EFFECT OF NUCLEAR CONTAMINATION FROM REPOSITORY ON GULF COAST SEAFOOD AND TOURIST INDUSTRIES
- \*0 VIOLATION OF CITIZEN RIGHTS AND FREEDOMS
- \*0 PSYCHOLOGICAL FEARS (MENTAL ANGUISH)
- \*0 "POLITICAL CLOUT" OF STATE (I.E., NUMBER OF ELECTORATE VOTES/INFLUENTIAL POLITICIANS)

\* OUTSIDE OF EA SCOPE

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TEXAS

EXAMPLE ISSUES FROM PUBLIC HEARINGS OF MAJOR PUBLIC CONCERNS

- O IMPACTS TO AGRICULTURAL ECONOMY OF REGION
- O CONTAMINATION OF OGALLALA AQUIFER
- O LOSS/CONTAMINATION OF PRODUCTIVE AGRICULTURAL LANDS
- O COMPETITION FOR WATER
- O LIMITATION ON FUTURE HYDROCARBON AND MINERAL DEVELOPMENT
- \*O RESPONSIVENESS OF DOE TO CITIZEN CONCERNS

\* OUTSIDE OF EA SCOPE

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UTAH

EXAMPLE ISSUES FROM PUBLIC HEARINGS OF MAJOR PUBLIC CONCERNS

- 0 PROXIMITY TO AND IMPACTS ON CANYONLANDS AND OTHER NATIONAL PARKS
- 0 IMPACTS ON TOURIST INDUSTRY
- 0 EXPANSION AND UPGRADE OF TRANSPORTATION NETWORK
- 0 PROXIMITY TO AND PROTECTION OF COLORADO RIVER
- 0 ADEQUATE REPOSITORY WATER SUPPLY
- 0 AIR QUALITY DETERIORATION



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