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See Pocket 2 for Encl.

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March 8, 1985

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BILBORN

MEMORANDUM FOR: Robert E. Browning, Director
 Division of Waste Management

FROM: Paul T. Prestholt, Sr. OR-NNWSI *PYP*

Subject: NNWSI Site Report for Weeks of Feb. 11, 18, 25
 and March 4, 1985.

I. Marc Rhodes, WMRP, called and asked for a list of NNWSI critical path items with long lead times that would benefit from discussions between the staff and the NNWSI before plans are completed or contracts finalized. Unfortunately, planning is tracked using milestone dates. This gives the date of completion of tasks, rather than the beginning. Therefore, the information that SAIC was able to furnish as a result of several hours work (more time would have required a formal task letter from WMPO) was not very satisfactory.

II. The February TPD Meeting was held on Feb. 21 and 22. The following items are of interest:

1. Bob Raup is the new USGS geotechnical coordinator for the NNWSI. Dr. Raup replaces Dr. Baltz in this position.
2. Vince Cassella, DOE Hq. (in Purcell's group), will be coordinating NNWSI and DOE-Hq. interactions in the future.
3. The Edison Electric Institute Waste Management Group is scheduled to meet with the NNWSI in April.
4. A revised plan for the DOE and the projects to write and issue final EA's was discussed. The highlights are enclosed.
5. Changes to the draft SCP Management plan were discussed. Viewgraphs from that discussion are enclosed.
6. A status report was presented on revisions to the NNWSI issues hierarchy. The viewgraphs are enclosed.

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7. The March, 1983 exploratory shaft letter from the NRC was discussed and an outline for a draft position paper on the ES was presented. Also, a proposed structure for DOE/NRC workshops was included for comment. Copies are enclosed.

8. The idea of a common waste package for all geologic media was discussed. Weston has written a document called "The Common Waste Package Evaluation Study". The study concludes that from the projects' viewpoint, the idea of a common waste package doesn't make much sense. However, the study leaves the door open. The projects would like to see a common performance goal rather than a common package design.

9. The concept of a common architectural engineer was discussed. Weston again has the lead. Weston will probably conclude that the idea has more negative aspects than positive.

III. Hearings on the EA were held in the community of Amargosa Valley on February 25 and in Las Vegas on February 26. At each hearing, 8 hours were made available to the public--4 hours in the morning and 4 hours in the evening.

At Amargosa Valley there were very few speakers. However, those that did take the trouble to prepare and present testimony were unanimously in favor of the repository if the DOE could assure safety to the public and if the local residents were given first chance at jobs.

The Las Vegas hearings were better attended with a maximum of about 80 people during the evening session. As would be expected, the testimony was split between the people for and those against; about 40% for, 40% against and 20% said let's get the facts before we decide. It was interesting to note, however, that those "for" tended to have technical backgrounds and those "against" were more emotional. Important is the fact that organizations such as the League of Women Voters tended to be in the "wait and see" category. Also, the state and local government representatives (except Nye County) called the repository a "dump", while those who were "for" took exception to the word "dump" and suggested that it's use constituted "yellow journalism" by both politicians and the media.

IV. Susan Bilhorn, WMRP, attended the DOE-Hq. QA audit of the DOE Waste Management Project Office (WMPD) on March 5, 6, and 7. She will be preparing a report and will attach the audit results. I believe that it was very worthwhile for Miss Bilhorn to observe an audit and participate in the exit interview.

*Encl. to memo to
R&B for Prestholt
3/8/85*

W. J. Purcell

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MAR 1 1985

- o Monday-Friday, March 25-29: Waste Management '85, Tucson, AZ.
- o Thursday, March 28: Don Vieth to speak at UNLV Community Forum, Las Vegas.

5. NRC Interaction

- o Tuesday-Wednesday, March 11-12: DOE/NRC Management Meeting, D.C.

WMPO:DLV-681

Mitchell P. Lanit
Donald L. Vieth, Director
Waste Management Project Office

cc:

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 David Siefken, Weston
 Robert Jackson, Weston
 William McClain, Weston
 Terrence Bates, Weston
 Curtiss Haymore, Weston



Department of Energy

Nevada Operations Office

P. O. Box 14100

Las Vegas, NV 89114-4100

MAR 1 1985

W. J. Purcell, Director, Office of Geologic Repositories, DOE/HQ (RW-20),
FORSTL

NNWSI WEEKLY HIGHLIGHTS FOR WEEK ENDING FEBRUARY 28, 1985

I. Issues Requiring Involvement of HQ or Other Projects

A. New Issues:

None to report.

B. Previously Reported Issues:

None to report.

II. Major Internal Concerns

None to report.

III. Significant Accomplishments (SA)/Information Items (II)

SA

WMPO has submitted a revised plan for the shipment of fuel from E-MAD and shutdown of the facility. The revised plan that was sent to Phil Craig at RL reflects the fact that the Office of Storage and Transportation Systems will assume the responsibility from OGR for shipment of the fuel. Shut-down costs will not be funded by OCRWM.

II

EA Public Hearings were held in Amargosa Valley and Las Vegas during the week. The Reno public hearing is being held today, February 28. Nye County residents expressed support of the Project. The President of the Beatty Chamber of Commerce said the group took a vote and unanimously supported the repository providing the controls are there. In Las Vegas, most concern dealt with transportation. No results are available from the Reno hearing.

The issues and information needs developed to supplement the Mission Plan Key Issues and Issues were reviewed during a two-day Issues Hierarchy meeting in Las Vegas on February 27-28. The group is correlating the issues and information needs with Chapter 8 of the SCP Annotated Outline.

IV. Upcoming Events

1. Coordination Group Meetings

- o Tuesday-Thursday, March 19-21: Waste Package Coordinated.
- o Tuesday-Wednesday, March 19-20: Institutional and Socioeconomic Coordinating Group, San Diego.

2. HQ Meetings

- o Tuesday-Thursday, March 5-7: HQ QA Audit of WMPO, Las Vegas.
- o Monday, March 18: EIS Planning Meeting, D.C.
- o Tuesday, April 2: Program Managers' Meeting, D.C.(?).
- o Tuesday-Thursday, April 2-4: EA Comments Review, D.C.

3. Internal Project and DOE/NV Meetings

- o Wednesday, February 27: SCP Management Plan Meeting, Las Vegas.
- o Wednesday-Thursday, February 27-28: Issues Hierarchy Working Group Meeting, Las Vegas.
- o Friday, March 1: SAIC Monthly Status Review Meeting, Las Vegas.
- o Monday, March 4: WMPO NVO-196-18 Training.
- o Monday, March 4: USNCTT Executive Committee Meeting, Don Vieth, D.C.
- o Wednesday, March 6: SCP Kickoff Meeting, Las Vegas.
- o Friday, March 8: WMPO NVO-196-17 Training.
- o Monday-Friday, March 11-15: ESTP "Edit-In", Los Alamos.
- o Thursday, March 14: SCP Working Group Meeting, Las Vegas.

4. State and Public Interaction

- o Thursday, February 28: Reno EA Public Hearing, Reno.
- o Friday, March 8: Don and Mitch address Pahrump Chamber of Commerce.
- o Friday, March 15: Don Vieth to address Health Physics Society Meeting, San Diego.

W. J. Purcell

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FEB 25 1985

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Department of Energy
Nevada Operations Office
P. O. Box 14100
Las Vegas, NV 89114-4100

FEB 25 1985

W. J. Purcell, Director, Office of Geologic Repositories, DOE/HQ (RW-20),
FORSTL

NNWSI WEEKLY HIGHLIGHTS FOR WEEK ENDING FEBRUARY 21, 1985

I. Issues Requiring Involvement of HQ or Other Projects

A. New Issues:

None to report.

B. Previously Reported Issues:

None to report.

II. Major Internal Concerns

None to report.

III. Significant Accomplishments (SA)/Information Items (II)

SA

The Supreme Court Justices in a 9-0 decision ruled that the Western Shoshone Indians may no longer claim ownership of 24 million acres of land in California and Nevada because the government paid into a fund to settle all claims to the land. The Court said that the Indians aboriginal title ended when the government established a trust fund of \$26 million in 1979, although it has not been paid to the Tribe. The trust fund is now worth \$43 million. Therefore, Yucca Mountain is free and clear of any encumbrances from the Indian tribes.

II

In a February 15 article in the Las Vegas Review Journal, Bob Loux was quoted as telling the State Tourism Commission that he was concerned about validity of employment numbers stated in the NNWSI Project EA.

U.S. Senator Paul Laxalt addressed the Nevada State Legislature on February 14 and urged them to "keep their powder dry" with respect to the proposed repository. He asked them to not make any decisions about the repository until more facts are known. Senator Laxalt encouraged the legislators to keep an open mind and weigh all considerations. He also disputed the Governor's claim that the repository would hurt tourism.

FEB 25 1985

QA training was conducted to WMPO staff members for compliance with NVO-196-17 (Rev. 3), the NNWSI Quality Assurance Plan.

A meeting was held with representatives from DOE/HQ, WMPO, Westinghouse, the Idaho field office, and Richland field office to discuss the possibility of transferring responsibility from the Office of Geologic Repositories to the Office of Storage and Transportation Systems for shipping spent fuel elements to Idaho. It was agreed to divide responsibility for developing cost estimates, alternatives, and an associated plan which will be sent to the Richland field office on February 25.

IV. Upcoming Events

1. Coordination Group Meetings

None to report.

2. HQ Meetings

- o Monday, March 18: EIS Planning Meeting, D.C.
- o Tuesday-Thursday, April 2-4: EA Comments Review, D.C.

3. Internal Project and DOE/NV Meetings

- o Friday, February 22: NVO-196-18 WMPO Training.
- o Wednesday, February 27: SCP Management Plan Meeting, Las Vegas.
- o Wednesday-Thursday, February 27-28: Issues Hierarchy Working Group Meeting, Las Vegas.
- o Friday, March 1: SAIC Monthly Status Review Meeting, Las Vegas.
- o Monday, March 4: WMPO NVO-196-17 Training.
- o Monday, March 4: USNCTT Executive Committee Meeting, Don Vieth, D.C.
- o Thursday, March 7: SCP Kickoff Meeting, Las Vegas.
- o Friday, March 8: WMPO NVO-196-18 Training.

4. State and Public Interaction

- o Friday, February 22: Don Vieth interview/taping at Channel 21 (KRLR), Las Vegas.
- o Monday, February 25: Nye County EA Public Hearing, Amargosa.

FEB 25 1985

W. J. Purcell

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- o Tuesday, February 26: Las Vegas EA Public Hearing, Las Vegas.
- o Tuesday, February 26: Community Monitoring Meeting, Henderson (tentative).
- o Thursday, February 28: Reno EA Public Hearing, Reno.
- o Friday, March 8: Don and Mitch address Pahrump Chamber of Commerce.
- o Friday, March 15: Don Vieth to address Health Physics Society Meeting, San Diego.
- o Monday-Friday, March 25-29: Waste Management '85, Tucson, AZ.
- o Thursday, March 28: Don Vieth to speak at UNLV Continuing Education Forum, Las Vegas.

5. NRC Interaction

- o Tuesday-Wednesday, March 11-12: DOE/NRC Management Meeting, D.C.

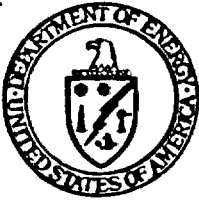


Donald L. Vieth, Director
Waste Management Project Office

WMPO:DLV-674

cc:

J. W. Bennett, DOE/HQ (RW-22), FORSTL
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FEB 19 1985

W. J. Purcell, Director, Office of Geologic Repositories, DOE/HQ (RW-20),
FORSTL

NNWSI WEEKLY HIGHLIGHTS FOR WEEK ENDING FEBRUARY 14, 1985

I. Issues Requiring Involvement of HQ or Other Projects

A. New Issues:

None to report.

B. Previously Reported Issues:

None to report.

II. Major Internal Concerns

None to report.

III. Significant Accomplishments (SA)/Information Items (II)

SA

On February 13, 22 Nevada labor unions backed the Nuclear Waste Repository Project, with reservations. The unions have sent resolutions to Nevada's elected officials encouraging them to work actively to attract the proposed SP100 and nuclear repository program.

II

A Nevada Assembly Joint Resolution (AJR7) to urge Congress not to allow Nevada to become a nuclear waste repository site has been introduced to the Nevada State Legislature. The sponsors feel that passage is assured. However, Congresswoman Barbara Vucanovich urged the lawmakers in a presentation to the Legislature to become informed about the facts and to adopt a more conservative wait-and-see attitude. Governor Bryan was quoted as stating that he "could only hope that Congresswoman Vucanovich takes the position of three Nevada Governors and the overwhelming majority of her constituents."

The Nevada Democratic Central Committee has accepted a plan to call for an advisory question to be placed on the 1986 election ballot regarding the repository.

Other bills introduced to the 1985 Nevada legislative session are AB128 and AJR 4-5. AB128 increases State rules for shipment of low-level nuclear waste and AJR 4-5 urges the federal government to take responsibilities for any high-level nuclear repository in Nevada. Another bill, AB40 was introduced on Monday to tighten Nevada's hazardous waste management laws.

The Las Vegas Review Journal published an article on February 9 indicating that the State of Nevada will request that DOE accept total liability for any accidents related to the repository, including transportation. According to the article, the State wants DOE to accept liability beyond the Price-Anderson Act damages limit of \$560 million and intends to include this in the consultation and cooperation agreement when it is negotiated.

Don Vieth, Bob Loux (NWPO), and Bob Fulkerson (Citizens Alert) made presentations to the Carson City League of Women Voters on February 12. Reaction in the press is not yet known.

During the EA workshop that was held at DOE/HQ during February 4-7, it was agreed that the field offices will control their comment resolution process for Chapters 2-6 and that DOE/HQ will handle their comments on Chapters 1 and 7 and appendices A and B. DOE/HQ will also oversee field office comment resolutions for consistency. This is a major change to the Draft EA Management Plan. Tentative accord was reached on the final EA Management Plan. The Project is now preparing an EA finalization and comment response plan and schedule based on the proposed August 29, 1985 public release date.

In a February 12-13 meeting, the NNWSI Project Issues Hierarchy Working Group decided to adopt Mission Plan Key Issue and Issues. Each issue now has a prime responsible person assigned to develop information needs. The group will meet again on February 27-28 to go over the information needs that will have been developed.

A meeting was held on February 12 with WMPO, SAIC and Sandia participants to review the Systems Description Document. Revisions were proposed to better define the physical system.

A management meeting has been scheduled on March 11 with NRC in Washington, D.C. to discuss Project workshop schedules.

Mitch Kunich gave a presentation about the NNWSI Project to the NTS Senior Management Meeting that was held on February 14. This group consists of vice presidents and upper management for the NTS contractors and subcontractors.

An ESF Status meeting was held on February 13 to discuss the design status and procurement packages. It was agreed that the draft definitive design will be delivered to HQ on schedule April 26 in accordance with the December 27 HQ guidance.

IV. Upcoming Events

1. Coordination Group Meetings

None to report.

2. HQ Meetings

- o Wednesday, February 20: Program Managers' Meeting, D.C.

3. Internal Project and DOE/NV Meetings

- o Tuesday, February 19: NV Program Review, Las Vegas.
- o Tuesday, February 19: NVO-196-17 WMPO Training.
- o Tuesday, February 19: Issues Hierarchy Working Group Meeting, Las Vegas.
- o Tuesday, February 19: EA Panel Members Meeting, Las Vegas.
- o Friday, February 22: NVO-196-18 WMPO Training.
- o Friday, February 22: Don Vieth will be taping show for KRLR, Channel 21, Las Vegas.
- o Wednesday-Thursday, February 27-28: Issues Hierarchy Working Group Meeting, Las Vegas.
- o Friday, March 1: SAIC Monthly Status Review Meeting, Las Vegas.
- o Monday, March 4: WMPO NVO-196-17 Training.
- o Friday, March 8: WMPO NVO-196-18 Training.

4. State and Public Interaction

- o Monday, February 25: Nye County EA Public Hearing, Amargosa.
- o Tuesday, February 28: Reno EA Public Hearing, Reno.
- o Tuesday, February 26: Community Monitoring Meeting, Henderson (tentative).
- o Monday, March 4: USNCTT Executive Committee Meeting, Don Vieth, D.C.

- o Friday, March 8: Don and Mitch address Pahrump Chamber of Commerce.
- o Friday, March 15: Don Vieth to address Health Physics Society Meeting, San Diego.
- o Monday-Friday, March 25-29: Waste Management '85, Tucson, AZ.
- o Thursday, March 28: Don Vieth to speak at UNLV Continuing Education Forum, Las Vegas.

5. NRC Interaction

- o Tuesday-Wednesday, March 11-12: DOE/NRC Management Meeting, D.C.



Donald L. Vieth, Director
Waste Management Project Office

WMPO:DLV-666

REGULATORY STATUS

- o LICENSING PROCESS BRIEFINGS
- o NRC/DOE SAMPLE DISTRIBUTION MEETING
- o SEISMIC/TECTONICS POSITION PAPER
- o DOE/NRC MANAGEMENT MEETING

LICENSING PROCESS BRIEFINGS

- o NRC "TOUR" OF PARTICIPANT LOCATIONS CANCELLED

- o NRC HAS PROVIDED TAPES AND VIEWGRAPH COPIES FROM BRIEFING GIVEN TO DOE/HQ ON 2/3/85
 - ALTMAN

 - OLMSTEAD

 - MILLER

- o ROUTING TAPES TO PARTICIPANTS
 - SUGGESTED ORDER:

LANL/SNL/LLNL/USGS (MENLO PARK)/USGS (DENVER)/
WMPO - RETENTION (?)

DOE/NRC SAMPLE DISTRIBUTION MEETING

G TUNNEL TOUR

- o FEBRUARY 4 - CORE LIBRARY

- o MEETING SUMMARY DISTRIBUTED TO TPOs - 2/19/85
 - PURPOSE OF MEETING - DISCUSS PROVIDING SAMPLES TO NRC/ORNL FOR GEOCHEMICAL STUDIES

- o TOTAL OF 15 PARTICIPANTS
 - WMPO, NRC, ORNL, LANL, USGS, LLNL, SAIC, NEVADA

- o MEETING EXCEPTIONALLY WELL RECEIVED
 - SMALL, OBJECTIVE ORIENTED, GROUP
 - GOOD TECHNICAL EXCHANGE
 - ACCOMMODATION
 - DOE SAMPLE CURATION NEEDS NRC/ORNL ANALYSIS NEEDS

- o G-TUNNEL TOUR - 2/5/85
 - WELL RECEIVED

SEISMIC/TECTONICS POSITION PAPER

PURPOSE: DEVELOP AN APPROACH TO SEISMIC AND TECTONIC INVESTIGATIONS THAT IS CONSISTENT WITH THE REQUIREMENTS OF 40 CFR 191, 10 CFR 60, AND 10 CFR 960

- SCOPE TO COVER BOTH PRE AND POST-CLOSURE CONSIDERATIONS
- SCP RELATED

STATUS

- o MEETINGS ON 1/11 AND 2/8
- o POSITION PAPER OUTLINE REVISED AND DISTRIBUTED FOR COMMENT TO PARTICIPANTS, HQ, WESTON, SRPO AND BWIP

APPROACH

- o WORKING GROUP
 - 1 CORE REPRESENTATIVE EACH INVOLVED PARTICIPANT
 - HQ/WESTON
 - REVIEW PANEL
- o DEVELOP ATOC

SEISMIC/TECTONICS POSITION (CONTINUED)

APPROACH (CONTINUED)

- o OBTAIN CONCURRENCE
- o MEET WITH NRC TO DISCUSS/INFORM ASAP
- o NRC WORKSHOP BASED ON DRAFT

ANTICIPATED SCHEDULE

- o ATOC TO NRC - END OF APRIL
- o (NRC/DOE "INFORMATION MEETING" SHORTLY THEREAFTER)
- o NRC/DOE WORKSHOP - 8/85
- o FINAL DRAFT - 10/85
- o POSITION PAPER - 11/85

CONSIDERATIONS

- o BOTH GENERIC AND SITE SPECIFIC COMPONENTS
 - RELATIVE VALUE TO NNWSI PROJECT
 - HQ/WESTON PARTICIPATION
- o SCHEDULING CONSISTENT WITH SCP
- o NRC COMMUNICATION

DOE/NRC MANAGEMENT MEETING

- o REQUIRED QUARTERLY UNDER "AGREEMENT"

- o MARCH 11, 1985, RECOMMENDED TO NRC
 - WASHINGTON, D.C. AREA

 - 2 PREVIOUS ATTEMPTS TO SCHEDULE

- o AGENDA TO BE ESTABLISHED BUT EMPHASIS OF MEETING TO BE ON SCHEDULING OF FUTURE TECHNICAL MEETINGS
 - ES AND TECTONICS

 - N 2 ADDITIONAL NEEDED

DOE-HQ/NRC MEETING - 2/15/85

SCP RELATED MEETINGS - PLANNING AND SCHEDULING

- COMBINATION OF NRC-DOE-HQ (GENERIC) AND
SITE SPECIFIC INTERACTIONS

- POTENTIAL CONSIDERED FOR PARALLEL INTERACTIONS
ON DIFFERENT TOPICS

- PROGRAM POSITIONS TO BE DEVELOPED PRIOR
TO MEETINGS

TOPICS FOR INTERACTION

(FROM 2/15 MEETING SUMMARY)

GENERIC

1. PERFORMANCE ALLOCATION --
WHAT SUBSYSTEMS SHOULD
BE ASSIGNED TENTATIVE
PERFORMANCE GOALS?

2. PERFORMANCE ASSESSMENT --
 - o DEFINITION
 - DISTURBED ZONE
 - ACCESSIBLE ENVIRONMENT
 - BOUNDARY OF ENGINEERED
BARRIER SYSTEM
 - o PERFORMANCE ASSESSMENT PLAN
 - o WHAT COUPLED TESTS?

3. EXPLORATORY SHAFT --
 - o WHAT IS NEEDED TO
ASSURE THAT ES COULD
BE CONVERTED TO AN
OPERATIONAL SHAFT?
 - o ESTP (GENERIC ASPECTS)

SITE SPECIFIC

- PERFORMANCE ASSESSMENT --
 - o DEFINITION
 - ACCESSIBLE ENVIRONMENT
 - o WHAT COUPLED TESTS?

- EXPLORATORY SHAFT
 - o IS ESTP ADEQUATE TO
DEVELOP NEEDED LICENSING
INFORMATION?
 - o IS ES LOCATION SUITABLE
TO CONDUCT ESTP?
 - o CAN ES BE SEALED IN
SHORT-TERM? LONG-TERM?
 - o IS METHOD OF CONSTRUCTION
APPROPRIATE?
 - o WILL ES AND ESTP ADVERSELY
IMPAIR OTHER SITE CHARAC-
TERIZATION ACTIVITIES?

4. CONCEPTUAL DESIGN --
- o WHAT LEVEL OF DETAIL IS NEEDED IN THE SCP?

- CONCEPTUAL DESIGN --
- o WHAT SITE-SPECIFIC DIFFERENCES ARE THERE IN LEVEL OF DETAIL?

5. QUALITY ASSURANCE --
- o Q-LIST METHODOLOGY
 - o QA GRADES
 - o HOW CAN HISTORICAL DATA BE QUALIFIED?
 - o HOW SHOULD QA BE ORGANIZED TO PROVIDE REQUIRED INDEPENDENCE?

- QUALITY ASSURANCE --
- o RESPONSES TO NRC VISITS
 - o WHAT DEGREE OF DETAIL IS NEEDED IN TEST PROCEDURES?
 - o ARE SCP TEST PLANS CONSIDERING THE DEGREE OF QA REQUIRED?

6.

- FIELD DRILLING AND TESTING PROGRAM --
- o WHAT DISTRIBUTION OF WELLS IS NEEDED?
 - o WHAT TESTS, SAMPLES, ETC. IN EACH?



Science Applications International Corporation

L85-SS-JHF-037

February 15, 1985

To: Distribution

Subject: February 1985 PM-TPO Meeting

Attached is an agenda for the February Project Manager-Technical Project Officers meeting which will be held on February 21-22 in the conference room at 2950 So. Highland Drive. You will be notified if any significant changes are made which would affect presentors' appearances.

Mini-agendas will be faxed to the TPOs prior to the meeting for some selected items as noted in the agenda.

SCIENCE APPLICATIONS
INTERNATIONAL CORPORATION

Joy H. Fiore
Deputy Manager,
Management Support Services

JHF:md

Enclosure:
As Stated

Distribution w/encl.:

D. L. Vieth, WMPO (2)
D. T. Oakley, LANL, Los Alamos, NM
T. O. Hunter, SNL, 6310, Albuquerque, NM
W. W. Dudley, Jr., USGS, Denver, CO
L. D. Ramspott, LLNL, Livermore, CA
J. B. Wright, W, Mercury, NV
M. E. Spaeth, SAIC, Las Vegas, NV
M. P. Kunich, WMPO
M. B. Blanchard, WMPO
V. F. Witherill, WMPO
A. J. Roberts, RMBD
D. I. Irby, EEM
B. C. Donahoe, Interaction Associates
C. H. Johnson, NWPO
P. T. Prestholt, NRC, Las Vegas, NV
M. D. Voegele, SAIC, Las Vegas, NV
J. R. LaRiviere, SAIC, Las Vegas, NV
C. S. Jonson, SAIC, Las Vegas, NV
Project File 9.2.1.8.2
Records Center

2769 South Highland, Las Vegas, NV 89109, (702) 295-1204

Technical & Management Support Services Contractor Nevada Nuclear Waste Storage Investigations

Other SAIC Offices: Albuquerque, Ann Arbor, Arlington, Atlanta, Boston, Chicago, Huntsville, La Jolla, Los Angeles, McLean, Palo Alto, Santa Barbara, Sunnyvale, and Tucson.

AGENDA

LOCATION: 2950 S. Highland

PAGE: 1 of 3

Las Vegas, NV

DATE: February 21-22, 1985

NNWSI PROJECT MANAGER-TECHNICAL PROJECT OFFICER MEETING

TIME	WHAT	HOW	WHO	EXPECTED OUTCOME	REF MATERIAL & COMMENTS
Thursday, February 21					
10:00-10:10	Introductions/Roles/Outcomes	Introductions 'round the room and review outcomes.	Brenda/Don/ TPOs		
10:10-10:25	Agenda	Review agenda; change as required.	Brenda/Don/ TPOs	Agree on today's agenda.	Agenda faxed 2/15/85.
10:25-10:30	October/November/January Minutes	Correct and/or approve.	Don/TPOs	Agree on minutes issued.	Minutes sent 11/1, 12/10, and 1/8.
10:30-11:30	FYIs o Carson City Debate o SCP/NRC Meeting o Program Manager's Meeting o Common Waste Package o Common A-E	Feedback Feedback Feedback Status/Feedback Feedback	Don Uel Don Larry Vern		
11:30-12:00	EA Finalization Plan	Feedback on HQ meeting and present EA finalization plan for NNWSI EA.	Mary Lou	Understand current status of finalizing EA and comment response appendix. Agree to plan.	
12:00-1:00	LUNCH				
1:00-2:00	SCP Management Plan	Mini-agenda to come	Mike V.		
2:00-2:30	Issues Hierarchy	Report progress on issues	Jean		

AGENDA

LOCATION: 2950 S. Highland

PAGE: 2 of 3

Las Vegas, NV

DATE: February 21-22, 1985

NMWSI PROJECT MANAGER-TECHNICAL PROJECT OFFICER MEETING

TIME	WHAT	HOW	WHO	EXPECTED OUTCOME	REF MATERIAL & COMMENTS
Thursday, February 21, cont'd.					
2:30-3:00	Performance Assessment Plan	Present status of PAP development, related to SCP.	Tom		
3:00-3:15	BREAK				
3:15-5:45	ESTP and SBTP Technical Presentation	Present status of ESTP. Questions & Answers Describe SBTP and how it will be developed. Questions and Answers	Wes Don/TPOs Dave J. Don/TPOs	Understand status related to SCP. Understand SBTP scope and purpose; update on status.	

Friday, February 22					
8:00-8:15	Agenda/Outcomes	Review day's agenda, clarify anticipated outcomes.	Brenda		
8:15-9:15	CCB MEETING		Don/Chuck		Agenda sent 2/14 by CCB Secretary.
9:15-12:00	QA				
	o ESI Records Management Report	Report on results of records management visits; propose next steps to implement a records management plan.	Bob Hofer	Understand results; agree on next steps.	
	o Software QA Procedure	Present draft procedure, identify problem areas.	Stan or Steve	Agree on procedure (or to review and comment)	
	o Update on QA Activities	Status of Levels of Quality Procedure, update on QA meetings.	Stan	Understand status.	

AGENDA

PAGE: 3 of 3

DATE: February 21-22, 1985

LOCATION: 2950 S. Highland

Las Vegas, NV

NNWSI PROJECT MANAGER-TECHNICAL PROJECT OFFICER MEETING

TIME	WHAT	HOW	WHO	EXPECTED OUTCOME	REF MATERIAL & COMMENTS
Friday, February 22, cont'd.					
12:00-1:00	LUNCH				
1:00-2:30	ES NRC Interaction	Feedback from Vern and Dean's meeting w/Stein; present concepts for draft Project position for NRC; discuss. Identify next steps.	Vern/Dean/ Tom	Update on HQ's position. Agree on position paper concepts. Agree on next steps.	
2:30-2:45	BREAK				
2:45-3:30	45-min. Open Time				
3:30-4:15	OPEN ITEMS				
4:15-4:25	Action Items	Review action items generated in meeting.	Brenda/Don/ TPOs	Agree on dates, responsibilities.	
4:25-4:30	March Agenda	Review items suggested during meeting and add as required.	Brenda/Don TPOs	Agree on items suggested.	
4:30-4:35	Meeting Evaluation				

Paul

MINI-AGENDAS

What/How	Who	Time
----------	-----	------

Thursday, 11:30-12:15 - EA Finalization Plan - Mary Lou

Summarize Expected Outcome	Mary Lou	
Present Results from HQ 2/5-6 Meeting	Mary Lou	5 min.
Present Organization Charts for HQ and NNWSI EA Finalization and CRA	Mary Lou	10 min.
Present EA Finalization Flow Chart	Mary Lou	10 min.
Present Schedule	Mary Lou	10 min.
Questions and Answers	Don/TPOs	10 min.
--Expected Outcome: Understand status of finalization plans and comments response appendix, understand schedule. Agree to recommended schedule and plan.		

Thursday, 1:15-2:00 - SCP Management Plan - Mike and/or Max

Present changes to SCP Management Plan: Tie Changes to Comments Received. Reach agreement on incorporated changes.	Mike or Max	10 min.
Discuss Upcoming SCP Management Group Meeting (2/27) and SCP Kickoff Meeting 3/7.	Mike	5 min.
Present Implications of Plan Approval.. What You're Buying Into.	Mike	30 min.
Request Approval of Plan; record Approval by each TPO.	Mike/Don/TPOs	
--Overall Outcome: Approved Plan, Understanding of Status.		

Thursday, 2:00-2:45 - Issues Hierarchy - Jean

Present results from Issues Hierarchy Meeting: Agreement to use Mission Plan Key Issues and Issues, Agreement to create additional Project issues on design and performance assessment; plans for 2/27-28 Issues Hierarchy Workshop.	Jean	15 min.
Present projections for finalization	Jean	5 min.
Discuss Level of Detail for Information Needs.	Jean/Don/TPOs	25 min.
--Expected Outcome: Understand status. Agree to direction group is taking. Agree to Level of Detail for Information needs.		

MINI-AGENDAS, PAGE 2.

Thursday, 3:15-5:45 - ESTP and SBTP Technical Presentations - Wes and Dave

Wes and Paul:

ESTP Mini-Agenda will be plotted just before the meeting.

Describe how the SBTP will evolve utilizing guidance packages and work plans.	Dave	15 min.
Present Outline of SCP Chpt. 8.3 (Plans, Tests, Analyses, and Studies)	Dave	15 min.
Show How Chpt. 8.3 Relates to the SBTP	Dave	15 min.
Describe Concerns, Attempt to Resolve some Concerns	Dave/Don/TP0s	30 min.
Wrapup Question and Answer Period	Dave/Don/TP0s	15 min.

Friday, 9:15-12:00 - Records Management - Bob Hofer

Present Records Management System Definition Described in Report	Bob	30 min.
Discuss; reach agreement on system definition in report. --Expected Outcome: Agree to RM System Definition as Described.	Bob/Don/TP0s	30 min.
BREAK	Everyone	15 min.
Discuss Implementation Issues Related to Findings; Propose Approach to Retrofit of Existing Data.	Bob	30 min.
Discuss, reach agreement on presented approach. --Expected Outcome: Agree on Approach.	Bob/Don/TP0s	30 min.

Overall Outcome: Agree to Presented Approach and Next Steps.

Quality Assurance Update - Stan Klein

Present Status of Levels of Quality Procedure.	Stan	10 min.
Present Status of Draft Computer Code Verification and Validation Procedure	Stan	10 min.
Present Summary of QA Monthly Meetings.	Stan	10 min.

MINI-AGENDAS, PAGE 3.

Friday, 1:00-2:30 p.m. - ES/NRC Interaction - Vern, Dean, Tom

Present Synopsis of Discussions with Stein.	Vern	10 min.
Present Outline for ES Position Paper for NRC.	Dean	15 min.
Discuss Position Paper Outline; Approve Outline, Identify Next Steps	Dean/Vern/Don/TPOs	20 min.
Propose Structure for DOE/NRC Workshops	Dean or Vern	10 min.
Discuss Workshop Structure; Work toward Agreement. If Agreement Can't Be Reached, Agree to Review Proposed Structure and Comment.	Dean/Vern/Don/TPOs	35 min.
--Expected Outcome: Agree on Position Paper Outline, Agree on Workshop Structure or Agree to Review and Comment.		

INFORMATION REQUESTED BY NRC
(3/83 LETTER)

- SHAFT AND SEAL DESIGN CONSIDERATIONS
- CONSTRUCTION PLANS AND PROCEDURES
- SEALING OR GROUTING PLANS AND PROCEDURES
- CONSTRUCTION TESTING AND INSPECTION PLANS AND PROCEDURES
- PLANS AND PROCEDURES FOR GATHERING SPECIFIC INFORMATION
RELATED TO SITE CHARACTERIZATION
- QUALITY ASSURANCE FOR ALL OF THE ABOVE

DCN
2/22/85
DRAFT

OUTLINE FOR
EXPLORATORY SHAFT FACILITY
POSITION PAPER
(RESPONSE TO NRC 3/83 LTR)

INTRODUCTION

SUMMARY

GENERAL ESF PROJECT DESCRIPTION

QUALITY ASSURANCE

QA PROGRAM PLAN

QUALITY LEVEL ASSIGNMENTS

SHAFT AND SEAL DESIGN

DETAILED SHAFT DESIGN AND CONSTRUCTION DESCRIPTION

SHAFT DESIGN CONSIDERATIONS

USE OF SHAFTS IN THE REPOSITORY

TESTING REQUIREMENTS

SHAFT CONSTRUCTION METHODS

SEALING DESIGN CONSIDERATIONS

REPOSITORY SEALING PROGRAM

ESF AS POTENTIAL RELEASE PATHWAY-WATERBORNE RADIONUCLIDES

ESF AS POTENTIAL RELEASE PATHWAY-AIRBORNE RADIONUCLIDES

SEALING BOREHOLES

EXPLORATORY SHAFT TESTING PROGRAM

TESTING DURING CONSTRUCTION ACTIVITIES

TESTING FOLLOWING CONSTRUCTION ACTIVITIES

PERFORMANCE ASSESSMENT

PROPOSED STRUCTURE FOR DOE/NRC WORKSHOPS
EXPLORATORY SHAFT FACILITY

DCN
2/18/85
draft

TWO WORKSHOPS PROPOSED

- ESF DESIGN AND REPOSITORY SEALING ONE DAY
- ESF TESTING PROGRAM TWO DAYS

PROVIDE NRC WITH FOLLOWING INFORMATION PRIOR TO WORKSHOPS

- ESF TITLE II DESIGN
- ESF POSITION PAPER IN RESPONSE TO NRC LETTER OF 3/83
- REPOSITORY SEALING STUDY
- NNWSI PROCEDURE ON QUALITY LEVEL ASSIGNMENTS
- ESF QUALITY LEVEL ASSIGNMENTS
- ESTP(REV 1)

WORKSHOP GUIDELINES

- BRIEF OVERVIEW PRESENTATIONS--NOT DETAILED LIKE LA JOLLA
- HOLD FOLLOW-UP WORKSHOPS ON SPECIFIC SUBJECTS--BUT ONLY IF NRC REQUESTS THEM
- HOLD WORKSHOPS ON THREE CONSECUTIVE DAYS TO MINIMIZE NNWSI PERSONNEL INVOLVEMENT
- INTEGRATE QA AND PA INTO WORKSHOPS AS REQUIRED RATHER THAN HOLDING SPECIAL WORKSHOPS ON THESE SUBJECTS
- TIMING--REQUIRED BY EARLY SUMMER FOR ZERO/SHAFT SINKING
SUBCONTRACT NEGOTIATIONS
IMPACT ON
--REQUIRED BY END OF SUMMER FOR MINOR/SHAFT SINKING
SUBCONTRACT NEGOTIATIONS
IMPACT ON
--REQUIRED NO LATER THAN _____ TO ALLOW MAJOR
NRC CONCERNS TO BE INCORPORATED IN THE SCP

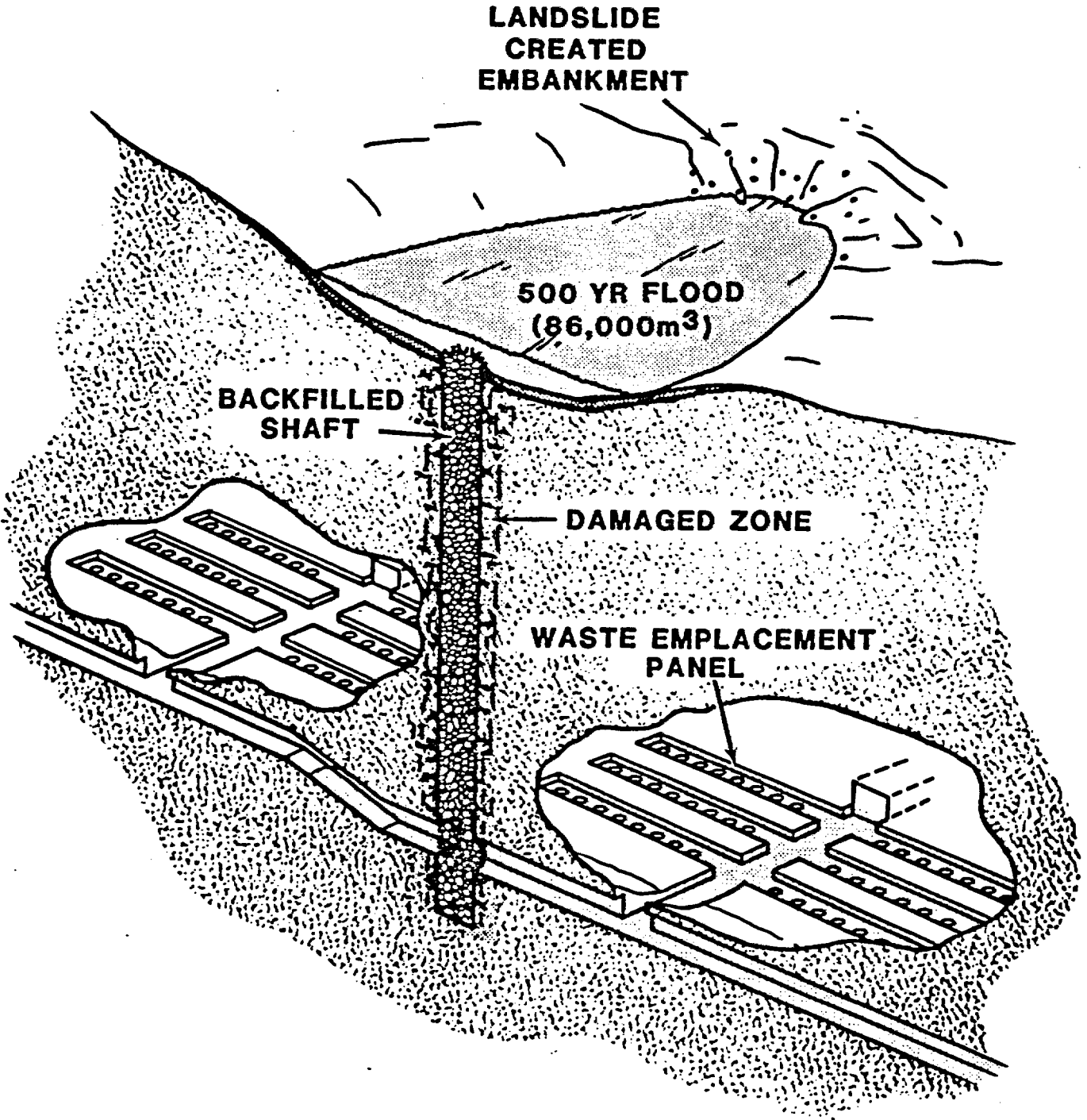


QUESTIONS FOR ES PERFORMANCE ASSESSMENT

- ROCK DAMAGE DURING CONSTRUCTION
- SHAFT LINER ROLE
- SHAFT INTERNALS USAGE IN REPOSITORY



SCENARIO FOR ES PERFORMANCE ASSESSMENT





SCENARIO FOR ES PERFORMANCE ASSESSMENT

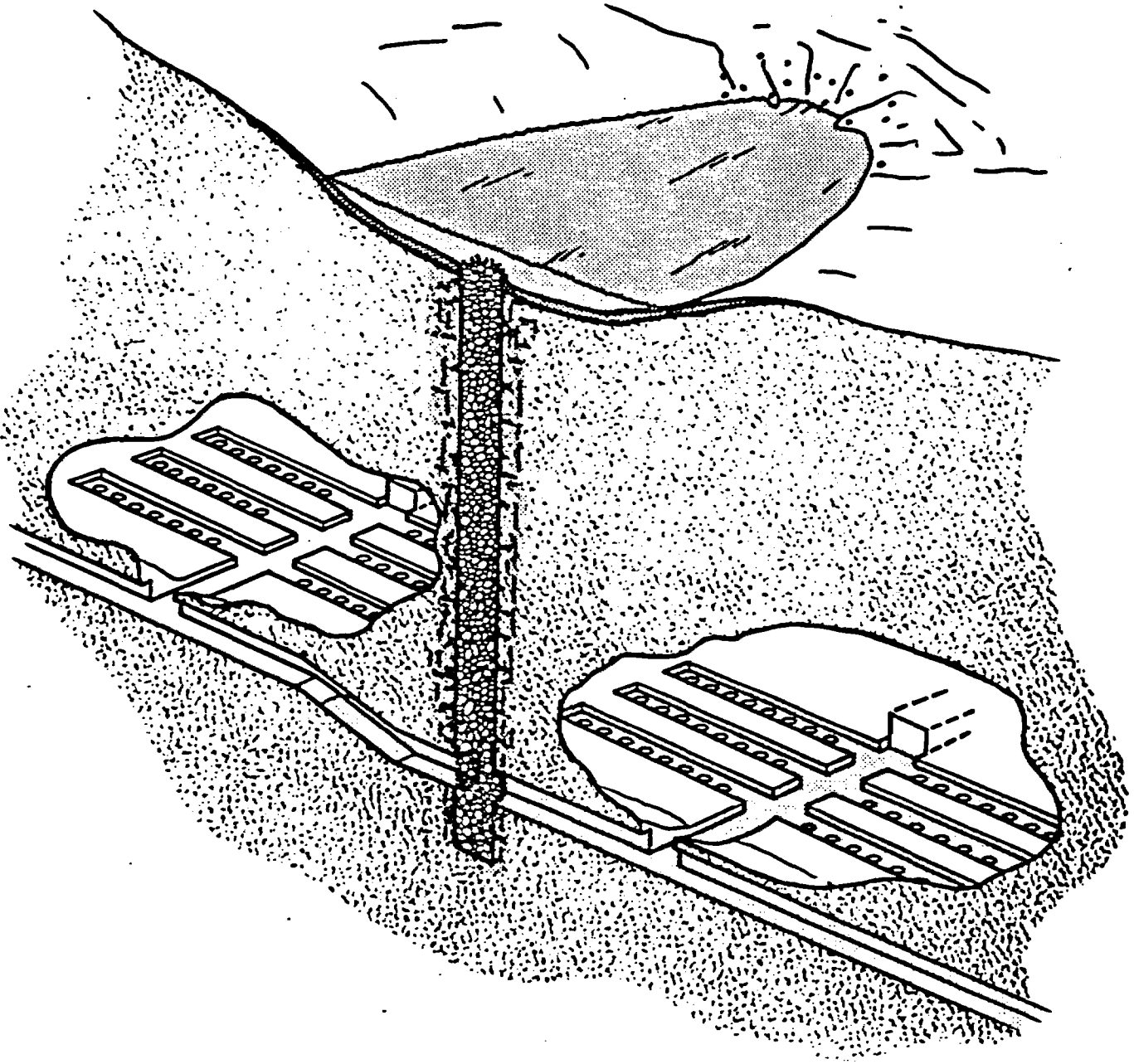
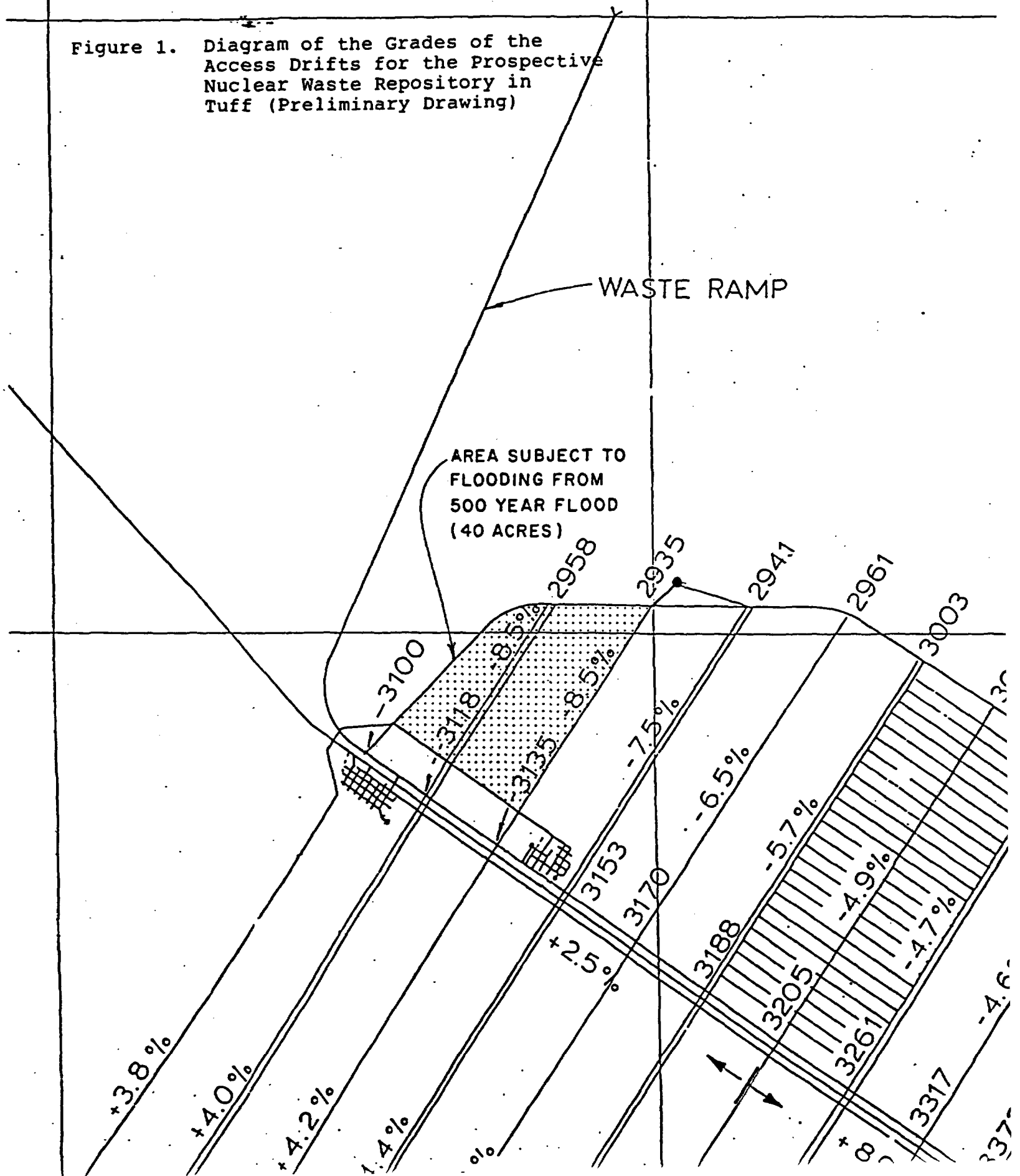


Figure 1. Diagram of the Grades of the Access Drifts for the Prospective Nuclear Waste Repository in Tuff (Preliminary Drawing)





ASSUMPTIONS

- LANDSLIDE
- 500-YEAR FLOOD
 - 86,000 M³
- HYDRAULIC CONDUCTIVITY
 - ROCK, 10⁻⁵ CM/S
 - DAMAGE ZONE, 10⁻³ CM/S, 1 RADIUS FROM SHAFT
- DISPOSAL AREA DOWNGRADIENT FROM SHAFT FLOODED
 - 40 ACRES
 - 516 WASTE PACKAGES
- WATER COVERING HORIZONTAL CROSS-SECTION OF WASTE PACKAGES
PASSES CONTAINER
- WATER SATURATED WITH RADIONUCLIDE
- CONGRUENT LEACHING

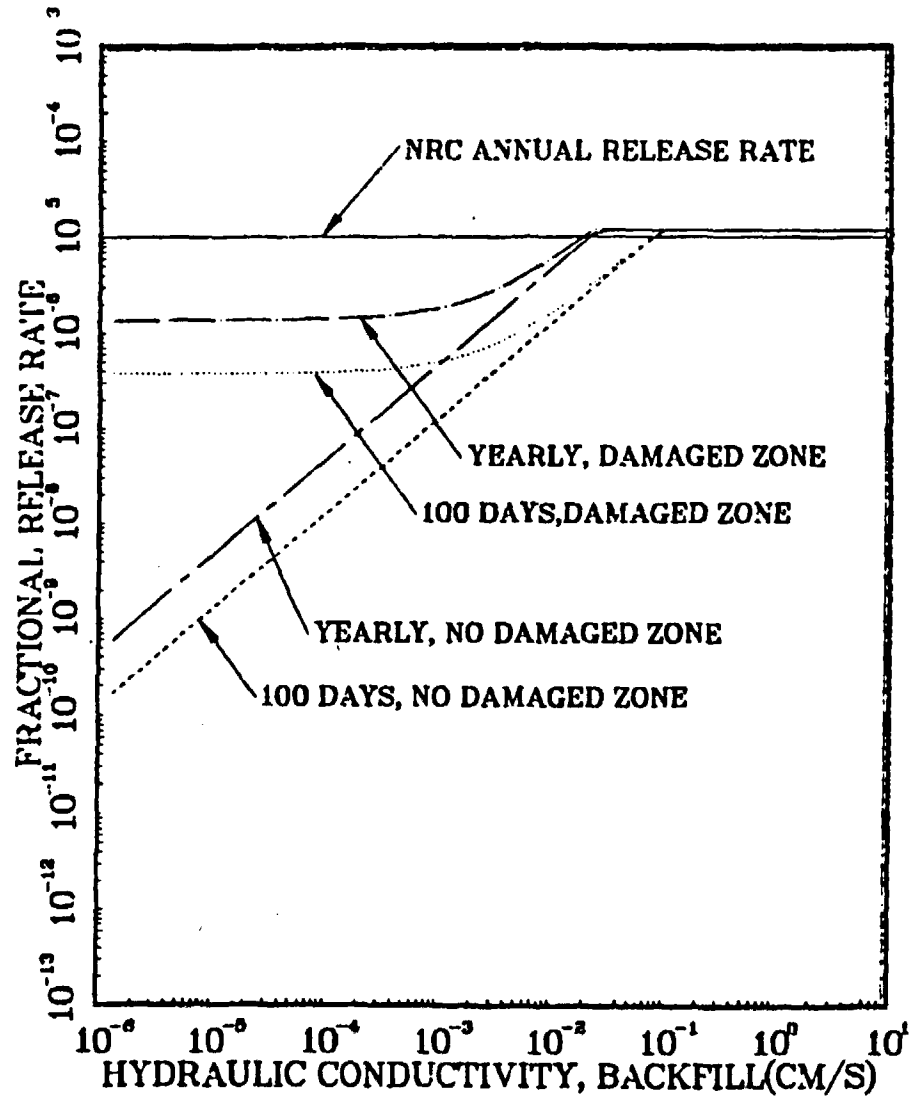
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PROJECT



U-238 ANNUAL RELEASE RATES



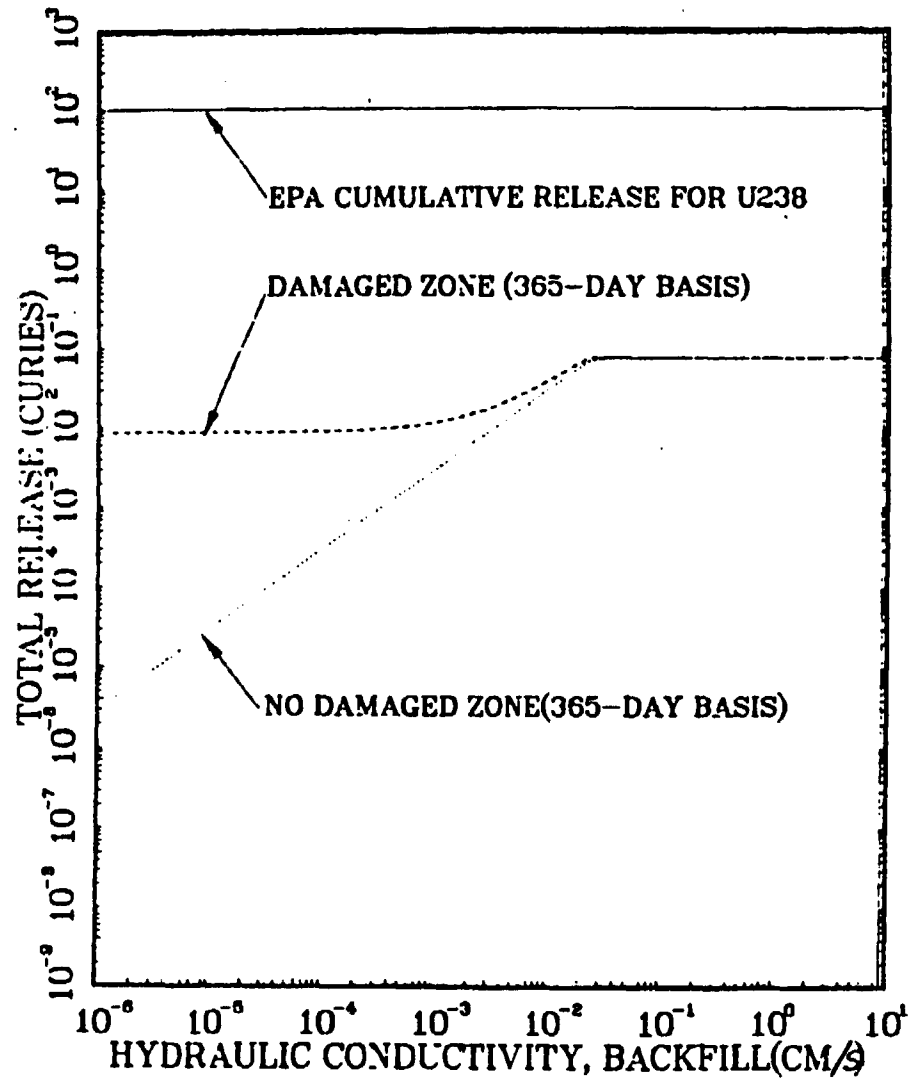
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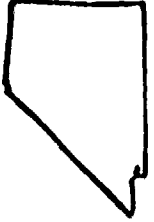
PROJECT



U-238 CUMULATIVE RELEASE



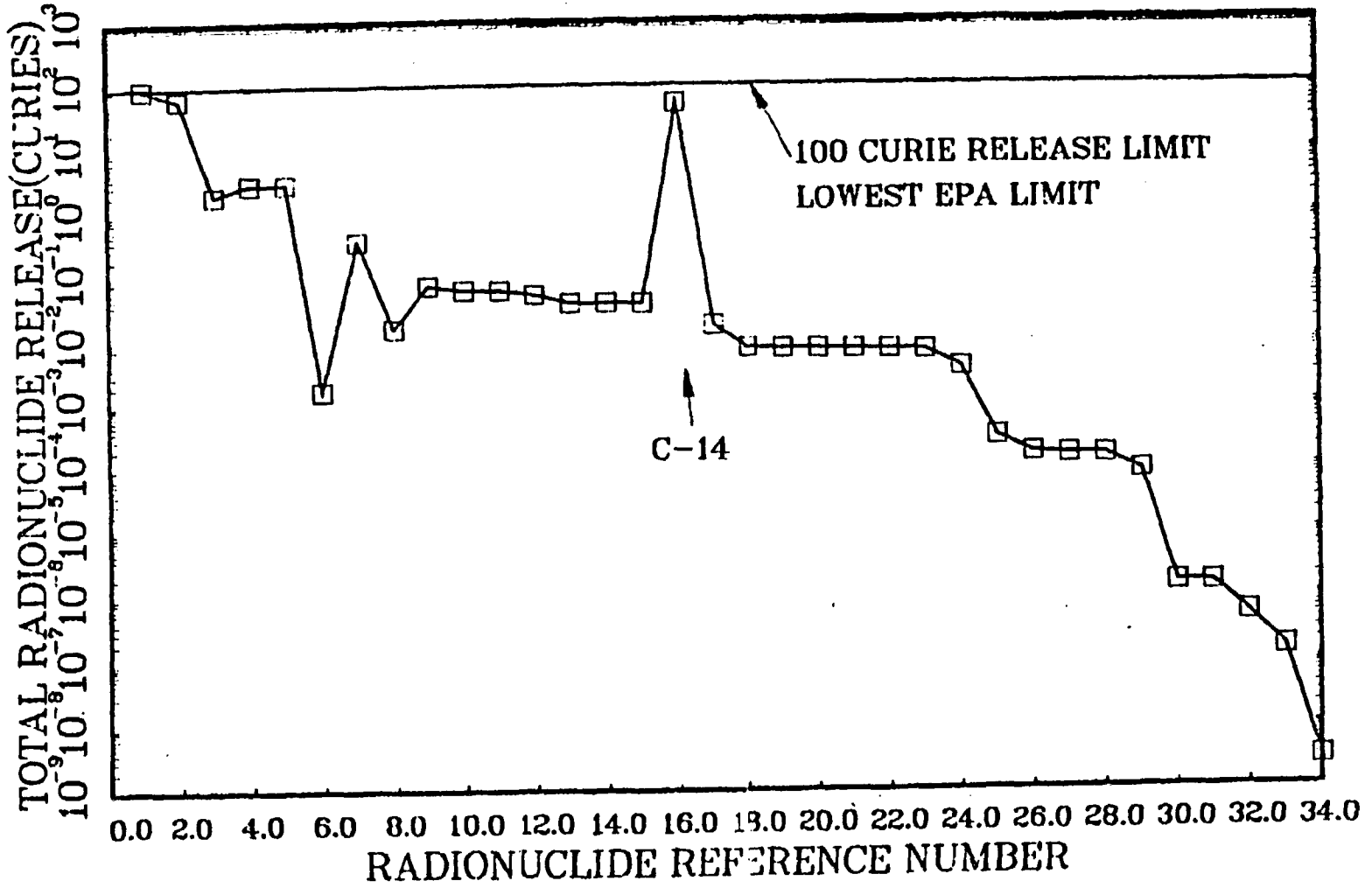
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PROJECT



TOTAL RADIONUCLIDE RELEASES



SCENARIOS - COMPARATIVE ANALYSES

- SURFACE WATER - WATER FLOWS IN THROUGH ES, 500-YEAR FLOOD
- ENTERS DRIFTS DOWNGRADIENT FROM ES
 - DRAINS THROUGH SHAFT SUMP
 - BUILDUP OF WATER OCCURS AT BASE OF SHAFT

SUBSURFACE WATER

- DISCRETE FAULT (GHOST DANCE FAULT)
PENETRATED BY REPOSITORY DRIFT
- WATER CONTACTS THE WASTE PACKAGES
- WATER CONTAINING THE RADIONUCLIDES FLOWS
DOWNGRADIENT IN DRIFTS TOWARDS THE ES
- IF CREDIBLE FOR WATER TO ENTER ES, THEN
INFLUENCE OF DAMAGED ZONE AND LINER
CAN BE ASSESSED

AIRBORNE

- AIR ENTERS SHAFT/RAMPS OUTSIDE REPOSITORY
- AIR PASSES THROUGH THE WASTE DISPOSAL AREA
BETWEEN THE PERIMETER OF THE REPOSITORY
AND THE ES
- AIR EXITS THE ES



ASSUMPTIONS - SURFACE WATER INFLOW

- LANDSLIDE OR FLOOD DEBRIS OCCURS DOWNGRADIENT FROM ES
- 500-YEAR FLOOD OCCURS
- DRAINAGE AREA (COYOTE WASH AND WASH TO SOUTH)
- RAINFALL RATE EQUALS RUNOFF RATE
- NO FLOW OCCURS THROUGH THE SHAFT WALL
- DAMAGED ZONE OCCURS ONE RADIUS FROM THE SHAFT WALL
- HYDRAULIC CONDUCTIVITY OF SHAFT ~~BACKFILL~~ ^{BACKFILL} 10^{-5} CM/S
(DAMAGED ZONE 10^{-3} CM/S)
- HYDRAULIC CONDUCTIVITY OF THE SHAFT BACKFILL VARIES
(10^2 - 10^{-4} CM/S)



ASSUMPTIONS - SUBSURFACE WATER INFLOW

- GHOST DANCE FAULT INTERSECTED UPGRADIENT FROM THE ES
- RUNOFF OF SUFFICIENT INTENSITY AND DURATION TO SUPPLY WATER TO FAULT AT SURFACE
- LITTLE TIME REQUIRED TO SATURATE FRACTURE PLANE
- FRACTURE ZONE COMPLETELY SATURATED FROM THE SURFACE TO THE WATER TABLE
- DRIFT INTERSECTED IS INFINITELY LONG
- FAULT IS COMPOSED OF EQUIVALENT POROUS MEDIA THAT IS ISOTROPIC AND HOMOGENEOUS
- FLOW CONVERGES TO THE DRIFT FROM ALL DIRECTIONS
- FRACTURE ZONE 1 FOOT THICK
- HYDRAULIC CONDUCTIVITY OF FAULT ZONE VARIED
(10^{-2} TO 10^{-5} CM/S)



ASSUMPTIONS - AIRBORNE ANALYSES

- CONVECTIVE AIR FLOW DRIVEN BY TEMPERATURE GRADIENT
- ROCK IMPERMEABLE
- DAMAGED ZONE AND NO DAMAGED ZONE CONSIDERED
- HEAT TRANSFER AND AIR FLOW NOT COUPLED
- MAXIMUM TEMPERATURE DIFFERENCE ASSUMED
- RANGE OF AIR CONDUCTIVITIES ASSUMED (10^{-5} - 10 FT/MIN OR
IN HYDRAULIC CONDUCTIVITY EQUIVALENCE 10^{-4} - 10^2 CM/S)

CONCLUSIONS - COMPARATIVE ANALYSES

SURFACE WATER INFLOW

- DRAINAGE CAPACITY OF THE SUMP IS LESS THAN INFLOW
- WHEN THE HYDRAULIC CONDUCTIVITY OF THE SHAFT BACKFILL IS GREATER THAN 10^{-2} CM/S THE DAMAGED ZONE HAS LITTLE EFFECT ON THE TOTAL FLOW
- WHEN THE HYDRAULIC CONDUCTIVITY OF THE SHAFT BACKFILL IS LESS THAN 10^{-3} CM/S, THEN THE DAMAGED ZONE DOMINATES
- FLOW INTO THE SHAFT CAN BE IMPEDED BY A SURFACE BARRIER OR A SHAFT PLUG

SUBSURFACE WATER INFLOW

- RELATIVELY SIMPLE MEASURES SUCH AS EMPLACEMENT OF DAMS AT THE END OF EMPLACEMENT DRIFTS CAN ADEQUATELY CONTROL WATER FLOW ALONG THE REPOSITORY FLOOR

AIRBORNE FLOW THROUGH THE DRIFTS

- FOR HIGH CONDUCTIVITY CORRESPONDING TO A COARSE ROCKFILL, THE DAMAGED ZONE HAS NEG'IGIBLE EFFECT ON TOTAL AIR FLOW
- FOR LOWER CONDUCTIVITIES CORRESPONDING TO FINER-GRAINED MATERIALS, MORE FLOW OCCURS THROUGH THE DAMAGED ZONE THAN THE BACKFILL. HOWEVER, FLOW RATE IS VERY LOW ($<.01$ FT³/MIN)



CONCLUSIONS/ RECOMMENDATION



- ABILITY TO MEET NRC AND EPA CRITERIA NOT SIGNIFICANTLY AFFECTED BY DEGREE OF DAMAGE (HENCE LINER QUALITY)
- ADDITIONAL CONFIDENCE CAN BE ANTICIPATED IF SURFACE BARRIERS AND STATION PLUGS ARE EMPLACED
- FIELD DATA PRIORITIES REMAIN TO ASSESS DRAINAGE CAPACITY OF TOPOPAH SPRING TUFF, CONFIRM DAMAGE ZONE EXTENT AND CONDUCTIVITY, AND QUANTIFY WATER INFLOW FROM DISCRETE SOURCES (IF ANY)
- CONSTRUCTION CONTROLS DURING EXCAVATION NEED BE NO STRICTER FROM SEALING PERSPECTIVE THAN SHORT-TERM STABILITY REQUIREMENT

TPO MEETING
2-21-85

STATUS REPORT ON REVISIONS TO NNWSI PROJECT
ISSUES HIERARCHY

- REVIEWED ADVANTAGES/DISADVANTAGES OF REVISIONS AT JANUARY TPO MEETING
- "CONCEPTUAL REVISIONS" WERE APPROVED --
INCORPORATE 10 CFR 960 & CONFORM TO MISSION PLAN
- WORKSHOP FOR WEEK OF FEB. 11 WAS PROPOSED --
PARTICIPANTS WERE IDENTIFIED
- TIME CONFLICTS/NEED FOR STAFF REVIEW AND INPUT:
DECISION WAS MADE TO CHANGE MEETING FORMAT
- WORKSHOP CHANGED TO SERIES OF 1-2 DAY MEETINGS
FOLLOWED BY STAFF REVIEW AND REVISION

TWO-DAY WORKSHOP WAS HELD ON FEB. 13-14

PARTICIPANTS: L. RAMSPOTT, LLNL
C. SHIRLEY, SNL
S. SINNOCK, SNL
C. BENTLEY, USGS
J. ROTERT, WMPO
M. BLANCHARD, WMPO
G. DEPOORTER, LANL
A. MEIJER, LANL
M. TEUBNER, SAIC
J. YOUNKER, SAIC
E. McCANN, SAIC

FEB. 13-14 ISSUES HIERARCHY WORKSHOP

- MUCH DISCUSSION ABOUT APPROACH/LEVEL OF DETAIL APPROPRIATE FOR ISSUES HIERARCHY/PURPOSE OF SITE CHARACTERIZATION ISSUES HIERARCHY/IMPORTANCE OF CONFORMANCE TO MISSION PLAN HIERARCHY
- GENERAL AGREEMENT WAS REACHED TO ADOPT THE MISSION PLAN KEY ISSUES (K.I. 1 - POSTCLOSURE; K.I. 2 - RADIOLOGICAL SAFETY; K.I.3 - ENVIRONMENTAL QUALITY/SOCIOECONOMICS/TRANSPORTATION; K.I.4 - PRECLOSURE DESIGN WITH REASONABLY AVAILABLE TECHNOLOGY AND COST-EFFECTIVE)
- MINOR WORDING CHANGES IN KEY ISSUES STATEMENTS ARE DESCRIBED IN ATTACHED LETTER TO PURCELL, DOE-HQ
- AT THE ISSUE LEVEL, AGREEMENT WAS REACHED TO USE THE MISSION PLAN WORDING WHERE POSSIBLE
- IN ADDITION, THREE ISSUES WILL BE ADDED TO EACH KEY ISSUE FROM MISSION PLAN TO EXPLAIN:
 1. INFORMATION FROM SITE CHARACTERIZATION NEEDED FOR WASTE PACKAGE DESIGN
 2. INFORMATION FROM SITE CHARACTERIZATION NEEDED FOR REPOSITORY DESIGN
 3. INFORMATION FROM SITE CHARACTERIZATION NEEDED FOR PERFORMANCE ASSESSMENT

FEB. 13-14 ISSUES HIERARCHY WORKSHOP (CONTINUED)

- WORKSHOP PARTICIPANTS WERE ASSIGNED RESPONSIBILITY FOR DEVELOPING DRAFT INFORMATION NEEDS FOR EACH ISSUE
- INFORMATION NEEDS ARE TO BE TELEFAXED TO SAIC BY FEB. 25
- SAIC TO COMPILE COMPLETE DRAFT HIERARCHY AND DISTRIBUTE BY FEB. 26
- MEETING SCHEDULED FOR FEB. 27-28 TO REVIEW INFORMATION NEEDS AND DEVELOP ANOTHER DRAFT FOR PROJECT REVIEW

WHAT HAPPENS AFTER THE FEB. 27-28 MEETING?

- AT LEAST ONE (OR MORE) WORKING SESSIONS WILL BE NEEDED BEFORE WORDING IS READY FOR WIDER PROJECT REVIEW
- EARLIEST POSSIBLE DATE FOR BASELINING THE ISSUES HIERARCHY APPEARS TO BE LATE MARCH
- SHOULD THE TPO'S CONVENE A SPECIAL MEETING TO CONCENTRATE THEIR EFFORTS ON REVIEW AND FINAL REVISIONS TO THE ISSUES HIERARCHY??

ITEMS FOR DISCUSSION

- USING THE MISSION PLAN ISSUES HIERARCHY MEANS THAT SOME PARTS OF THE ISSUES HIERARCHY WILL NOT BE DEVELOPED IN DETAIL IN THE SCP
- WE ASSUME THOSE PARTS OF THE ISSUES HIERARCHY NOT ADDRESSED IN THE SCP WILL BE CROSS-REFERENCED TO OTHER PLANS/DOCUMENTS
- THIS MEANS THAT THE SCP WILL FORWARD REFERENCE TO PLANS/DOCUMENTS THAT WILL NOT BE COMPLETED AT THE TIME OF INITIAL SUBMISSION OF THE SCP
- A MATRIX (SEE NEXT VUGRAPH) COULD BE USED TO EXPLAIN THE RESOLUTION OF THE ENTIRE ISSUES HIERARCHY

MATRIX FOR CROSS-REFERENCING SCP ISSUES HIERARCHY TO OTHER PLANS/PROJECT DOCUMENTS

ENVIRONMENTAL REPORT/CAA																				
ENVIRONMENTAL IMPACT STM.										✓	✓									
SOCIOECONOMICS INVESTIG. PLAN										✓	✓									
METEOROLOGICAL MONITORING PLAN								✓	✓											
ENVIRONMENTAL FIELD PLAN										✓	✓									
RADIOLOGICAL MONITORING PLAN																				
ENVIRONMENTAL PERMIT PLANS								✓	✓			✓	✓							
ENVIRONMENTAL COMPLIANCE PLAN								✓	✓			✓	✓							
PROJECT MANAGEMENT PLAN																				
SURFACE-BASED TEST PLAN			✓	✓													✓	✓		
REPOSITORY SEALING PLAN			✓	✓																
SYSTEM DESCRIPTION DOCUMENT																	✓	✓		
REPOSITORY DESIGN PLAN			✓	✓				✓	✓			✓	✓				✓	✓		
PERFORMANCE ASSESSMENT PLAN			✓	✓																
EXPLORATORY SHAFT TEST PLAN			✓	✓													✓	✓		
KEY ISSUE 1.0	ISSUES																			
	INFORMATION NEEDS																			
KEY ISSUE 2.0	ISSUES																			
	INFORMATION NEEDS																			
KEY ISSUE 3.0	ISSUES																			
	INFORMATION NEEDS																			
KEY ISSUE 4.0	ISSUES																			
	INFORMATION NEEDS																			

NEW DIRECTIONS?

- IS APPROACH STILL REASONABLE?
- ANY NEW OR REDIRECTION NEEDED?
- SHOULD WE PROCEED TO PRODUCE REVISED ISSUES HIERARCHY IN MARCH TIME-FRAME?

DRAFT

W. J. Purcell, Associate Director, Office of Geologic Repositories, DOE/HQ
(RW-20), FORSTL

REVISIONS TO MISSION PLAN KEY ISSUES

A working group within the NNWSI Project is revising the NNWSI Issues Hierarchy to be more consistent with the Hierarchy of Information Needs that is used in the Draft Mission Plan, Chapter 1. Developing a common approach at this time will greatly improve the clarity and ease with which Chapter 8 of the NNWSI Site Characterization Plan can be prepared, and will demonstrate a common approach across the program. During efforts to merge the two hierarchies, we note that several wording changes in the Mission Plan Key Issue statements will improve clarity, and we urge you to consider these changes. Unless advised otherwise, we will develop the NNWSI Issues Hierarchy using the modified wording of the four Key Issues. A second letter will be sent to you with the wording that is adopted by the NNWSI Project for the Issues under these Key Issues.

The following statements of the Mission Plan Key Issues include the suggested wording (underlined) that would replace the information enclosed in brackets:

KEY ISSUE 1: Will the geologic repository including [consisting of] multiple natural and engineered barriers, isolate the radioactive waste from the accessible environment after closure in accordance with the requirements set forth in 10 CFR Part 60 and 40 CFR Part 191 [the proposed Environmental Protection Agency rule to be codified at 40 CFR 191].

The geologic repository consists of more than just the multiple natural and engineered barriers. It was therefore felt that "includes" expresses this more accurately. In addition, we noted that Key Issues 1 and 2 were inconsistent in their reference to 40 CFR Part 191. We suggest the above wording could simplify the reference.

KEY ISSUE 2: Will projected radiological exposures of the general public and repository workers, and releases of radioactive materials to restricted and unrestricted areas during repository operation and closure meet applicable safety requirements set forth in 10 CFR Part 20, 10 CFR Part 60, and 40 CFR Part 191 [Subpart A]?

The addition of repository workers makes it clear that radiological safety of workers is included in this Key Issue. The reference to 40 CFR Part 191 is consistent with Key Issue 1.

KEY ISSUE 3: Can the repository and its support facilities be sited, constructed, operated, closed, and decommissioned without causing unacceptable risks to public health and safety and unacceptable environmental, socioeconomic, and transportation impacts? [so that the quality of the environment will be protected and waste-transportation operations can be conducted without causing unacceptable risks to public health or safety?]

The suggested wording reflects the recent addition of Issue 3.3 in the Mission Plan dealing with socioeconomic impacts. The above wording also recognizes that all transportation impacts must be considered, rather than only waste transportation.

KEY ISSUE 4: Will [Are] repository construction, operation (including retrieval), closure, and decommissioning be feasible on the basis of reasonably available technology and will [are] the associated costs be reasonable?

Suggested changes for Key Issue 4 improve wording and clarity.

WMPO:MBB-1534

Donald L. Vieth, Director
Waste Management Project Office

cc:

M. D. Voegele, SAIC, Las Vegas, NV
M. E. Spaeth, SAIC, Las Vegas, NV
L. Ramspott, LLNL, Livermore, CA
Scott Sinnock, SNL, 6312, Albuquerque, NM
C. B. Bentley, USGS, Denver, CO
G. L. DePoorter, LANL, Los Alamos, NM

DRAFT

SCP MANAGEMENT PLAN

CHANGES TO DRAFT

- o INCORPORATION OF TPO COMMENTS TO THE DRAFT PLAN
- o FORMAT MODIFICATIONS TO IMPROVE PRESENTATION CLARITY
- o ADDITIONAL DETAILS:
 - SECTION AND CHAPTER PRESENTATION
 - PRODUCTION AND REVIEW PROCESS
 - DOCUMENT AND RECORDS MANAGEMENT
 - PERSONNEL AND RESPONSIBILITIES
- o SCHEDULE CHANGE (NOVEMBER 22 TO DECEMBER 27 SLIP DELIVERY OF CAMERA-READY COPY TO DOE/HQ)

SCP MANAGEMENT PLAN

SUMMARY OF TPO COMMENTS

- o PARALLEL SECTION/CHAPTER DEVELOPMENT
- o TOO LITTLE WRITING TIME, TOO MUCH REVIEW TIME
- o USE OF SCP WORK INSTRUCTIONS
- o USE OF PROJECT WORK PLANS
- o TPO INVOLVEMENT AND APPROVAL
- o COAUTHORS OF SECTION 8.3
- o SCP STYLE GUIDE
- o SCHEDULE CONFLICTS

SCP MEETINGS

- FEBRUARY 21 PM-TPO MEETING
 SCP MANAGEMENT PLAN STATUS
 SCP MANAGEMENT PLAN APPROVAL
- FEBRUARY 27 SCP PRE-KICK-OFF MEETING
 (SCP MANAGEMENT GROUP ATTENDANCE)
 SCP MANAGEMENT PLAN COMMENT REVIEW
 QUALITY ASSURANCE FOR THE SCP
 DRAFT SCP WORK INSTRUCTIONS REVIEW
- MARCH 7 SCP KICK-OFF MEETING
 (SCP COORDINATORS AND SUPERVISORS ATTENDANCE)
 SCP MANAGEMENT PLAN ORGANIZATION,
 RESPONSIBILITIES AND AUTHORITY
 SCP FORMAT AND CONTENT
 QUALITY ASSURANCE FOR THE SCP
 DRAFT SCP WORK INSTRUCTION REVIEW*
 SCP SCHEDULE
- MARCH 14 SCP WORKING GROUP MEETINGS
 (SCP COORDINATORS AND TASK LEADERS ATTENDANCE)
 SCP WORK INSTRUCTION REVIEW AND AGREEMENT
 BASELINE SCP MILESTONES (WITH TPO CONCURRENCE)

*(TPOs WILL NEED TO REVIEW AND CONCUR WITH THE WORK INSTRUCTIONS CONTENT BY THE MEETING ON MARCH 14)

WHAT IT MEANS TO BUY INTO THE SCP MANAGEMENT PLAN

- o AGREEMENT WITH SCP ORGANIZATION, RESPONSIBILITIES AND AUTHORITY

- o AGREEMENT TO COMMIT TECHNICAL AND MANAGEMENT PERSONNEL

- o AGREEMENT TO USE THE SCP WORK INSTRUCTIONS TO BASELINE SCP WORK ACTIVITIES AND MILESTONES

- o AGREEMENT TO USE THE PROJECT WORK PLANS AS A MEANS OF GATHERING INFORMATION FOR THE PREPARATION OF SECTION 8.3 (PLANNED TESTS, ANALYSES AND STUDIES).

- o AGREEMENT TO FOLLOW THE SCP PREPARATION SCHEDULE; INCLUDING INPUT SCHEDULES FOR THE SUPPORTING TEST AND ANALYSIS PLANS.

SCP PREPARATION CONCERNS

- o SCHEDULE

 - NOVEMBER 22 TO DECEMBER 27; 1985
 - EA/SCP CONFLICTS
 - EA COMMENT PERIOD WILL NOT BE EXTENDED

- o PARALLEL DEVELOPMENT

 - TECHNICAL DATA
 - ISSUES AND PLANS
 - SUPPORTING PLANS AND PROCEDURES

- o ISSUE HIERARCHY FINALIZATION

- o WORK PLANS

 - DRAFT PROJECT MANAGEMENT PLAN

- o TECHNICAL PROCEDURES

 - PREPARATION
 - REVIEW
 - MONITORING

TOPICS TO BE DISCUSSED

- o GUIDANCE PACKAGE/WORK PLANS/SCP 8.3/SBTP INTERFACE
- o STRUCTURE OF SCP SECTION 8.3
- o CONTENTS OF 8.3
- o STRUCTURE OF SBTP
- o CONTENTS OF SBTP
- o SCHEDULE
- o CONCERNS

SECTION 8.3 CONTENTS

8.3 PLANNED TESTS, ANALYSES, AND STUDIES

8.3.1 SITE PROGRAM (SBTP,ESTP,MMP)

GEOLOGY

HYDROLOGY

GEOCHEMISTRY

CLIMATOLOGY

8.3.2 REPOSITORY PROGRAM (RCDP)

8.3.3 SEAL SYSTEM PROGRAM (RSP)

8.3.4 WASTE PACKAGE PROGRAM

8.3.5 PERFORMANCE ASSESSMENT PROGRAM (PAP)

SCP SECTION 8.3 STRUCTURE

INFORMATION NEED

E.G., IN 3.3.2 SUBSURFACE ROCK CHARACTERISTICS

NARRATIVE

E.G., WHY THE NEED EXISTS, WHERE THE INFORMATION IS USED.

ACTIVITY 1
DESCRIPTION

ACTIVITY N
DESCRIPTION

3.3.2.1 IN SITU STRESS DETERMINATION

NARRATIVE

E.G., TECHNICAL BASIS FOR ADDRESSING THE NEED. RESULTS OF STUDIES, TYPES OF INFORMATION

TECHNICAL PROCEDURES, ANALYSES, TESTS (IN TABLES):

<u>TECHNICAL PROCEDURE</u>	<u>TEST PLAN REFERENCE</u>	<u>NAME OF TEST</u>
3.3.2.1.1 HYDRAULIC FRACTURING	SBTP, SEC. 1.3.3	HYDRAULIC FRACTURING, TOP. SPR., USW G-1 HYDRAULIC FRACTURING, TOP. SPR., USW G-2 HYDRAULIC FRACTURING, TOP. SPR., UE25 P-1
	ESTP, SEC. 4.2	HYDRAULIC FRACTURING, CALICO HILLS, BASE OF ES
3.3.2.1.2 OVERCORING	ESTP, SEC. 4.2	OVERCORING AT UPPER BREAKOUT LEVEL OVERCORING AT LOWER BREAKOUT LEVEL OVERCORING AT BOTTOM OF ES

* COMMON TO SBTP

SBTP CONTENT

1.0 GEOLOGY .

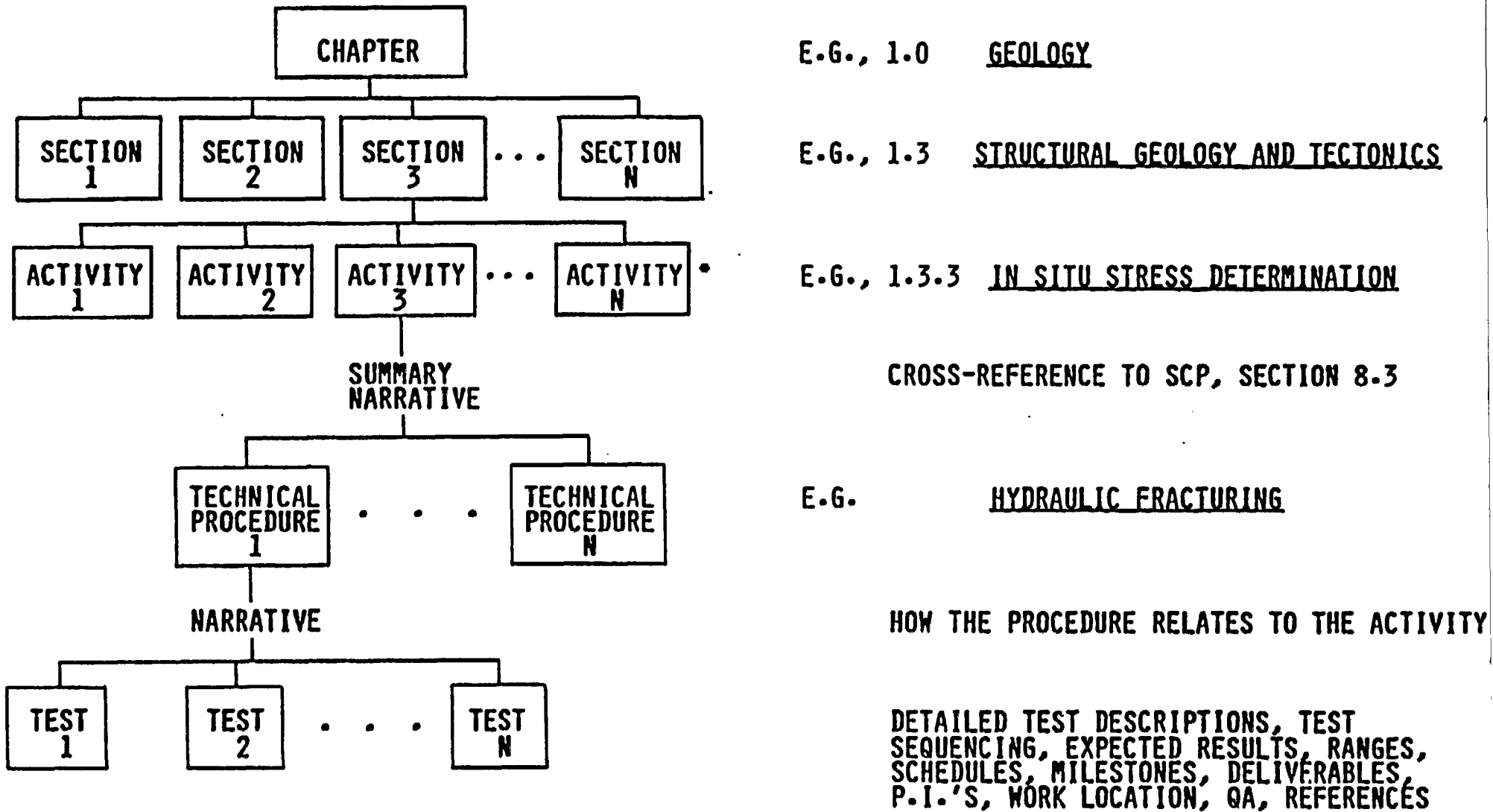
2.0 GEOENGINEERING ?

3.0 HYDROLOGY

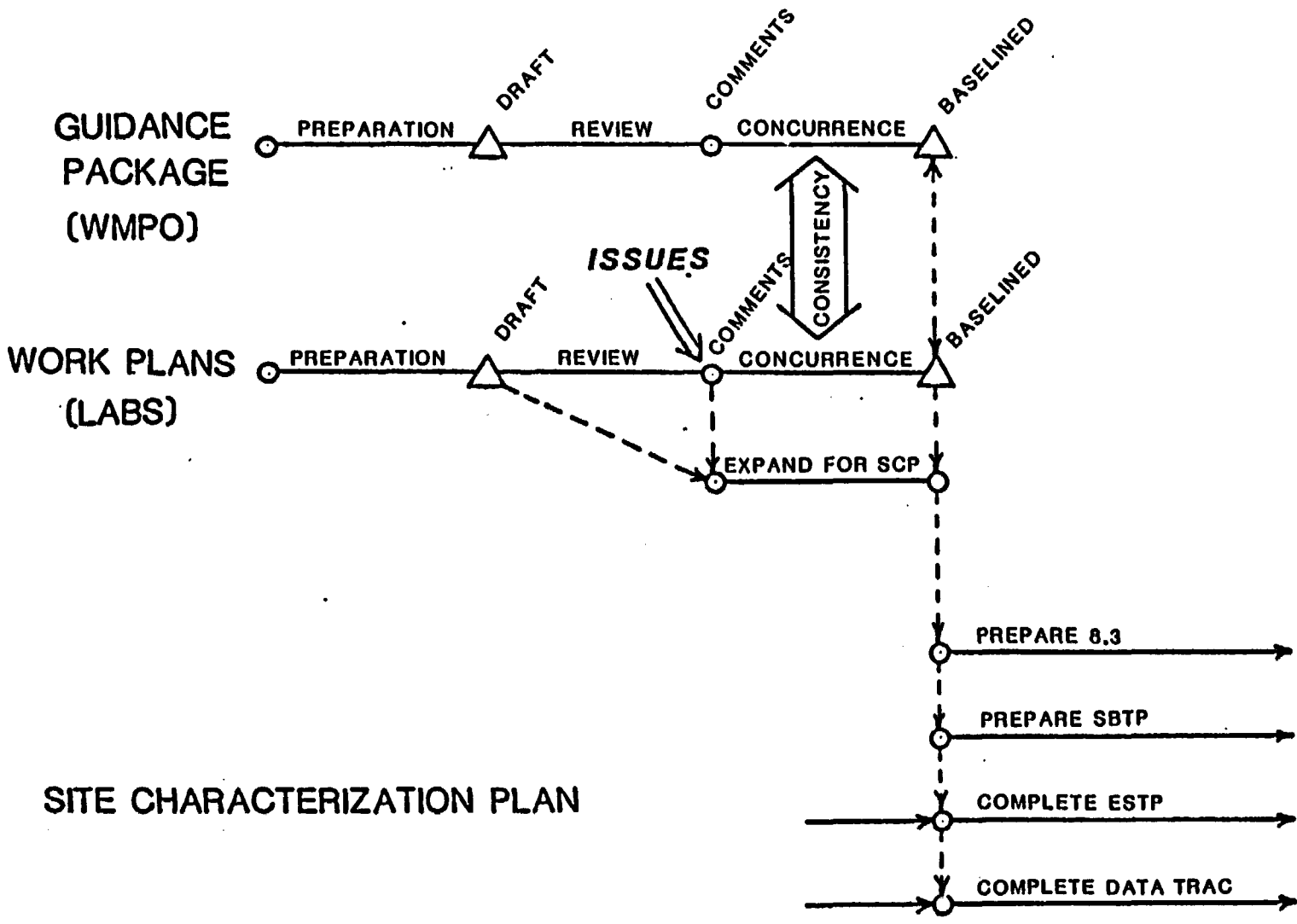
4.0 GEOCHEMISTRY

5.0 CLIMATOLOGY AND METEOROLOGY

SBTP STRUCTURE



• COMMON TO SCP 8.3

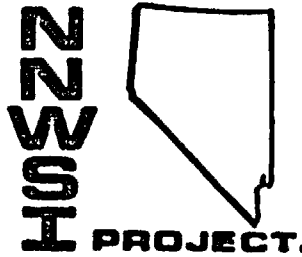


SCHEDULE

COMPLETE WORK PLAN EXPANSIONS	4/15
ADDITIONAL INPUT TO 8.3	5/10
8.3 DRAFT COMPLETE	5/30
SBTP DRAFT COMPLETE	8/20

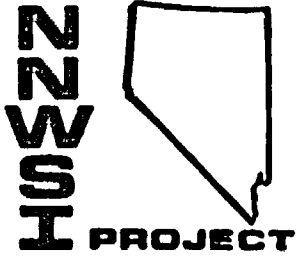
CONCERNS

- o WORK PLANS
- o ISSUES HIERARCHY
- o SCHEDULE
- o
- o STATUS OF RCDP, RSP, MMP, PAP
- o GEOENGINEERING CHAPTER
- o DISTINCTION BETWEEN TESTS DESCRIBED IN ESTP VS SBTP



PLAN ...

... TO WRITE AND ISSUE FINAL EAS



ROADMAP

- **EXPECTED OUTCOME**
- **RESULTS OF HQ MEETING FEB 5&6**
- **HQ ORGANIZATION CHART**
- **NNWSI ORGANIZATION CHARTS**
- **EA FLOW CHART**
- **GANT CHART**
- **QUESTIONS**



EXPECTED OUTCOME

- **UNDERSTAND CURRENT STATUS OF HQ AND NNWSI PROJECT PLANS TO WRITE AND ISSUE FINAL EAs**

- **COMMENT ON/AGREE TO PLAN**



RESULTS OF HQ MEETING FEB 5&6

- **ISSUED REVISED DRAFT OF EA MANAGEMENT PLAN**
 - INCLUDED A GANT CHART
 - DELETED EA COORDINATION GROUP
 - REPLACED EA FINALIZATION TEAMS WITH EA CHAPTER TEAMS
- **DRAFTED PRELIMINARY TOC FOR THE CRA**
- **CREATED A CLASSIFICATION SYSTEM FOR GROUPING COMMENTS INTO ISSUES**
- **DECIDED THAT COMMENTS WOULD BE CLASSIFIED ACCORDING TO ISSUES BY POs (ELIMINATES THE NEED FOR PO STAFF WORKING IN WASHINGTON)**
- **ACKNOWLEDGED THAT SCHEDULE WAS TOO SHORT. STEPS IN SCHEDULE WERE APPROPRIATE, AGREED TO REVISIT IN APRIL**



OUTLINE FOR COMMENT RESPONSE APPENDIX (EA APPENDIX C)

C.1 INTRODUCTION

C.2 POLICY ISSUES & RESPONSES

- PROGRAMMATIC POLICY ISSUES**
- PROJECT POLICY ISSUES**

C.3 TECHNICAL ISSUES & RESPONSES

C.3.1 SITING PROCESS

C.3.2 DATA BASE, PROPOSED ACTIVITIES, REPOSITORY DESIGN

C.3.3 POSTCLOSURE CONSIDERATIONS

C.3.4 PRECLOSURE RADIOLOGICAL SAFETY CONSIDERATIONS

C.3.5 ENVIRONMENT, SOCIOECONOMICS, TRANSPORTATION

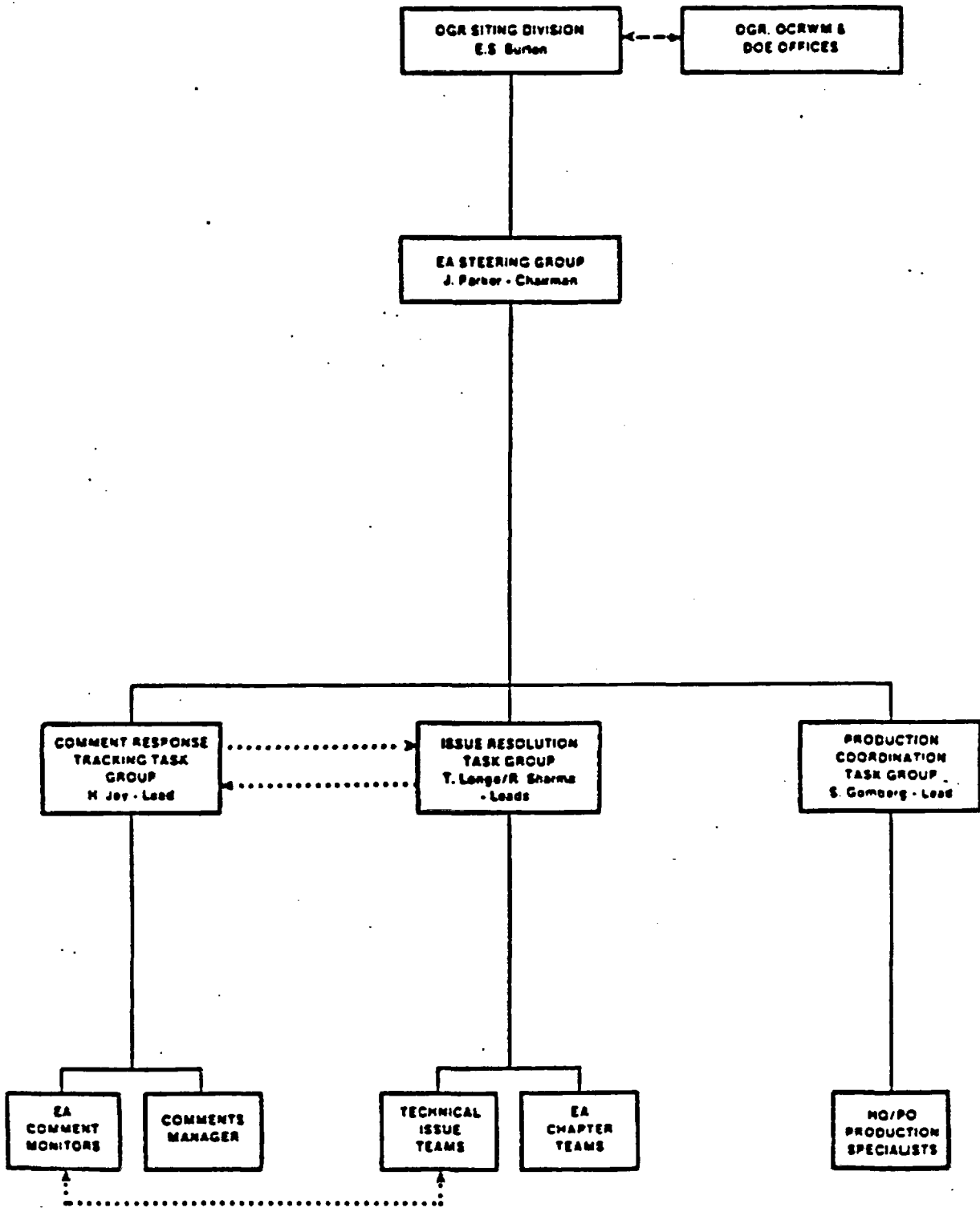
C.3.6 EASE AND COST OF SITING, CONSTRUCTION, OPERATION, AND CLOSURE

Attachment 3

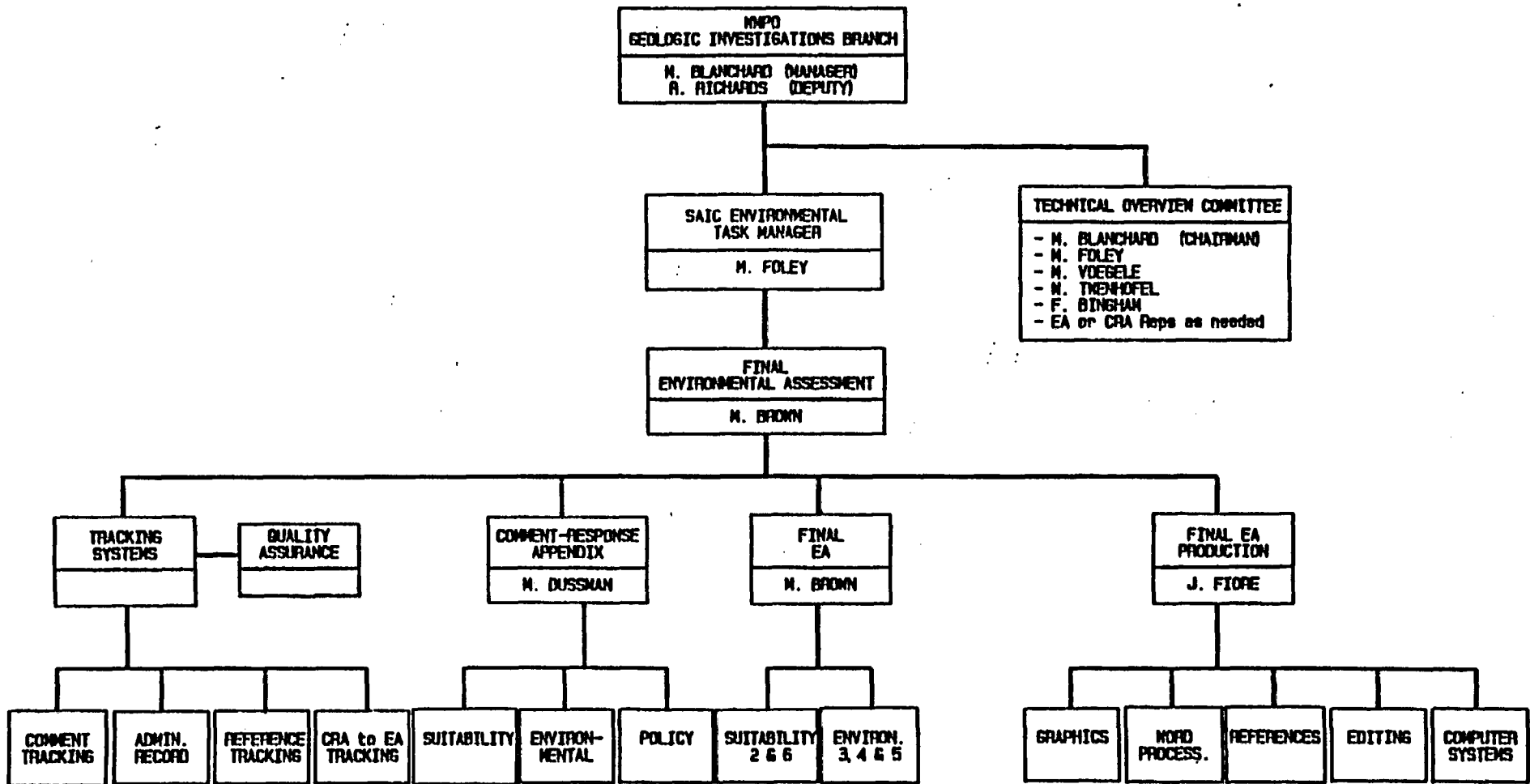
Issue Categories

<u>C.3.1 Siting Process</u>	<u>C.3.3 Postclosure</u>	<u>C.3.4 Preclosure Rad. Safety</u>	<u>C.3.5 Env. Socio. Trans.</u>	<u>C.3.6 Ease & Cost</u>	<u>C.3.2 Data Base Proposed Act. & Repository Design</u>
Chapter 1 Chapter 2 Chapter 7 Misc. Appendix B Siting GL	Site ownership Geohydrology Geochemistry Rock char. Climate Erosion Dissolution Tectonics Human inter. Perf. assess.	Rad. effects Trans. rad. effects Site ownership Pop. density Meteorology Offsite Rad. assess.	E.S. effects Rep. effects - including Environmental Transportation Socioeconomics Transportation appendix	Surface char. Rock char. Hydrology Tectonics	Chapter 3 Site char. Alternative site char. Actual Repository Design

ORGANIZATION FOR FINALIZING EAs



NNWSI PROJECT EA ORGANIZATION

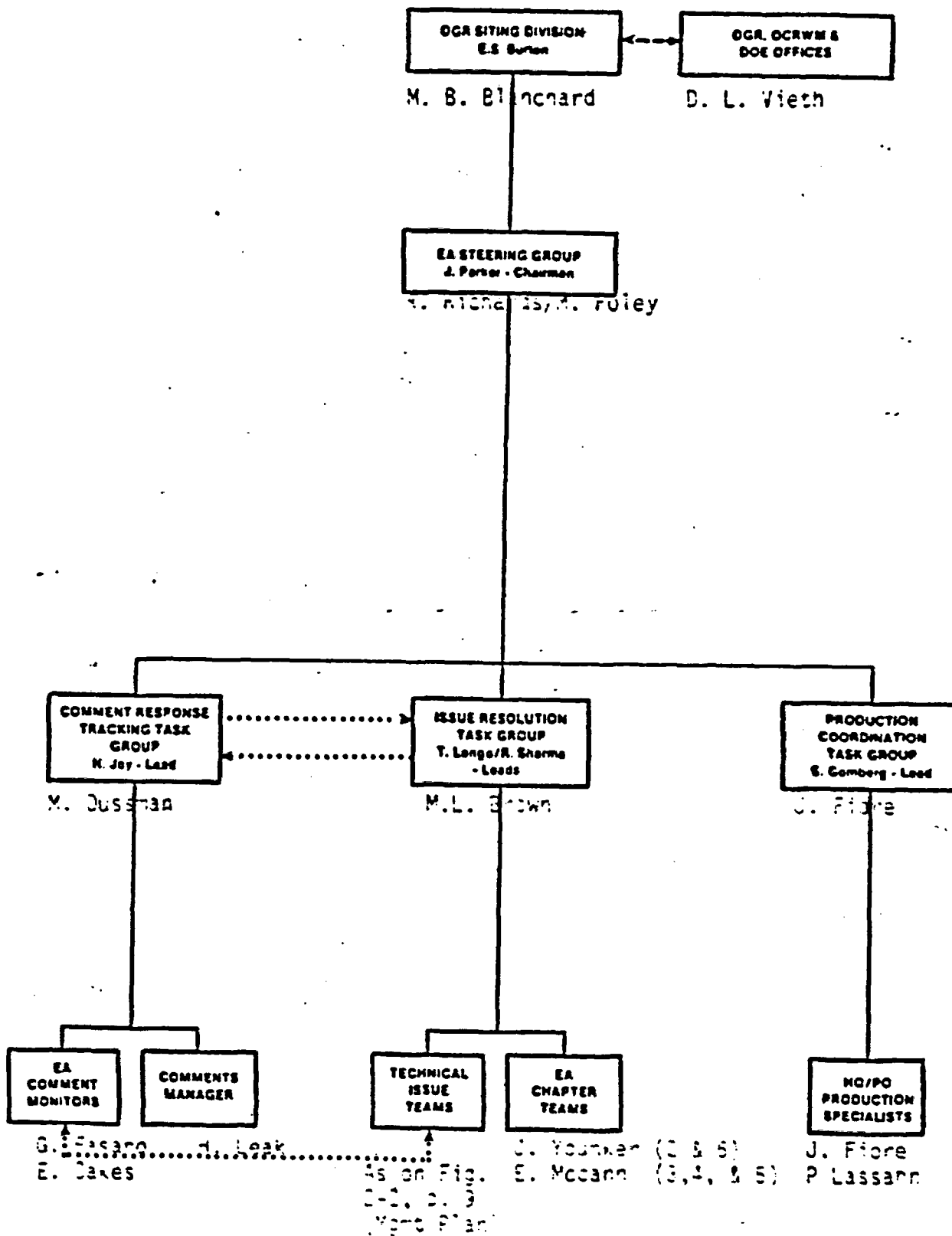


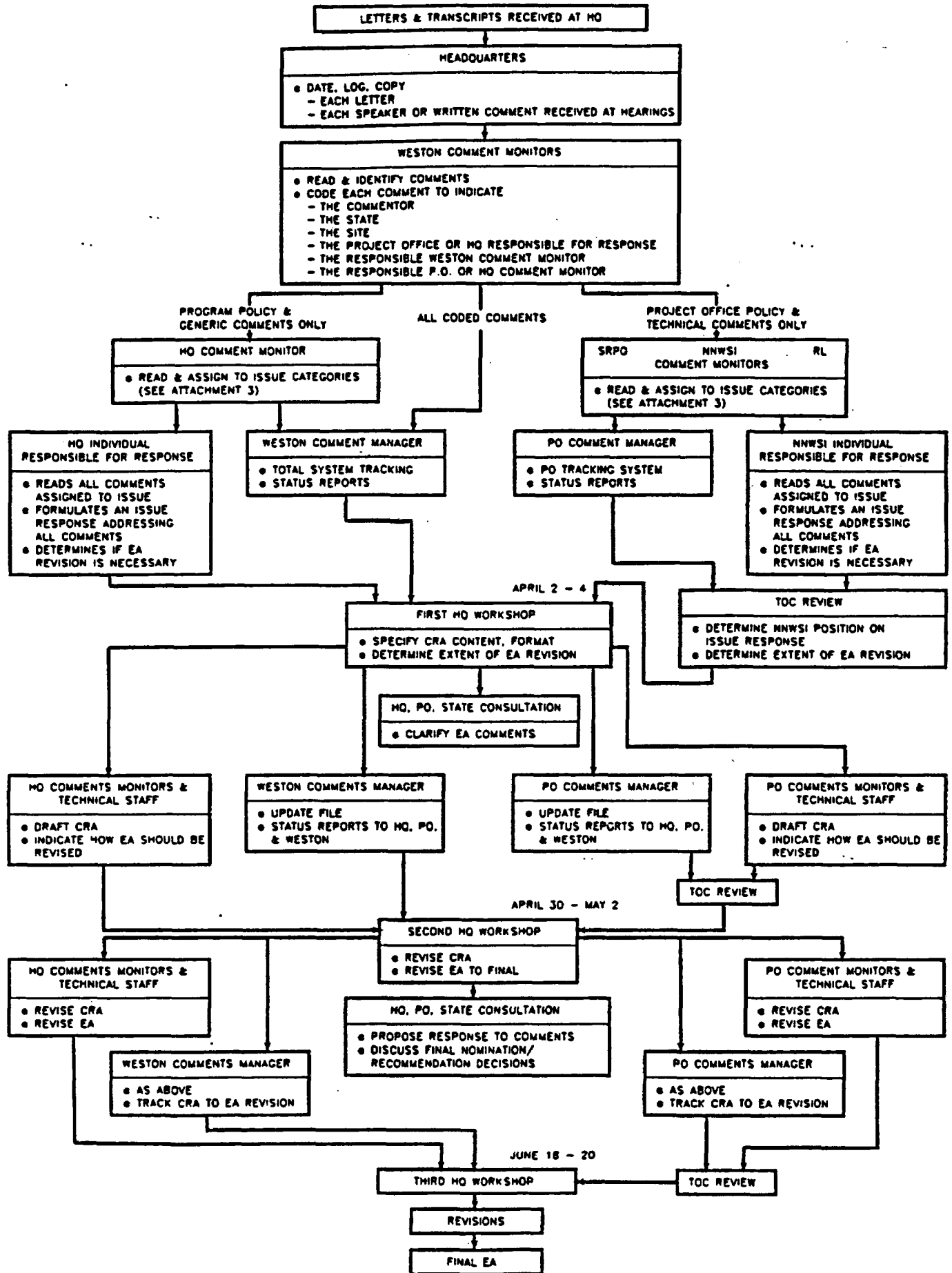
SUITABILITY

YOUNKER
FASANO

- SITE SELECTION (SINNOCK)
- HYDROLOGY (WILSON)
- GEOLOGY (MYERS)
- PERFORMANCE ASSESSMENT (TIERNEY)
- GEOCHEMISTRY (DePOORTER)
- ENVIR./S-E/TRANS/RAD/MET/ (McCANN)
- ROCK CHARACTERISTICS (VOEGELE)
- TECTONICS (MYERS/McDOUGALL)

ORGANIZATION FOR FINALIZING EAs





PROCESS AND SCHEDULE FOR PREPARATION OF FINAL EAs

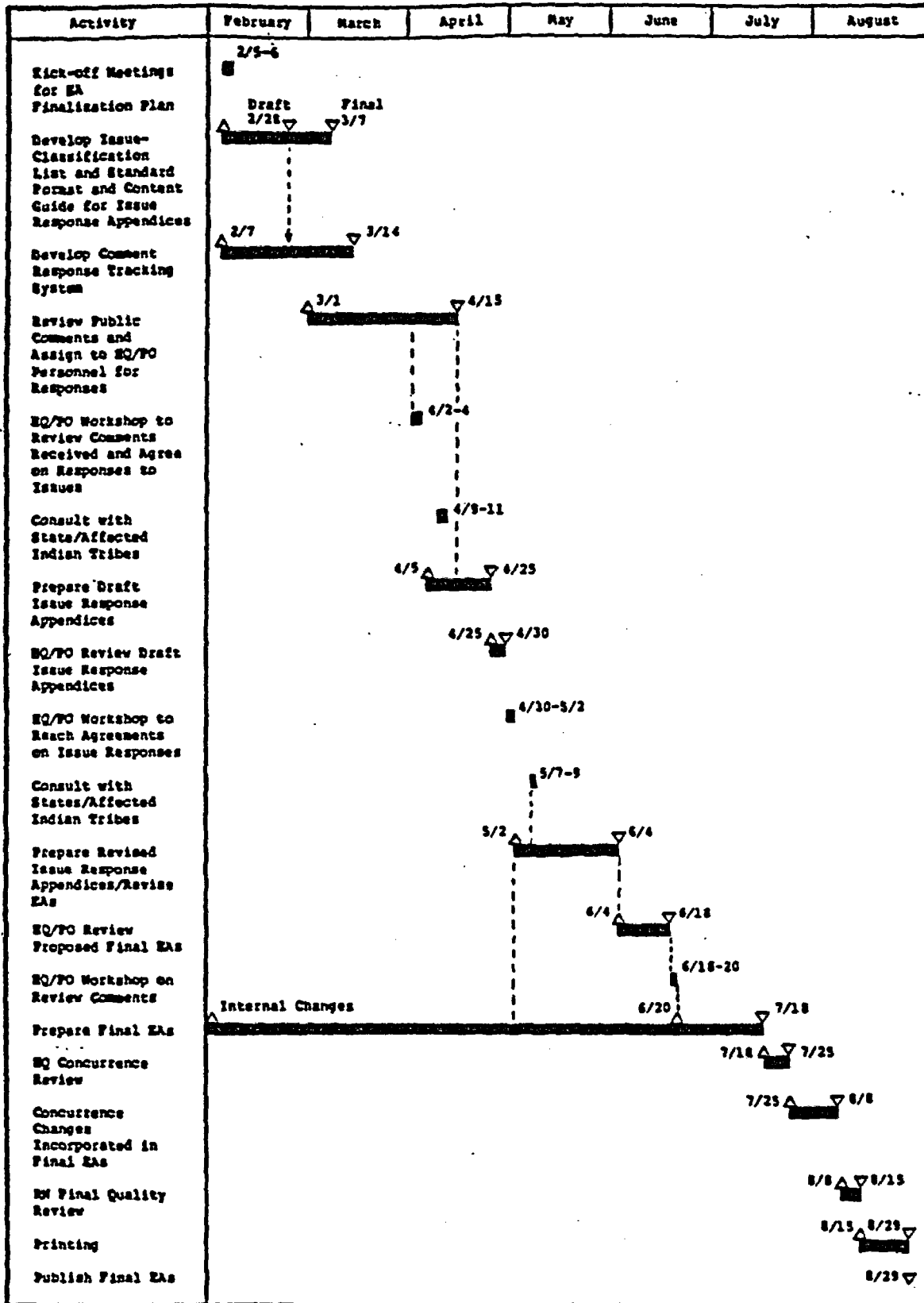


Figure 1-1