

AUG 10 1988

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MEMORANDUM FOR: R. L. Ballard, Chief
Technical Review Branch
Division of High-Level Waste Management

FROM: D. L. Chery, Section Leader
Hydrology Section
Technical Review Branch
Division of High-Level Waste Management

SUBJECT: SCOPE OF HYDROLOGY SECTION YUCCA MOUNTAIN CONSULTATIVE DRAFT
SITE CHARACTERIZATION PLAN REVIEW

In February 1988, the Hydrology Section completed a level of effort review of the Yucca Mountain Consultative Draft Site Characterization Plan (CDSCP). In the memorandum (February 22, 1988) to you transmitting the Hydrology Section Draft Point Papers, a commitment was made to provide a description of the focus and the portions of the CDSCP covered by our review. This memo fulfills that commitment and contains a description of the Sections's focus and a listing of portions of the CDSCP reviewed by the Section. Those sections of the CDSCP and the level of responsibility assigned to the Hydrology Section in the Administrative Plan and Procedures for NRC Staff Review of DOE's CDSCP are listed below.

	<u>SECTION</u>	<u>LEVEL OF RESPONSIBILITY</u>	<u>ESTIMATED PAGES</u>
1.0	GEOLOGY	2	348
3.0	HYDROLOGY	1	240
4.0	GEOCHEMISTRY	2	38
5.0	CLIMATOLOGY & METEOROLOGY	1	106
8.0	INTRODUCTION	2	1
8.1	RATIONALE FOR SCP	2	11
8.2	ISSUE RESOLUTION INFORMATION REQ.	2	229
8.3	PLANNED TESTS, ANALYSES, AND STUDIES	2	2
8.3.1	SITE PROGRAM	2	1
8.3.1.2	GEOHYDROLOGY	1	346
8.3.1.3	GEOCHEMISTRY	2	136
8.3.1.4	ROCK CHARACTERISTICS	2	95
8.3.1.5	CLIMATE	1	106
8.3.1.6	EROSION	3	29
8.3.1.7	ROCK DISSOLUTION	2	2
8.3.1.8	POST CLOSURE TECTONICS	2	119
8.3.1.9	HUMAN INTERFERENCE	3	44
8.3.1.12	METEOROLOGY	1	65
8.3.1.16	PRECLOSURE HYDROLOGY	4	25

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<u>SECTION</u>	<u>LEVEL OF RESPONSIBILITY</u>	<u>ESTIMATED PAGES</u>
8.3.2.2	CONFIGURATION OF UNDERGROUND FACILITIES	2 81
8.3.3.1	SEAL OVERVIEW	2 5
8.3.3.2	SEAL CHARACTERISTICS	2 48
8.3.4.2	WASTE PACKAGE CHARAC. (POST CLOSURE)	2 58
8.3.5	PERFORMANCE ASSESSMENT	2 2
8.3.5.1	STRATEGY FOR PRECLOSURE PERF. ASSESS.	2 20
8.3.5.4	WORKER RADIOLOGICAL SAFETY	2 27
8.3.5.5	ACCIDENTAL RADIOLOGICAL RELEASES	2 31
8.3.5.7	HIGHER LEVEL FIND.-EASE & COST OF CONST.	2 16
8.3.5.8	STRATEGY FOR POST CLOSURE PERF. ASSESS.	2 9
8.3.5.10	ENGINEERED BARRIER SYSTEM RELEASES	2 75
8.3.5.12	GROUND-WATER TRAVEL TIME	1 67
8.3.5.13	TOTAL SYSTEM PERFORMANCE	2 104
8.3.5.15	GROUND-WATER PROTECTION	1 16
8.3.5.17	NRC SITING CRITERIA	2 100
8.3.5.19	COMPLETED ANALYTICAL TECHNIQUES	2 10
8.3.5.20	ANALYTICAL TECH. REQUIRING DEVELOPMENT	2 9
8.4	PLANNED SITE PREPARATION ACTIVITIES	2 38
8.5	SCHEDULE	2 3
8.6	QUALITY ASSURANCE	2 28
TOTAL		2690

The Hydrology Section completed a limited review of the Consultative Draft Site Characterization Plan by focusing on those sections for which it had prime responsibility. An exception was made for Section 8.3.1.16 (Preclosure Hydrology). We were assigned a level 4 responsibility for this section, but no one else was assigned to review this section and we assumed it to be our responsibility. Another exception was made for Section 8.3.5.14 (Individual Protection), which was reviewed, because we thought it was in our area of responsibility.

Further it is noted that the limited review that was done was not able to be fully coordinated with all the General Review Guides (Section 4.2) of the Draft Technical Review Plan. Those sections of the Consultative Draft Site Characterization Plan that received a limited review by the Hydrology Section are listed below.

<u>SECTION</u>	<u>LEVEL OF RESPONSIBILITY</u>	<u>ESTIMATED PAGES</u>
3.0	HYDROLOGY	2 240
5.0	CLIMATOLOGY AND METEOROLOGY	1 106
8.0	INTRODUCTION	2 1
8.1	RATIONALE FOR SCP	2 11
8.2	ISSUE RESOLUTION INFORMATION REQ.	2 229
8.3	PLANNED TESTS, ANALYSES, AND STUDIES	2 2

<u>SECTION</u>		<u>LEVEL OF RESPONSIBILITY</u>	<u>ESTIMATED PAGES</u>
8.3.1	SITE PROGRAM	2	1
8.3.1.2	GEOHYDROLOGY	1	346
8.3.1.5	CLIMATE	1	106
8.3.1.12	METEOROLOGY	1	65
8.3.1.16	PRECLOSURE HYDROLOGY	4	25
8.3.5.12	GROUND-WATER TRAVEL TIME	1	67
8.3.5.13	TOTAL SYSTEM PERFORMANCE	2	104
8.3.5.14	INDIVIDUAL PROTECTION	NONE	14
8.3.5.15	GROUND-WATER PROTECTION	1	16
8.3.5.17	NRC SITING CRITERIA	2	100
8.3.5.20	ANALYTICAL TECH. REQUIRING DEVELOPMENT	2	9
8.4.2.7	CONSTRUCTION OF EXP. SHAFT 1 TO DEPTH	2	1
TOTAL			<u>1434</u>

Should you have any questions on this memo please contact William Ford (x20506).

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 Donald Chery, Section Leader
 Hydrology Section
 Technical Review Branch
 Division of High-Level Waste Management

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 DATE: 8/10/88 : 8/10/88 : : : : :
