

APR 18 1988

426/DC/4/14/88

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April 14, 1988

MEMORANDUM FOR: John L. Russell  
Manager, Geologic Setting  
Center for Nuclear Waste Regulatory Analyses  
6220 Culebra Road, Drawer 28510  
San Antonio, TX 78284

FROM: Philip S. Justus, Section Leader  
Geology/Geophysics Section  
Technical Review Branch, HLWM

SUBJECT: MODIFICATION OF TECHNICAL DIRECTION #4; "TECHNICAL BASIS FOR PERFORMANCE GOALS, DESIGN REQUIREMENTS, AND MATERIAL RECOMMENDATIONS FOR THE NNWSI REPOSITORY SEALING PROGRAM"

This Technical Direction applies to Operations Plan for the Geologic Setting Program Element for Year 1; Task 4: Support Geologic Setting Investigations and Compliance Determination; Subtask 4.1: Support Technical Analyses, Evaluate Data and Prepare Selected Topical Reports.

The requested review of Chapters 3 and 4 need to focus on the following issues.

1. The estimation of the probable maximum flood with a discussion of uncertainty of confidence interval.
2. The estimation of total hydrograph (volume) with a discussion of uncertainty or confidence interval.
3. The estimation of the elevation (depth) peak discharge of the PMF at the location of Exploratory Shaft (ES-1). Explain the flood routing method used to estimate the flow depth for determination of the peak discharge elevation.
4. Evaluate the Sandia estimation of recharge volume into the Exploratory Shaft (ES-1). If a single event (PMF) estimate, extend estimate to an estimate for one year assuming a single PMF event and a conservative estimate of a sequence of other events for a year period.
5. Assume a two fold increase in annual rainfall and repeat the evaluations 1-4.
6. Evaluate the drainage rate from the bottom of the ES.

At a minimum, these focused issues must be included in the report to be submitted by April 29, 1988 (Technical Direction #4).

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in the report, correct  
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Please contact Fred Ross, who has replaced William Ford as Project Officer, at (301) 492-0527 or Donald Chery, Hydrology Section Leader, at (301) 492-3461 if there are questions or any items that need to be discussed.

The action taken by this Technical Direction is considered to be within the scope of the current contract NRC-02-88-005. No changes to cost or delivery of contracted services and products are authorized. Please notify me immediately if you believe that this Direction would result in changes to cost or delivery of contracted services or products.

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Philip S. Justus, Section Leader  
Geology/Geophysics Section  
Technical Review Branch, HLWM

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DATE: APRIL 14, 1988

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CONCURRENCES

ORGANIZATION/CONCUREE	INITIALS	DATE CONCURRED
HLTR/PSJustus/cj/lw	<i>PSJ</i> *	88/04/18

*I hand delivered a signed copy to J. Russell at the CDWRA on 4/18/88.*