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MRKnapp
PSJustus
JTGreeves
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RRBoyle
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MEMORANDUM FOR: Hubert J. Miller, Chief
Repository Projects Branch
Division of Waste Management

FROM: Leslie A. Peeters
Repository Projects Branch
Division of Waste Management

SUBJECT: OCRD WORKSHOP TRIP REPORT

On November 16-18, 1983, Battelle's Office of Crystalline Repository Development (OCRD) held its second workshop in Chicago, Illinois. In addition to OCRD personnel, 16 of the 17 states being considered for a repository in crystalline rock were represented (New Jersey being the absentee). The DOE, USGS, NRC and numerous consulting firms were also in attendance.

The purpose of the meeting was to obtain States' input regarding the region to area screening methodology for crystalline rocks. The following topics were specifically addressed:

- (1) status and current schedule
 - Siting Guidelines
 - Regional Characterization Reports (RCR)
 - Area Recommendation Report (ARR)
- (2) proposed screening methodology
- (3) proposed scaling of variables
- (4) agenda for third workshop

OCRD commenced the workshop by presenting the proposed timetable for progress through the final Site Characterization Plan (see attachments 1 and 2). The major concern with the schedule was the current status of the siting guidelines. The States felt that there will likely come a point when no further progress can be made until the guidelines are finalized. Throughout the workshop the States continually urged for their expeditious finalization. Issuance of the final RCR is expected on November 15, 1984 and the final ARR will be presented in August of 1985.

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The primary purpose of the workshop was to obtain State input on the proposed region-to-area screening methodology. OCRD described the proposed three-step process in detail, but the concepts can be briefly summarized as follows:

- STEP 1: Application of the disqualifying factors screen will eliminate land units from further consideration based upon the disqualifiers identified in the siting guidelines. In this step the disqualifiers must be applicable at a regional scale. Those that have been found to meet this criteria are (1) federal protected lands, (2) state protected lands, and (3) population distribution and density. This step incorporates the idea of the "fatal flaw", where the presence of any single disqualifying condition is sufficient to eliminate that land unit from future consideration.

- STEP 2: Land units that remain after Step 1 will undergo further evaluation in terms of potentially adverse to potentially favorable conditions as outlined in the siting guidelines. Once again the variable must be applicable at a regional scale. The screening in this step is based on a "shades of gray" scaling. The presence of a potentially adverse condition for a particular variable can be compensated for by the presence of potentially favorable conditions for other variables (i.e., no single variable will be treated as a fatal flaw). This screening step will result in an estimate of the aggregate favorability of each land unit.

- STEP 3: The final step involves the use of three types of sensitivity analyses: scale modification of screening variables, weighting of screening variables, and incorporation of variables with limited data availability. The objective of this step is twofold. First, it attempts to mitigate the impacts of decisions based upon technical judgement. And second, it takes into account variables for which there does not exist a preponderance of data, but may help in the selection of candidate areas.

This proposed three step screening method will provide the information necessary to select 15-20 candidate areas from the 17 states currently

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being considered. These areas are chosen for subsequent characterization studies due to the maximized likelihood of finding licensable sites.

There was much discussion pertaining to the three steps. However, emphasis was clearly directed at Step 2, as Step 1 had been discussed at a previous workshop and Step 3 would be better addressed at a future workshop. Discussion centered around the proposed scaling and definitions of the variables. Minor changes were made at the time of discussion while any major modifications of the variables will be presented at the third screening workshop (January 25-27, 1984).

At the close of the three day workshop the States presented a list of suggestions and recommendations arrived at during a "States Only" session of the workshop (see attachment 3). In addition to the consensus report, several states had individual concerns which they expressed to OCRD and DOE. Although this oral communication is a productive and immediate avenue for States' input, it should not take the place of written follow-up responses. OCRD continually urged the States to submit in writing their comments and recommendations in the weeks following the workshop.

The last topic to be addressed was the agenda for the third workshop. The major point of concern will be the proposed weighting of the various variables. In addition, OCRD will present modifications of the methodology arising from the incorporation of States' comments and guideline changes.

During the workshop I developed several concerns that I would like to bring to the attention of Waste Management. Because crystalline rock is being considered for a second repository, the Crystalline Rock Project (CRP) does not demand the immediate, full-scale attention being given to basalt, tuff and salt. NRC involvement in the CRP has been minimal, amounting to not much more than maintaining an awareness of the current screening stage. However, the CRP is of primary concern to many of the seventeen states involved and is being expanded at an increasing rate. It was evident from the workshop that both DOE/Battelle and the States have, even at this early stage, invested a good deal of time. Documents arising from the work being performed will be coming to the NRC in increasingly voluminous quantities. In an attempt to avoid a "catch up" situation, it is my suggestion that management designate to someone the responsibility of remaining cognizant of the current events pertaining to the CRP. Keeping up to date on this project in the early stages will

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undoubtedly alleviate many problems that may arise when the NRC is required to participate.

In addition, the NRC needs to determine to what extent it will assist the States in their future requests for information. With the large number of states involved, accommodating their needs could potentially put a strain on Waste Management resources.

In my opinion, the general atmosphere of the workshop was encouraging. OCRD appeared to be quite receptive to States' input. However, some issues were easily sidestepped, using the current status of the guidelines as an evasion. The ultimate success of the workshop will depend on the follow-up responses submitted by the States and to what extent OCRD will incorporate the input into the screening methodology.

Original Signed by:

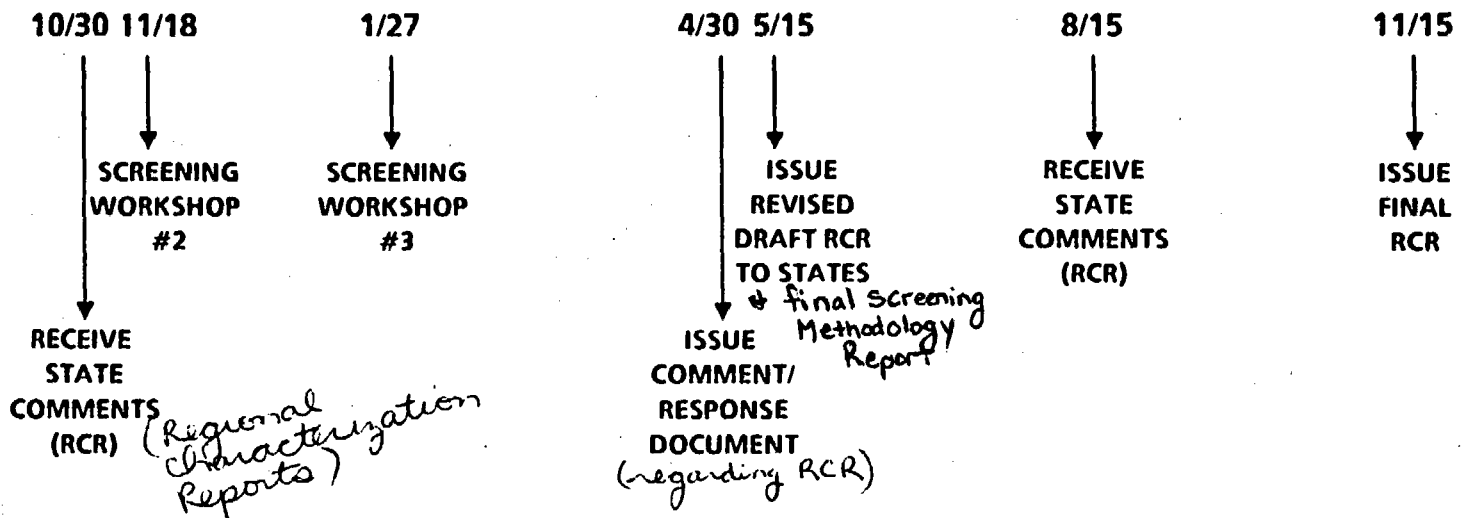
Leslie A. Peeters
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Attachments:
States' Consensus Report
CRP Schedule

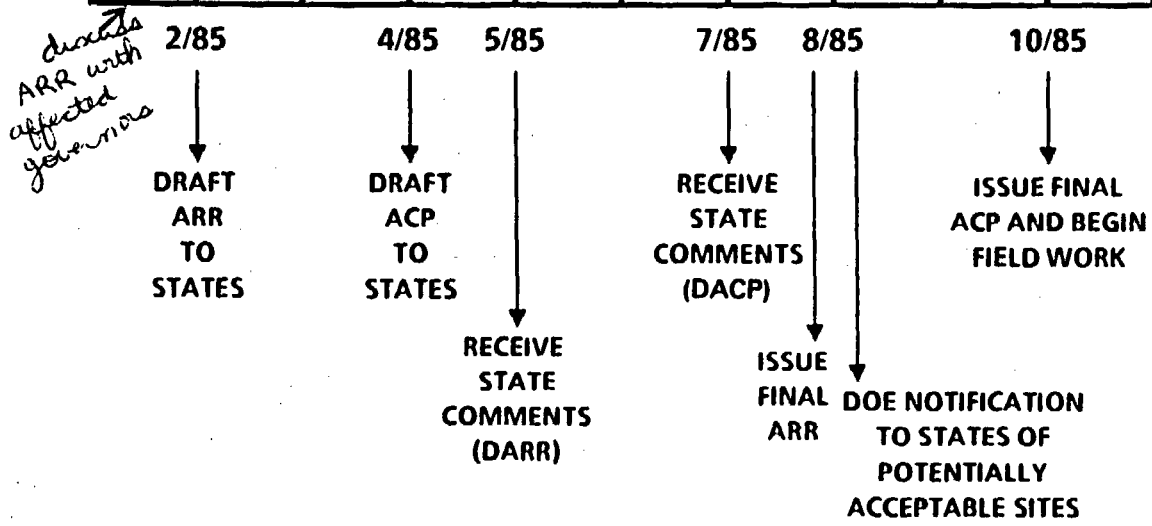
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CRP Schedule Through Final ARR (Area Recommendation Report)

CY 1983				CY 1984											
9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12



CY 1985											
1	2	3	4	5	6	7	8	9	10	11	12



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Attachment 3

CONSENSUS REPORT
OF STATES--11/18/83

Crystalline Rock Project Office

1. DOE and ~~the~~ Office of Crystalline Rock Development are to complimented for conducting the workshop and ~~the~~ ^{fruitful} meaningful dialogue ~~that developed~~. This is in the true spirit of the consultation and cooperation process. ~~The workshops should continue in this spirit which should continue in future workshops.~~

2. The next workshop should be held about three weeks after proceedings of this workshop have been submitted to the states. ~~This workshop should address~~ Weighting *shall be addressed at the workshop.*

3. The agenda for the next workshop should be set so that the "states-only" meetings occur at both the beginning and ^{the} end of the workshop.

4. The individual group sessions ~~of~~ ^{of} environmental and geology ~~should~~ be efficiently moderated. A person should be designated to record the proceedings and a one-page synopsis of the ~~previous~~ day's proceedings should be provided the ~~next~~ ^{following} morning.

5. The next workshop should include a model of the screening process for a hypothetical region.

6. A better explanation of the decision-making process is needed. This ^{explanation} should include a "road map" ~~from~~ regional screening to site selection. Basic ~~components and~~ ^{components and} concepts should be identified.

7. ~~There is a clear need for~~ ^{of this process} additional workshops ^{are clearly necessary} to wrap up the screening methodology after the siting guidelines have been finalized.

8. The most recent maps of the rock bodies should be sent to the states in the next few days. Also, states should have access to all screening variable data.

9. Inconsistent variables and gaps in the data base ^{are} ~~is an~~ issues ~~that needs~~ ^{requiring} further clarification.

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All of the states strongly recommend that DOE never lose sight of the objective of maximizing the safety of present and future generations.

Note: the above corrections and clarifications were made by the states prior to presentation to DOE and DCRD.
Leslie Peator