

VOLCANISM LETTER

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AUG 15 1989

Mr. Allen Whiting, Director  
 Systems Engineering and Integration  
 Center for Nuclear Waste Regulatory Analysis  
 P. O. Box 28510  
 6220 Culebra Road  
 San Antonio, Texas 78284

Dear Mr. Whiting:

SUBJECT: SUBSTITUTION OF ADVERSE GEOCHEMISTRY WITH QUATERNARY IGNEOUS ACTIVITY  
 TO SUPPORT BASELINING PROGRAM ARCHITECTURE

This letter is to confirm the discussions between U. S. Nuclear Regulatory Commission (NRC) and the Center for Nuclear Regulatory Analysis (CNWRA) (note specifically the July 20-21, 1989 meeting at the Center and the August 8-9, 1989 meeting at NRC) that the 10 CFR Part 60 Quaternary Igneous Activity potentially adverse condition Regulatory Requirement will be substituted for that of Adverse Geochemistry in supporting baselining of the Program Architecture. This follows the conclusion that most of the regulatory analysis that has been completed for Adverse Geochemistry is transferable to the adverse condition of Quaternary Igneous Activity and that Adverse Geochemistry can be brought to an orderly holding point and restarted sometime after September or continued at a reduced level of effort. The Quaternary Igneous Activity (also referred to as Volcanism) regulatory requirement is of greater near term concern and is therefore to be completed ahead of the Adverse Geochemistry. Since many of the same Center staff are required for both of these activities it is necessary to delay the completion of one.

In accordance with our discussions, the CNWRA will develop the Program Architecture for the Quaternary Igneous Activity Regulatory Requirement through Regulatory and Institutional Uncertainties, proposed Uncertainty Reduction Methods, Regulatory Elements of Proof, and first draft Technical Review Components by the end of September. This information will be useful to the NRC technical staff in their discussions with the U. S. Department of Energy (DOE) as well as useful in supplementing the Erosion and Substantially Complete Containment regulatory requirement analyses for baselining the Program Architecture. If time permits, the CNWRA will also initiate preparation of draft Compliance Demonstration Methods and Information Needs. The schedule for completion of remaining parts for Quaternary Igneous Activity and Adverse Geochemistry Regulatory Requirements will be included in the Fiscal Year 1990-1991 Operations Plans.

Charlotte Abrams will be the lead NRC technical staff in the effort on Quaternary Igneous Activity and will be closely supported by John Trapp and Keith McConnell. Dave Brooks is the NRC Program Element Manager for the CNWRA's Geologic Setting and Philip Justus is the Section Leader for this project. Charlotte Abrams is anticipated to provide about one days time in each two week period to consult with the CNWRA, not including planned technical meetings.

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In consideration of the heavy workload of both the CNWRA and NRC staff, planned meetings are limited. A two day meeting will be held during the week of September 10, 1989, actual date and place to be determined, to review Regulatory Elements of Proof, Regulatory and Institutional Uncertainties, proposed Uncertainty Reduction methods, and draft Technical Review Components developed by the CNWRA. A follow up one to two day meeting will be held before the end of September if necessary. Draft Regulatory Elements of Proof and draft Regulatory and Institutional Uncertainties should be provided to NRC the week of August 21, 1989.

It is recognized that this is a tight schedule, however, information that can be developed would be of assistance to the NRC staff in meetings with the DOE presently scheduled for August 30, 1989 and September 26, 1989 on the general subject of tectonics. The CNWRA should contact Dave Brooks or Phil Justus as regards attending these meetings.

We appreciate the efforts of the CNWRA in complying with this request.

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.

Sincerely,

### ORIGINAL SIGNED BY

Philip Altomare, Project Element Manager  
Waste Systems Engineering and Integration  
Engineering Branch  
Division of High-Level Waste Management

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*Record Note: these time constraints apply - Abrams 6 days max; McCovell & Trapp 15 days ea. max*

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*Record Note: although the work being performed is within the scope of the contract, no formal deliverables have yet been contractually specified.*