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February 27, 2008  
Contract No. NRC-02-07-006  
Account No. 20.14002.01.161  
WM-00011

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Mr. Jack Guttman  
Office of Nuclear Material Safety and Safeguards  
Division of High-Level Waste Repository Safety  
Two White Flint North  
11545 Rockville Pike  
Mail Stop EBB-2-B02  
Washington, DC 20555

Subject: Revision to IM 20.06002.01.312.640  
Final Status Report of Field Observations From Sunset Crater, Arizona

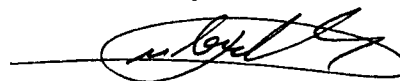
Dear Mr. Guttman:

This letter transmits the final version of Status Report of Field Observations From Sunset Crater, Arizona. The initial draft was sent to NRC on September 12, 2006 under Contract No. NRC-02-02-012 and Account No. 20.06002.01.312.

This final report addresses comments from John Trapp dated January 23, 2008. NRC comments and CNWRA responses are provided as an attachment to this letter.

If you have any questions regarding this report, please contact Don Hooper at (210) 522-6649 or me at (210) 522-5085.

Sincerely,



Philippe Dubreuilh, Ph.D.  
Manager, Geology & Geophysics

/slo

Attachment

cc: **NRC**

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SUNSI Review Complete

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**ATTACHMENT**  
**NRC Comments and CNWRA Responses**

Contract No.: NRC-02-07-006 Project No.: 14002.01.161 Deliverable No.: formerly IM 06002.01.312.640

Comment No.	Section/ Page	Para.	Line	NRC Comment	CNWRA Response
1	1-4	first full paragraph		Sunset Crater is not a historic eruption even though it occurred in historic time	Reworded to state that scoria cones (basaltic volcanism) in the Yucca Mountain region are analogous to Sunset Crater
2	2.2 / 2-1		second sentence	acnelithic should be achnelithic	Typographical error was corrected
3	abstract / ii		last sentence	From a legal sense, the information is not used to support the review or do the review. Only the DOE information can be used that way. Suggest change to something like ... to inform the review, or to help the staff prepare for the review.	Reworded to "inform the review"
4	1-1	second paragraph	first sentence		Reworded to "prepare staff for the review"
5	5-2	past paragraph	last sentence		Reworded to "help staff prepare for the review"
6	1-4	last paragraph before Section 1.3	second sentence	Same comment as above, but suggest that this sentence just be removed.	Sentence deleted
7	2-12 and 2-14	Figs 2-8 and 2-10		(for example) Add millimeter scale and captions like sand, silt and clay to these figures for ease of understanding.  On figure 2-8 hard to tell that if this is for a specific sample site and not an aggregate of all samples. Clarify.	Millimeter scale bar added to each of the four affected plots. Light shading was also added to separate the lapilli, coarse ash, and fine ash grain size intervals.  Figure and caption reworded to indicate these are from the same tephra pit.