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October 23, 2008
Contract No. NRC-02-07-006
Account No. 20.14003.01.007
NMSS06n: PROJ0734; PROJ0735

U.S. Nuclear Regulatory Commission
ATTN: Mr. Michael J. Fuller
Division of Waste Management and Environmental Protection
Two White Flint North
11545 Rockville Pike
Mail Stop T7-J8
Washington, DC 20555

Subject: Final Software Validation Test Plan and Report for GeoStudio™ VADOSE/W® 2007
Version 7.11, Deliverable 14003.01.007.320

Dear Mr. Fuller:

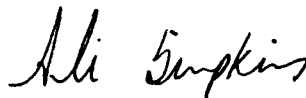
This letter transmits the subject deliverable, fulfilling deliverable 14003.01.007.320.

This report includes the software validation test plan and documentation of validation activities for GeoStudio™ VADOSE/W® 2007 Version 7.11, a two-dimensional, simultaneous coupled heat transport and fluid flow finite element model for vadose zone processes that rigorously couples soil hydraulic behavior with atmospheric forcing or climate conditions. VADOSE/W® developed by GEO-SLOPE International, Ltd. is primarily used for design of engineered geotechnical systems, including engineered soil covers.

This final version of the report incorporates some of the comments received from the U.S. Nuclear Regulatory Commission (NRC) staff via email on September 19, 2008. Followup conversations with NRC staff reduced the number of comments to be addressed. No formal comment response is attached because comment resolution was an iterative process in which NRC staff was closely involved.

Please do not hesitate to contact me (210.522.6260) or Dr. Cynthia Dinwiddie (210.522.6085) with any questions about the subject report or software.

Sincerely,



Ali Simpkins
Assistant Director
Environmental Science and
Environmental Engineering

GW/AS/ls: enclosure

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