Department of Energy
Washington, DC 20585

December 24, 1991

Mr. Joseph J. Holonich, Director
Repository Licensing and Quality
Assurance Project Directorate
Division of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Holonich:

This is in response to a U.S. Nuclear Regulatory Commission (NRC) letter (Linehan to Shelor), dated November 12, 1991, concerning an NRC quality assurance (QA) audit of the U.S. Geological Survey (USGS), conducted at the Nevada Test Site from September 16-17, 1991, and at the USGS facilities in Denver, Colorado, from September 18-20, 1991.

The NRC Audit Report No. NRC-91-01 identified four deficiencies where the USGS QA program requirements were insufficient in their implementation.

Enclosed are the USGS responses to the four deficiencies as detailed in the NRC Notice of Deficiency, Appendix A, of the NRC audit report for NRC review and evaluation.

Also discussed in the NRC Audit Report are four areas of weakness. Although no response is required for those, the USGS is evaluating each of the items. Program implementation changes will be made as appropriate.

The DOE and the USGS appreciate the constructive comments of the NRC audit team and will continue to work toward positive working interactions.

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Should you have any questions in this regard, please contact either me at (202) 586-1447 or Mr. Don Horton of the Office of Quality Assurance at (202) 586-8858.

Sincerely,

Linda J. Desell

for John P. Roberts
Acting Associate Director for
Systems and Compliance
Office of Civilian Radioactive
Waste Management

Enclosure:
USGS Responses to NRC Audit Report No. NRC-91-01

cc w/Enclosure:
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K. Whipple, Lincoln County, NV
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K. Hooks, NRC

YMP-USGS RESPONSE FOR AUDIT NO. NRC-91-01, DEFICIENCY NO. 1
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NUCLEAR REGULATORY COMMISSION AUDIT - NOTICE OF DEFICIENCY

Section 5.3.1 of YMP-USGS-QMP-6.01 "Document Control, "Revision 5 states, in part, "The PI may issue sub-issue copies of a 'controlled' technical procedure to personnel under his/her direction. These copies of the latest revision of the technical procedure shall be 'checked' out to the technical person via a check-out log...."

Section 5.3.2 of QMP 6.01 "Document Control, "Revision 5, states in part, "If the procedure is revised or rescinded, the PI is responsible for retrieving the sub-issue document."

Contrary to the above, there was a packet containing six technical "HP" procedures at well site USW WT-16 in a USGS van, but (a) there was no documented evidence that the PI used a check-out log for the distribution of the documents, and (b) Revision 0 of HP-26 "Method for Calibrating Water-Level Measurement Equipment Using the Reference Steel Tape" which was superseded by Revision 1 on June 18, 1990 was in the packet. (Level 3)

YMP-USGS RESPONSE

Cause of Condition(s): Oversight, the practice of keeping reference copies in the van was established before the QMP-6.01 requirement for the log was initiated.

Remedial Corrective Actions(s): The packet of technical procedures, including the superseded procedure, has been discarded. Therefore, there is no need for the check-out log. Controlled copies are available at the Hydrologic Research Facility for use by field personnel. Since the QMP-6.01 requirements regarding sub-tier issue of controlled documents have been in place, YMP-USGS Quality Assurance field audits and surveillances have identified no deficiencies in this area. (Reference Audits USGS-90-02 and USGS-91-05 and surveillances USGS-91-S08, USGS-91-S09, and USGS-91-S16.)

Scheduled completion: Complete.

Preventive Actions(s): Activity personnel have been reminded of requirements pertaining to accessing current technical procedures. Other Principal Investigators with personnel assigned to the Hydrologic Research Facility will be warned to avoid this deficiency through distribution of this Notice of Deficiency.

Scheduled completion: December 24, 1991

YMP-USGS RESPONSE FOR AUDIT NO. NRC-91-01, DEFICIENCY NO. 2

NUCLEAR REGULATORY COMMISSION AUDIT - NOTICE OF DEFICIENCY

Section 8.4 of YMP-USGS-QAPP-01, Revision 5 states, in part, "Data generated from a YMP-USGS scientific investigation shall be identified.... Identification of such data shall be provided in all documents.... Identification of YMP data shall include a reference to the origin of the data...."

Contrary to the above, at well site USW H-6, the logbook did not identify the data collection platform (DCP) by either model number and/or serial number. (Level 3).

YMP-USGS RESPONSE

Cause of conditions(s): Oversight

Remedial Corrective Action(s):

Serial number of DCPs are included on the Notification of Calibration Status forms when the DCPs are first installed. Therefore the identification of the DCP was not lost; the detail was not in the logbook.

The logbook now includes an entry regarding the DCP identification.

Scheduled completion: Completed.

Preventive Action(s):

A cue sheet has been prepared and distributed to appropriate activity personnel regarding appropriate logbook entry for DCP identification.

Scheduled completion: Completed.

YMP-USGS RESPONSE FOR AUDIT NO. NRC-91-01, DEFICIENCY NO. 3
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NUCLEAR REGULATORY COMMISSION AUDIT - NOTICE OF DEFICIENCY

Section 7.1 of NWM-USGS-HP-60 "Method for Monitoring Water Level Changes Using Pressure Transducers," Revision 1 states, in part, "All documents shall be signed (or initialed) and dated by the investigator on a daily basis as entries are made."

Contrary to the above, at well site USW WT-11, entries were made in the logbook for April 24, 1991, but the logbook was not signed or initialed by the field technician. (Level 3)

YMP-USGS RESPONSE

Cause of condition(s): Oversight

Remedial Corrective Action(s): The PI recognized the handwriting and was aware of who made entries. An entry will be added to that effect in the logbook for the well site.

Scheduled completion: 1-31-92

Preventive Action(s): The concern was discussed with the field technician. This discussion included a reminder of the need for signing or initialing the logbook entries.

Scheduled completion: Completed

YMP-USGS RESPONSE FOR AUDIT NO. NRC-91-01, DEFICIENCY NO. 4
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NUCLEAR REGULATORY COMMISSION AUDIT - NOTICE OF DEFICIENCY

Section 5.4.2 of YMP-USGS-QMP-5.05 "Scientific Notebook System," Revision 2 states, in part, "In-process entries [in the Scientific Notebook (SN)] shall provide the following information as appropriate:

> Description of the experiment or research attempted, including detailed step-by-step process followed; either by reference to implementing procedure or by actual entry into the notebook...
>
> Conditions which may adversely affect the results of the experiment or research investigation...."

Contrary to the above, the SN for collecting scientific data from well sites USW WT-11 and USW H-6 did not reference source documents or describe the step-by-step process for collecting and dumping data from the DCP. (Level 3)

YMP-USGS RESPONSE

Cause of condition(s): There is a difference in interpretation of the level of detail needed for replication of an activity by a scientist with a comparable background. In addition, there is no standard to gauge "adequacy" - it relies upon technical judgement.

Remedial Action(s): The condition was corrected-on-the-spot during the audit by additional notebook entries. The manufacturer's manual is available in the YMP-USGS Local Records Center.

Scheduled completion: Completed.

Preventive Action(s): The "adequacy" of each Scientific Notebook is addressed as part of the independent technical review performed by a scientist after the final entries are made in each scientific notebook.

Scheduled completion: None needed (will be via YMP-USGS-QMP-5.05 and -3.07).