OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

YUCCA MOUNTAIN QUALITY ASSURANCE DIVISION

QUALITY ASSURANCE SURVEILLANCE REPORT OF

TRACEABILITY OF WHOLE CORE SAMPLES

SURVEILLANCE NO. YMP-SR-92-004

CONDUCTED MARCH 17 THROUGH MARCH 27, 1992

ACTIVITIES SURVEILLED:

EXAMINED RECORDS GENERATED TO SUPPORT TRACEABILITY OF ALLOCATED WHOLE CORE SAMPLES IN ACCORDANCE WITH ADMINISTRATIVE PROCEDURE AP-6.4Q AND BRANCH TECHNICAL PROCEDURE BTP-SMF-006

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1.0 EXECUTIVE SUMMARY

This report contains the results of the Office of Civilian Radioactive Waste Management (OCRWM) Quality Assurance (QA) Surveillance No. YMP-SR-92-004 of traceability of samples from the Sample Management Facility (SMF) to the U.S. Geological Survey (USGS). The surveillance was conducted at SMF and the USGS Hydrologic Research Facility (HRF) both of which are located at the Nevada Test Site (NTS). The surveillance was conducted by a team from the Yucca Mountain Quality Assurance Division (YMQAD) of the Office of Quality Assurance (OQA) in accordance with OCRWM Quality Assurance Administrative Procedure (QAAP) 18.3, Revision 3.

A review of documentation generated as a result of implementation of Administrative Procedure (AP)-6.4Q, Revision 0, "Procedure for the Submittal, Review and Approval of Requests for Yucca Mountain Project Geologic Specimens" and Sample Management Facility (SMF) Branch Technical Procedure BTP-SMF-006, Revision 2, "Removal of Specimens from Samples by the SMF for Shipment and Remnant Return" was examined.

Based on an examination of records at the SMF and USGS, it is concluded that whole core specimens are traceable and procedures are being implemented properly.

Two problems were discovered with regards to records submittal. A supplemental record package to correct this condition was prepared and submitted to the Local Records Center (LRC) on March 19, 1992.

2.0 SCOPE

The surveillance was conducted to determine the effectiveness of implementation of Yucca Mountain Site Characterization Project (YMP) SMF procedures that describe controls for allocation of samples and specimens as determined by the Sample Overview Committee (SOC), and removal of specimens from samples by the SMF for shipment to a participant.

3.0 THE SURVEILLANCE TEAM CONSISTED OF THE FOLLOWING INDIVIDUALS

Richard L. Weeks, Surveillance Team Leader, Quality Assurance Scientist, Science Applications International Corporation (SAIC)/YMQAD, Las Vegas, Nevada

Cynthia H. Prater, Surveillance Team Member, Quality Assurance Specialist, SAIC/YMQAD, Las Vegas, Nevada

4.0 PERSONNEL CONTACTED DURING THE SURVEILLANCE

The following personnel were contacted during the course of the surveillance:

Alan Flint, USGS/Principal Investigator
Lorraine E. Flint, Raytheon Services Nevada/Hydrologist
Chris Lewis, SAIC/Technical & Management Support Services (T&MSS), SMF Division Curator
David W. Merritt, SAIC/T&MSS, SMF Division Geologist

5.0 SURVEILLANCE RESULTS

5.1 This surveillance was conducted in accordance with checklist questions derived from requirements found in the following procedures:

AP-6.4Q, Revision 0 - Procedure for the Submittal, Review, and Approval of Requests for Yucca Mountain Project Geologic Specimens

BTP-SMF-006, Revision 2 - Removal of Whole and Other Specimens from Samples by the SMF for Shipment and Remnant Return

5.2 Record package NNA.920211.0053 was examined to determine if the requirements of AP-6.4Q, Revision 0 and BTP-SMF-006, Revision 2 were met with regards to the allocation and distribution of samples. Additional record packages, representing requests from other participants, are in-process and were not examined. All examined records and record packages were found to be complete except for those identified in Section 5.3.

The examined record package was generated as a result of requests made by A. Flint of the USGS to conduct tests on whole core specimens. Quality records have been generated and document the following:

1. SOC Specimen Removal Request forms indicated approval for distribution of whole core specimens to A. Flint for boreholes USW UZ N11, N15, N16, N17, N27, N36, N-37, N-38, N53, N54, N55, and N64.

2. A Specimen Removal Log was examined for boreholes N54 and N55 and indicated specific intervals to be distributed.

3. An SMF Specimen Shipment Packaging Log was examined for both boreholes and found to correlate with the Specimen Removal Log.

4. Transfer of Custody Forms were examined and found to be complete.

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Mr. Flint stated that he had sent specific specimens, in accordance with USGS procedure NNWSI-USGS-QMP-8.01, Identification and Control of Items, Samples and Data, to D. Vaniman of Los Alamos National Laboratory (Los Alamos). A copy of the memorandum that transfers the samples is attached and lists the specific samples that were transferred. A review of records documenting the transfer of these samples indicates compliance with

USGS requirements and supports traceability. Mr. Vaniman of Los Alamos was called to verify that he received the samples. He indicated that he did receive the samples and that they were being controlled in accordance with Los Alamos procedure TWS-ESS-DP-101,"Sample Collection, Identification, and Control for Mineralogy-Petrology Studies".

5.3 There were no Corrective Action Requests generated as a result of this surveillance however, two violations of requirements requiring remedial action were identified and corrected.

While examining record package NNA.920211.0053, it was determined that several SMF Custody Receipt forms were missing. A supplemental record package, consisting of the missing SMF Custody Receipt forms, was assembled and submitted to the LRC on March 3, 1992.

One SOC Specimen Removal Request form was incomplete. The Yucca Mountain Project Regulatory Site Evaluation Division Director did not indicate approval, disapproval or tabled as required. A corrected supplemental record package is being processed.

6.0 RECOMMENDATIONS

1. AP-6.4Q should provide guidelines for transfer of samples between participants and Principle Investigators (PIs) when prior SOC approval has not been received.

2. AP-6.4Q should provide concise language as to the limitations placed on a PI that receives YMP whole core samples.

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