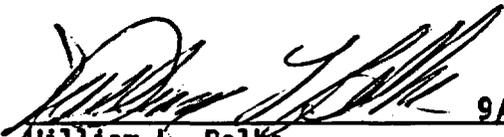
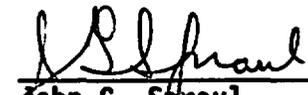
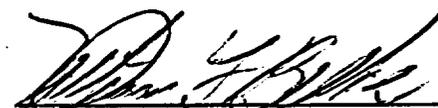


U.S. NUCLEAR REGULATORY COMMISSION  
OBSERVATION SURVEILLANCE REPORT NO. 93-S5  
FOR THE OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT  
SURVEILLANCE NO. HQ-SR-93-07 OF THE  
CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM  
MANAGEMENT AND OPERATING CONTRACTOR

  
9/28/93  
William L. Belke  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste  
Management

  
9/28/93  
John G. Spraul  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste  
Management

  
9/28/93  
William J. Boyle  
Geology and Engineering Branch  
Division of High-Level Waste  
Management

  
9/29/93  
Rodney M. Weber (per telephone)  
Center for Nuclear Waste  
Regulatory Analyses

Reviewed and Approved by:

  
9/21/93  
Kenneth R. Hooks  
Repository Licensing and Quality  
Assurance Project Directorate  
Division of High-Level Waste Management

## OBSERVATION SURVEILLANCE REPORT NO. 93-S5

### 1.0 INTRODUCTION

From September 8-17, 1993, the U.S. Department of Energy Office of Civilian Radioactive Waste Management (OCRWM) conducted Quality Assurance (QA) Surveillance No. HQ-SR-93-07 of the Civilian Radioactive Waste Management System Management and Operating Contractor (M&O) QA program in Vienna, VA and Las Vegas, NV. The State of Nevada did not participate in this surveillance.

### 2.0 PURPOSE

The U.S. Nuclear Regulatory Commission staff observed and evaluated the OCRWM QA surveillance to gain confidence that OCRWM and the M&O are properly implementing the requirements of their QA programs by assessing the effectiveness of the OCRWM surveillance and determining the adequacy of the M&O QA program in the areas observed. The NRC staff's evaluation is based on direct observations of the surveillance process, discussions with the surveillance team and M&O personnel, and reviews of pertinent M&O records.

### 3.0 SCOPE

The scope of this surveillance was focused on the preparation, review, and issuance of the requirements, and the flowdown of requirements from the Civilian Radioactive Waste Management System and Requirements Document to other documents. Also included in the surveillance scope were the corrective actions taken to close Corrective Action Requests (CARs) HQ-92-012 and HQ-93-19. CAR HQ-92-012, which was issued by the OCRWM, documented deficiencies involving the document review process whereby it did not adequately ensure that the top level Waste Management System Requirements consistently flowed down into the Project Level technical baseline documents. CAR HQ-93-19 noted deficiencies pertaining to personnel training records and verification of education.

### 4.0 SURVEILLANCE PARTICIPANTS

#### 4.1 NRC

William L. Belke	Observer
William J. Boyle	Observer
John G. Spraul	Observer (VA portion only)
Rodney M. Weber	Observer (Center for Nuclear Waste Regulatory Analyses) (NV portion only)

#### 4.2 OCRWM

Marlin Horseman	Surveillance Team Leader (STL)	Quality Assurance Technical Support Services(QATSS)/CER Corp.
Robert Clark	Team Member (NV portion only)	OCRWM

Jim George	Team Member	OCRWM/CER Corp.
Gerald Heaney	Team Member (NV portion only)	Science Applications International Corp. (SAIC)
Rob Howard	Team Member	OCRWM
Dennis Threatt	Team Member	QATSS/SAIC
Terry Grant	Technical Specialist	OCRWM/SAIC
Arul Mozhi	Technical Specialist (NV portion only)	OCRWM/Roy F. Weston, Inc.
Trieu Trang	Technical Specialist (VA portion only)	OCRWM

## 5.0 SURVEILLANCE SUMMARY RESULTS

The surveillance team, composed of QA programmatic and technical personnel, developed the checklist questions from the previous and currently revised mined geologic disposal technical baseline documents, and previous audit results. Each team member was responsible for specific documents, and although there were overlapping questions, effective communications between team members reduced redundant efforts. A "horizontal" type sample was selected and an evaluation was performed to gain confidence that the previous document requirements were included in the current technical document baseline or justification provided for not including previous requirements. Similarly, for the current technical document baseline, a "vertical" type sample was selected and an evaluation was performed to evaluate the flowdown of requirements from the top or lead requirements document down to the lower tier requirements documents to ensure that requirements in those documents are being adequately addressed.

The team did not do a complete sampling of the new system of requirements from top to bottom. A complete flow of documents from top to bottom exists only for that portion of the Exploratory Studies Facility (ESF) that has been designed and constructed under the old system of requirements. Documents are currently being prepared under the new system of requirements, but the team was not able to examine the lowest level of documents (Basis for Design Documents, design packages, and job packages) because no complete set had been finalized yet.

The flowdown of requirements in the new system will be discussed at the upcoming technical exchange on the ESF scheduled for October 1993. If there are still doubts or questions about the flowdown of requirements in the new system, the NRC staff may request OCRWM to consider conducting another audit/surveillance to examine a complete top to bottom set of documents prepared under the new system of requirements documents.

The corrective action taken to close previously issued CAR HQ-92-012 was verified and found to be acceptable. CAR HQ-93-019 remains open pending the issuance and acceptability of the revised M&O QA Procedure (QAP) 2.2, "Verification of Personnel Qualifications."

Three preliminary CARs were issued by the OCRWM surveillance team; one for not adequately addressing the flowdown requirements from the Civilian Radioactive

Waste Requirements Document into the Mined Geologic Disposal System Requirements Document (MGDS) (Vienna VA), one for not providing the basis for derived requirements in the Exploratory Studies Facility Design Requirements Document, Surface Based Testing Facilities Requirements Document, and Site Design and Test Requirements Document (Las Vegas, NV), and one because the Technical Document Preparation Plan for the preparation of the MGDS did not address all of the procedural requirements of QAP 3.5, "Development of Technical Document." The adverse conditions identified in the preliminary CARs are not significant in terms of the overall QA program and do not reflect any major problems with the flowdown of requirements.

#### 6.0 PRINCIPAL PERSONS CONTACTED DURING THE SURVEILLANCE

William Law           (M&O VA)  
Sam Rindskopf       (M&O LV)

#### 7.0 NRC CONCLUSIONS

The NRC staff has determined that the OCRWM surveillance of the M&O QA program with respect to flowdown of requirements, following procedures, and corrective actions for prior CARs was useful and effective. The surveillance team was familiar with the QA procedures in the areas being surveilled and knowledgeable of the work products being examined. The programmatic and technical specialists worked well together in determining whether document flowdown requirements were adequately implemented. Also, even though not required for this surveillance activity, a pre-surveillance meeting was held by the STL which further enhanced the quality of communications between the surveillance team and the M&O. Although M&O QA personnel were in attendance in the VA and NV entrance and daily caucus meetings, they did not participate to a great extent. This situation was brought to the attention of the STL and corrected.

The NRC staff agrees with the OCRWM surveillance team's preliminary conclusion that the M&O development process for the preparation, review, and issuance of the requirements and the flowdown of requirements is effective and the associated documents are adequate in the areas surveilled except for the areas noted in the preliminary CARs.