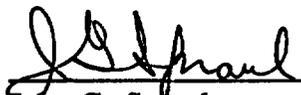


U. S. NUCLEAR REGULATORY COMMISSION
SURVEILLANCE OBSERVATION REPORT NO. 93-S3
OF THE OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
SURVEILLANCE NO. HQ-SR-93-01
OF THE VITRIFICATION PROJECTS DIVISION (EM-343)


06/29/93
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1.0 INTRODUCTION

During June 22 through 24, 1993, quality assurance (QA) staff of the NRC Division of High-Level Waste Management observed the U.S. Department of Energy (DOE), Office of Civilian Radioactive Waste Management (OCRWM) QA Surveillance No. HQ-SR-93-01 of the DOE Office of Environmental Restoration and Waste Management Vitrification Projects Division (EM-343). The surveillance team conducted interviews with EM-343 and its contractors' personnel and reviewed pertinent documents in Germantown, MD. A member of the NRC staff participated as an observer on this surveillance.

2.0 SCOPE

The surveillance, HQ-SR-93-01, focused on the development, preparation, review, and issuance of the EM-343 Waste Acceptance Product Specifications for Vitrified High-Level Waste Forms (WAPS). The surveillance team independently verified the flow-down of requirements from the OCRWM Waste Acceptance Systems Requirements Document (WASRD) into the WAPS.

3.0 PURPOSE

The NRC staff observed and evaluated the OCRWM QA surveillance to gain confidence that OCRWM and EM-343 are properly implementing the requirements of their QA programs by assessing the effectiveness of the OCRWM surveillance and determining the adequacy of the EM-343 QA program in the areas under surveillance. The NRC staff's evaluation is based on direct observations of the surveillance process; discussions with the OCRWM surveillance team, EM-343 personnel, and EM-343 contractor personnel; and reviews of pertinent EM-343 records. The NRC staff did not evaluate the technical validity, adequacy, or correctness of the WAPS.

4.0 SURVEILLANCE PARTICIPANTS

4.1 NRC

Jack Spraul Observer

4.2 DOE/OCRWM

| | | |
|-----------------|--------------------------|-----------------|
| Fred Bearham | Surveillance Team Leader | OCRWM/CER Corp. |
| Mark Senderling | Technical Specialist | OCRWM |
| Arul Mozhi | Technical Specialist | OCRWM/Weston |

5.0 SURVEILLANCE SUMMARY RESULTS

The surveillance team developed the checklist questions based on the requirements found in Revision 0 of EM-343's Standard Practice Procedure 4.16, "Document Reviews;" Revision 0 of the WAPS; and Revision 1 of DOE/EM/WO/02, EM-343's "Quality Assurance Program Description" (QAPD). The surveillance team evaluated the effectiveness of the process used by EM-343 to develop, prepare, review, and issue the WAPS by interviewing EM-343 and its contractors' personnel, by independently verifying the flow-down of requirements from the OCRWM WA-SRD into the WAPS, and by reviewing pertinent QA records.

The WAPS was prepared by EM-343 to pass on to the waste producers the requirements identified in the WA-SRD that are applicable to the producers. Development of the WAPS is an exception to the statements in Section 3, "Design Control," of the EM-343 QAPD that "The only technical activities performed by the Vitrification Projects Division (EM-343) are technical reviews and peer reviews. All other design and design control activities are the responsibility of the field offices." Thus, one of the two preliminary Corrective Action Requests (CARs) prepared by the surveillance team reflected the fact that EM-343 had no procedure to prescribe methods for the preparation of technical documents. (A draft of a procedure to prescribe these activities was given to the surveillance team leader shortly before the exit meeting.) The second preliminary CAR generated by the surveillance team reflected discrepancies perceived by the team during the surveillance of the review of the WAPS.

In addition, the surveillance team recommended several actions that were taken by the EM-343 during the surveillance to improve the design control process and the related records. For example, a number of items in the WA-SRD that EM-343 believed needed clarification had been transmitted informally by note to the DOE Office responsible for the WA-SRD. During the surveillance and at the surveillance team's recommendation, the list of items was expanded and attached to a formal memorandum (draft) to ensure that the records package for the WAPS will include the items and their resolution.

6.0 PRINCIPAL PERSONS CONTACTED DURING THE SURVEILLANCE

| | |
|--------------------|------------------------------------|
| James T. Conway | EM-343/QA Program Manager |
| Jeffrey M. Allison | EM-343/Vitrification Engineer |
| Robert Jakubik | BDM Federal/Sr. Tech. Staff Member |
| Abdullah Dasti | BDM Federal/QA |
| John F. LeVea | BDM Federal/Sr. Staff Member |

7.0 NRC CONCLUSIONS

The NRC staff determined that the surveillance was effective and agreed with the surveillance team that the WAPS adequately addresses the requirements in the WA-SRD but that some corrective actions should be taken. Two preliminary CARs were issued by the

surveillance team. The adverse conditions identified in the preliminary CARs are not significant in terms of the overall EM-343 QA program and they do not reflect any major problems with the quality of the WAPS.