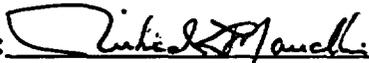


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**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
OFFICE OF QUALITY ASSURANCE**

**SUPPLIER AUDIT REPORT
OF
NATIONAL OCEAN SCIENCES
WOODSHOLE, MASSACHUSETTES
REPORT NUMBER OQA-SA-97-009
MARCH 4-5, 1997**

Prepared by:  Date: 03/12/97
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Approved by:  Date: 3/13/97
Donald G. Horton
Director
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Enclosure

1.0 EXECUTIVE SUMMARY

The results of the supplier audit of National Ocean Sciences (NOSAMS) revealed that implementation in all the areas evaluated was satisfactory. There were no conditions adverse to quality found. Personnel performing sample receipt through Accelerator Mass Spectrometry (AMS) testing demonstrated a good knowledge and understanding of their respective responsibilities. The facility capability and environment were determined to be above average for the work being performed. NOSAMS is a nationally recognized facility for the performance of carbon 14 dating. NOSAMS participates in interlaboratory comparisons with several other laboratories. NOSAMS personnel demonstrated a clear commitment to quality. The preparation processes (i.e., Water Stripping and Graphitization) are computer automated processes which provide for a high level of consistency during the sample preparation.

The results of the audit do not warrant any recommendation for limitations or other conditions that should be invoked relative to the items or services being provided; however, responsibility for determination of continued use of this supplier rests with the U. S. Geological Survey (USGS).

2.0 SCOPE

The supplier audit was conducted to evaluate the adequacy, implementation, and effectiveness of NOSAMS quality program. This was accomplished by determining if NOSAMS program implements the applicable portions of the Office of Civilian Radioactive Waste Management's Quality Assurance Requirements and Description Document (OCRWM QARD); satisfies the applicable Quality Assurance (QA) requirements specified in the USGS procurement document 1434-CR-96-SA-00844; and satisfactorily implements the NOSAMS QA program as stipulated in the attachment to the USGS Purchase Order and as accepted by the USGS, for the scope of work. The QA program elements determined to be applicable are: Organization; QA Program; Procurement Document Control; Implementing Documents, Document Control; Control of Purchased Items and Services; Measuring and Test Equipment; Nonconformance/Corrective Action; QA Records; Audits; Software Control, and Sample Control.

3.0 AUDIT TEAM AND OBSERVERS

Richard L. Maudlin, Audit Team Leader, Office of Quality Assurance (OQA)
Bruce Parks, Observer, USGS
Tom H. Chaney, Observer, USGS

4.0 PERSONNEL CONTACTED DURING FACILITY AUDIT

R.J. Schneider, Associate Director, NOSAMS
K.L. Elder, Quality Assurance Coordinator, NOSAMS

5.0 SUMMARY OF AUDIT RESULTS

NOSAMS QA program as stipulated in the attachment to the USGS Purchase Order addresses the applicable elements of the OCRWM QARD for the intended scope of work. Effective implementation of the applicable elements of the QARD by NOSAMS is considered satisfactory. It should be noted that this is a one time purchase of services by the USGS and no further procurements are expected as of this audit. In addition, the only procurement that NOSAMS made related to this work is the purchase of Oxalic Acid II which was essentially procured prior to the USGS procurement. Subsequently, no quality affecting procurements are expected to be made by NOSAMS during the life of this USGS procurement.

The details of the audit, along with the objective evidence reviewed, are contained within the audit checklist, which is available from the OQA's supplier evaluation files.

6.0 DEFICIENCIES/RECOMMENDATIONS

No unsatisfactory conditions and/or recommendations were identified during this audit.