



Department of Energy
Washington, DC 20585

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Mr. John J. Linehan, Deputy Director
Division of High-Level Waste
Management
Office of Nuclear Materials Safety
and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20545

Dear Mr. Linehan:

As you know, the Department of Energy (DOE) is devoting considerable effort to enhance its quality assurance (QA) program. A part of this overall effort has been intensively reviewing the status of our QA program, as I mentioned in my letter of September 7, 1988. For your information, I have enclosed results from a status review of the DOE QA program. This review was conducted at the direction of Lake Barrett, Director, Office of Quality Assurance, to determine the status of Headquarters and the Yucca Mountain Project Office QA programs with respect to a fully qualified QA program prior to the start of new site characterization activities.

I want to assure you that since this "snapshot" was taken in mid-August, DOE is aggressively pursuing actions to fully implement the QA program prior to the start of new site characterization activities.

If you have any questions concerning this matter, please contact me on (202) 586-6046 or Lake Barrett on (202) 586-8858.

Sincerely,

Ralph Stein
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SUMMARY
OF
OCRWM/NNWSI QA PROGRAM STATUS REVIEW

INTRODUCTION

A Quality Assurance (QA) Program review was conducted at the YMPO Office in Las Vegas, Nevada, on August 10 through 16, 1988. The review team members were:

<u>NAME</u>	<u>TITLE</u>	<u>ORGANIZATION</u>
D. Shelor (RTL)*	Office of Quality Assurance	OCRWM/RW-3
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The purpose of the QA Program review was to determine the status of Headquarters (OCRWM) and NNWSI (YMPO) QA Programs with respect to a fully qualified QA Program prior to the start of new site characterization activities.

In addition to OCRWM and YMPO, the program review included visits to Fenix and Scisson, Inc. (F&S), Reynolds Electrical and Engineering Co., Inc. (REECO), and Lawrence Livermore National Laboratory (LLNL) to determine the status of development of their respective QA Programs.

CONCLUSIONS

The conclusions of the QA Program review are that: 1) currently planned QA activities are reasonable and appropriate to achieve a fully qualified QA Program prior to the start of new site characterization activities; and 2) the status of activities and the current rate of progress does not appear sufficient to support the schedule. If additional QA and line resources are made available, the rate of progress could be increased.

- o The activities required to develop and implement the QA Program at OCRWM, YMPO, and the Contractors does not appear sufficiently advanced to support the current schedule. This includes QA Program coordination and overview.
- o Until recently there were insufficient FTE's in the OCRWM QA organization and there continues to be insufficient FTE's in the YMPO QA organization to provide good management and implementation of the QA Program.

*Review Team Leader

**Program Management Division

- o Less than 50% of the procedures required to implement the QA Programs at OCRWM and YMPO for new site characterization activities have been developed, approved, and issued.
- o Contractors QA Program Plans primarily reiterate QA Program requirements already stated in NNWSI QA Plan NO. 88-9 rather than provide descriptions of how the QA Program is to be implemented.
- o The required training of personnel performing activities affecting quality, with the exception of auditor training, is in the initial implementation state at YMPO and initial planning stage at OCRWM.
- o The activities required to develop and implement a QA Program at OCRWM, YMPO, and contractor levels do not appear to have been sufficiently coordinated.

RECOMMENDATIONS

Reevaluate the schedule considering the substantial amount of work necessary to implement a fully qualified QA program for new site characterization activities.

- o Provide guidance to substantially improve the consistency of program participants QA Program documents.
- o Apply additional resources to the preparation of the QA procedures needed to implement the OCRWM and YMPO QA Programs for new site characterization
- o Develop innovative approaches to expedite implementation of the training program and provide consistency in interpretation of requirements (e.g., program-wide training for generic QA program requirements).

FORWARD

A program status review was conducted of the YMPO, Headquarters and selected contractors QA programs and activities that will be needed to have a fully qualified QA program prior to start of new site characterization activities. This summary provides observations keyed to the criterion/basic requirements of Appendix B to 10CFR50/ANSI-ASME NQA-1 that are applicable to the activities being conducted by YMPO (Section I) and Headquarters (Section II). Attachment 1 provides additional observations on YMPO procedures for SCP and Study Plan preparation and review. Attachments 2, 3, and 4 provide observations of NNWSI contractors performing work directly applicable to new site characterization activities

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SECTION I - YMPO OBSERVATIONS

CRITERION I: ORGANIZATION

AUTHORITIES AND RESPONSIBILITIES

- o The organizational charts and text in Section I of NNWSI/88-9 and WMPO/88-1 define sufficient involvement of the QA and line organizations in performance and verification of quality affecting activities.
- o The responsibilities and authorities of each organizational element noted on the charts are described in writing.
- o The QA organization has stop work authority through established channels and procedures
- o The QA management position is a dedicated position with no other assignments which affect execution of the responsibilities.
- o It was evident that senior management at YMPO maintains a high level of involvement on the status of the overall QA Program and actively supports its implementation.
- o Based on interviews with responsible personnel, it appears that communications should be improved for personnel to elevate problems related to QA Program development to appropriate management levels.

MANAGEMENT ASSESSMENT

- o A management assessment was conducted during March 1987 in accordance with the applicable requirement. However, it was not submitted to OCRWM until 13 months after the assessment was conducted.
- o Acceptable progress has been made toward correcting identified problems. About half of the 47 improvement actions cited in report have been completed.
- o Successfully completing all 47 improvement actions will improve the program, however, it will probably not resolve major areas highlighted in the assessment.
- o A tracking system was implemented and is kept current.
- o No follow-up management assessment has been scheduled.

CRITERION II: QA PROGRAM

INDOCTRINATION AND TRAINING

- o A dedicated training center has been established and initial staffing provided.
- o A computerized tracking system is in use and operators are being trained.
- o A training management plan has been approved.
- o A revised indoctrination and training procedure is in the approval cycle.
- o A procedure for qualification of personnel is being developed.
- o Staff training needs and requirements are being determined.
- o 170 staff members have completed an orientation and indoctrination session (approximately 50% of staff).
- o 28 staff members have completed training on the procedure for document review, acceptance, and approval.
- o Several staff members have completed training on the procedure for sample management and monitoring.
- o Training for procedures has not been provided for personnel performing major quality effecting work.
- o Training and indoctrination sessions are only planned on a month-to-month basis.
- o Integration of the schedule for procedure development and training for personnel to implement the procedures should be improved.

APPLICATION OF GRADED QUALITY ASSURANCE

- o Written instructions have been available for the selection of quality levels to items and activities. However, these instructions require revision and amplification to be fully satisfactory.
- o Existing procedures do not provide adequate guidance for grading of QA requirements within quality levels.
- o A procedure for implementing the Q-List methodology is in preparation.
- o The justification of the QA Levels listed on the ESF QALA Sheets requires expansion and strengthening.

- o NUREG-1318, "Technical Position on Items and Activities in the High-Level Waste Geologic Repository Program Subject to QA Requirements" has been issued by NRC and was accepted by OCRWM in July 1988 as the controlling requirements document for the graded QA approach. Existing NNWSI Project Quality Assurance Program Plans and implementing procedures need to be revised consistent with NUREG-1318.

SURVEILLANCES

- o Approved procedures for surveillances are available and in use.
- o The primary focus of surveillance activities since they were initiated in May 1988 has been limited to standard deficiency report (SDR) follow-up only.
- o The surveillance division at SAIC which supports YMPO does not have sufficient full time staff available. Therefore, the surveillance activities are not yet effectively implemented due to resource constraints and those corrective actions identified have not been resolved on a timely basis.

CRITERION III: DESIGN CONTROL

- o YMPO has numerous management and QA controls in place for the ESF Title I Design. However, these controls will need to be better defined and formalized in accordance with the recently approved NNWSI QA program plan.
- o ESF design criteria were provided to the design agencies (Holmes & Narver and Fenix & Scisson, Inc.) by YMPO. Development of the design criteria was consistent with existing design control practices.
- o Holmes & Narver and Fenix & Scisson, Inc., performed the ESF Title I Design in accordance with approved QA program plan.
- o The ESF systems requirements document cites 10CFR60 and other regulations "to the extent applicable" and defers to the Design Basis Document for specific identifications of the applicable regulations. However, this document did not appear to provide specific detail on applicable regulations.
- o For seismic design criteria of the ESF, the Design Basis Document refers to a Working Group Report, entitled "ESF Design Basis", April 1988. This Working Group was established by the Interface Control Working Group to develop reference seismic design criteria. The Group concluded that the shaft did not involve components or systems important to public health and safety and hence 10CFR60 was not applicable. Nonetheless, seismic design criteria exceeding that required in standard building codes for the seismic conditions expected, were formulated and made applicable to four items anticipated to exist as a permanent part of the repository (i.e., long term isolation). The four items were the underground opening, operational seal, ground support and shaft liners. The Working Group recommendations were approved by YMPO and given to F&S through an Engineering Change Requirement (ECR) dated 7/1/88.

- o The YMPO SEMP requires design controls in the form of:
 - A configuration management plan, including change control procedures
 - Interface Control Document
 - Records Management Plan
 - Reference Information Base (for Design Parameters Controls)
 - Design Verifications
 - Technical Assessment Reviews
 - Readiness Reviews

Note: Some of the plans and associated procedures are not in place as of this date.

- o YMPO developed and approved a procedure for a Technical Assessment Review (QMP-02-08). This procedure was used for the recently conducted Technical Assessment Review of the 100% ESF Title I Design.

CRITERION IV:PROCUREMENT DOCUMENT CONTROL

CONTRACTOR QA DOCUMENTS

- o The project participants QA plans now in use were prepared in accordance with NNWSI NV-17 and have been approved by NNWSI.
- o The schedule for revision and approval of the participant QA plans to be in compliance with the NV-88-9 document is October 1988.
- o To date no project participants QA Administrative Procedures have been approved by NNWSI. The preparations, review, and approval of these procedures (approximately 250 to 300) will have to be coordinated.
- o In perusing the participants QA plans, it appeared that the plans repeated the QA requirements in the NV-17 document rather than explaining how the requirements would be implemented.

CONTRACTUAL QA REQUIREMENTS

- o The Project Charter dated June 16, 1987 was reviewed with respect to designation of management authority, Quality Assurance requirements and Stop Work authority. The document appears to meet NRC review plan requirements but needs to be revised to reflect the April 1988 OCRWM reorganization.
- o MOU's between NVO/ALO and NVO/SFO are in existence which pass QA requirements to SNL, LANL, AND LLNL. In addition, the MOU's designate the YMPO Project Manager as the NVO Manager's representative and includes Stop Work authority. These documents appear to be effective and appropriate but need to be updated to reflect current program management responsibilities and authorities.

- o H&N, F&S, and REECO have prime contracts with NVO which are broad in scope. These contractors have specific tasks for the YMPO activities. Separate documents exist which designate the YMPO Project Manager as the Contracting Officer's Technical Representative (COTR) and for Stop Work authority. However, it appears that QA requirements would have to be implemented by the NVO contracting officer.
- o The SAIC contract with NVO is specific to the Waste Management activities. A document exists naming the YMPO Project Manager as COTR. However, unless other documents exist or the QA requirements are in the contract, the contracting officer would have to invoke QA requirements and retains Stop Work Authority.
- o MACTEC support contract, now with NVO, is specific to waste management activities. A document exists designating the YMPO Project Manager as COTR. There does not appear to be any QA requirements for this effort. However, the YMPO Project Manager stated that specific QA requirements would be prescribed when required on a task by task basis.
- o The inter-agency agreement between USGS and NVO was reviewed with respect to QA requirements for USGS and Stop Work authority. USGS acceptance and implementation of NNWSI QA requirements and Stop Work directions is not specifically required. This document needs to be revised to specifically provide QA requirements and Stop Work authority.

CRITERION V: INSTRUCTIONS, PROCEDURES, AND DRAWINGS

- o The YMPO QA Program Plan identifies three types of procedures:
 - 1) Administrative Procedures (APs) which are NNWSI Program-wide and thus apply to YMPO as well as to all other NNWSI program participants (the AP's which are used in performing activities affecting quality are further designated as AP (Q)).
 - 2) Quality Management Procedures (QMPs) which describe how the 18 Criteria/Basic Requirements are implemented.
 - 3) Branch Technical Procedures (BTPs) which describe how specific technical activities are performed.
- o Procedures for the development of APs, QMPs and BTPs have been issued and are being implemented.

o Status of development of QA procedures: *

	REQUIRED	ISSUED	IN PREP.	T.B. PREP.
AP	31	16	13	2
AP(Q)	30	6	22	2
QMP	31	18	6	7
BTP	43	13	2	28**
Total	<u>135</u>	<u>53</u>	<u>43</u>	<u>39</u>

* a number of procedures shown in the preparation stage are to supersede existing procedures such as SOP's.

** Not identifiable as to whether in preparation or to be prepared.

CRITERION VI: DOCUMENT CONTROL

- o The documents being controlled at YMPO include documents such as the Baseline Procedures, Quality Assurance Program Plans and QA Implementing Procedures. Engineering Documents such as Drawings and Design Specifications are not currently included under the Document Control System.
- o Document Control Procedures have been issued (AP 1.5Q) or are under final internal review for final approval (QMP-06-03) and are being implemented at the Document Control Center.
- o Adequate staffing levels and facilities have been provided for the current level of activity at the center.
- o YMPO is planning to provide facilities for future inclusion of Design Documents in the Document Control Center.
- o The YMPO Document Control System is being effectively implemented for documents now under the scope of the system. Design Documents and all other documents which prescribe activities affecting quality must be included in the Document Control System if it is to meet QA Program requirements set forth in NNWSI/88-9.

CRITERION XVI: CORRECTIVE ACTION

GENERAL REQUIREMENTS

- o Approved procedures are available and in use.
- o The procedures need to be revised to reflect the current organization responsibility assignments.
- o A tracking system has been implemented and is being kept current.
- o 17 audit findings (from as early as June 1985) remain open. Of these, 13 findings are past the corrective action (CA) due date, and 4 of them had no corrective action due date assigned.
- o Close-out of standard deficiency reports (SDRs) should be completed in a more timely manner.
 - Over 40 of the SDRs issued during 1987 remain open.
 - 2 audit responses received more than 3 months ago have not

TREND ANALYSIS

- o The first and only Trend Analysis Report was issued July 10, 1987 and it appears that no corrective action was taken .
- o The scope of the trend analysis report covered deficiency documents (AFS, NCR, SDR, and CAR) from January 1984 through June 1987.
- o The second trend analysis report has been in draft form since February 1988, and indicates the same problems as were identified in the July 1987 report.

CRITERION XVII:QA RECORDS

- o OCRWM issued a new Records Management Policies and Requirements document (DOE/RW-0194) in July 1988.
- o NNWSI issued a new Records Management Plan (NNWSI/88-15) in July 1988.
- o NNWSI QA Records Management Requirements are currently contained in Section XVII of the NNWSI Project QA Plan (88/9), Section XVII of the WMPO QAPP (88-1), NNWSI SOP-17-01, and in applicable project participants QA Plans and Procedures.
- o Two additional procedures are currently in preparation to provide detailed implementing instructions for the management of QA Records:
 - AP-1-7Q, NNWSI Project "Information Management System Record Collection and Retrieval" (replaces SOP NNWSI-SOP-17-01)
 - QMP-17-01, QA Records
- o NNWSI SOP-17-01 states that the requirements of NNWSI SOP-02-01, Section 17 and NNWSI SOP-17-01 forms the basis the NNWSI Project Records Management Plan.
- o The existing NNWSI and YMPO QA Plans, Records Management Plan, and Records Management Procedures need to be evaluated for compliance with the recently issued OCRWM Records Management Policies and Requirements Document (DOE/RW-0194).

CRITERION XVIII: AUDITS

- o Approved audit procedures are available at YMPO.
- o No internal audits at YMPO have been conducted to date. This appears to be a conscious management decision. Audits of YMPO will be conducted by OCRWM.
- o The external audit schedule of YMPO program participants has been implemented.
- o Eleven of the twelve certified lead auditors utilized by YMPO are contractor personnel.

SECTION II--HEADQUARTER/OCRWM OBSERVATIONS

CRITERION I: ORGANIZATION

- o The Quality Assurance Program Description (QAPD) document is currently in the HQ-OCRWM concurrence cycle.
- o The responsibilities and authorities of each organizational element noted on the charts are described in writing
- o The QA management position is a dedicated position with no other assignments which affect execution of the responsibilities of the position.
- o The QA organization, through established channels and procedures, has stop work authority

CRITERION II: QA PROGRAM

- o The OCRWM-HQ QA Program is currently described in the following documents: 1) OCRWM Quality Management Policies and Requirements; 2) OGR and Transportation QA Plans; 3) OGR Quality Implementing Procedures; 4) QA Requirements Document for Waste Form Producers; and 5) Associated Program Management Plans and Procedures. New and/or revised QA Program documents are required to support the establishment of a fully qualified QA Program in light of the: Amendments Act; the OCRWM-HQ Reorganization; QA Program development required to support new program items and activities; and evolving program requirements.
- o The OCRWM-HQ QA Program documents structure will be revised to consist of Quality Assurance Requirements (QAR); QAPD, Quality Assurance Administrative Procedures, Quality Assurance implementing procedures (if required), and associated program management plans and procedures for quality affecting activities.
- o The status of the OCRWM-HQ QA Program documents associated with ongoing near-term repository site characterization and design is as follows:
 - the QAR document is currently in the final review and concurrence cycle.
 - the QAPD is currently is the final review and concurrence cycle.
 - the QA administrative and implementing procedures are currently being developed (see Criterion V).
 - the associated program management plans and procedures are addressed under Criterion III, VI, and XVII.
- o In addition to the OCRWM-HQ QA Program documents associated with near-term repository site characterization and design activities noted above, there are numerous OCRWM-HQ QA Program documents required to support ongoing and near-term activities in the repository program element areas of waste packages and waste-form producers and in the transportation program element area of transportation cask design.

- o An OCRWM-HQ training program is being established to provide the required training on the OCRWM-HQ QA Program documents. An OCRWM-HQ QA training plan and procedure is currently under development.
- o The QA Program will be implemented in a defined, graded QA approach. Outstanding actions required to support the establishment of a fully qualified QA Program at OCRWM-HQ include development of quality level and graded QA methodologies and associated implementing procedures.

CRITERION III: DESIGN CONTROL

- o The OCRWM-HQ program management documents intended to manage and control the program technical activities for the ongoing and near-term repository site characterization and design activities and their status are:
 - The OGR Systems Engineering Management Plan (issued).
 - The Generic Requirements for a MGDS document (issued).
 - The Waste Management Systems Requirements and Descriptions document (issued).
 - The annotated outline for Site Characterization Plans (issued).
 - The annotated outline for the SCP Conceptual Design Report (issued).
 - Other documents, as necessary, will be identified and developed as the program evolves.
- o The OCRWM-HQ Program Management documents required to support the transportation and MRS Program elements will be identified and developed as the Program elements evolve.
- o An OCRWM-HQ Technical Baseline has been established and is controlled in accordance with the OGR Program change control procedure.
- o QA procedures have not been developed for control of program management documents.

CRITERION IV: PROCUREMENT DOCUMENT CONTROL

- o The OCRWM Procurement Document Control activities are described in the draft QAPD document. The organizational responsibilities are described for procurement planning, the preparation, review, approval, and control of procurement documents, and for review and approval of contractor QA Program. The involvement of the QA Organization is described.

- o HQ/OCRWM has several technical support contracts.
- o National laboratories performing activities for HQ/OCRWM work under existing DOE orders unless specifically directed otherwise.
- o Procurement document implementation procedures are being developed.

CRITERION V: INSTRUCTIONS, PROCEDURES AND DRAWINGS

- o The OCRWM-HQ QA Program procedures will consist of QA Administrative Procedures and Technical Implementing Procedures (if required).
- o The OGR QA Plan currently identifies seventeen QA procedures required, fourteen of which have been issued. Twenty-seven QA procedures have been identified as being required to support near-term program activities. While some of these QA procedures currently exist, revisions are required to reflect the new OCRWM-HQ organization. The current schedule is to issue the required QA procedures for internal review and comment in four phases between August 3, 1988, and October 26, 1988.
- o A review is currently in progress to identify those OCRWM-HQ technical implementing procedures required in the near-term and to develop a plan and schedule for their issue.

CRITERION VI: DOCUMENT CONTROL

- o The OCRWM Document Control activities are described in the draft QAPD. The responsibilities for preparation, review, approval, and issuance of documents have been identified and described.
- o Draft Document Control procedures have been developed for control of quality related documents.

CRITERION VII: CONTROL OF PURCHASED ITEMS AND SERVICES

- o The OCRWM control of purchased items and services are described in the draft QAPD. The responsibilities for procurement planning, source evaluation and selection, bid evaluation, performance evaluation, verification of activities and acceptance have been identified and described.
- o Control of purchased items and services procedures are being developed.

CRITERION X: INSPECTION - SURVEILLANCE

- o The OCRWM surveillance activities are described in the draft QAPD. The responsibilities for planning, performance, and reporting have been identified and described.

- o Draft surveillance procedures have been completed.

CRITERION XV: CONTROL OF NONCONFORMANCE ITEMS

- o The OCRWM control of nonconforming items are described in the draft QAPD. The responsibilities for the identification, segregation, documentation, evaluation, notification, disposition, and verification of corrective action of nonconforming OCRWM items have been identified and described.
- o Control of nonconforming items procedures are being developed.

CRITERION XVI: CORRECTIVE ACTION

- o The OCRWM corrective action activities are described in the draft QAPD. The responsibilities for identifying, documenting, tracking, reviewing, dispositioning, and verification have been identified and described.
- o The following procedures are being developed: corrective action; stop work authority; resolution of differing technical opinions; resolution of quality issues; and quality improvement.

CRITERION XVII: QA RECORDS

- o The OCRWM control of QA records are described in the draft QAPD. The responsibilities for the establishment, generation, validation, receipt, identification, permanent storage, preservation, safekeeping, correction, storage facilities, and retrieval of QA records have been identified and described.
- o Records management and correspondence control procedures are being developed.

CRITERION XVIII: AUDITS

- o The OCRWM audit requirements are described in the draft QAPD. The responsibilities for planning, scheduling, preparing, performing, reporting, and follow-up for internal and external audits have been identified and described.
- o Certification of audit personnel and QA verification by audit procedures are being developed.

ATTACHMENT 1

OBSERVATIONS OF YMPO PROCEDURES FOR SCP AND STUDY PLAN PREPARATION AND REVIEW

- o An SCP Management Plan (SCPMP) had been developed and issued. The SCPMP included provisions for Study Plans.
- o SCPMP Revision 0 issued on 4/9/85; Revision 1 on 11/05/86; and Revision 2 on 4/21/88.
- o The SCPMP contains detailed instructions and assigned authorities and responsibilities for the preparation and review of the SCP and Study Plans and provides for the documentation and disposition of review comments.
- o The QA responsibilities were defined in all three issues of the SCPMP.
- o Verification that the SCPMP had been implemented was not done due to time limitations.

ATTACHMENT 2

OBSERVATIONS OF THE F&S DESIGN CONTROLS IN AFFECT DURING ESF TITLE I DESIGN

- o YMPO provided F&S with the Design Criteria documents to be used for the Title I design of the ESF including:
 - a) Subsystem Design Requirements
 - b) Reference Information Drawings
 - c) Reference Information Base
 - d) QLASs
 - e) Working Group Seismic Design Basis
- o F&S prepared a Design Basis document and a Design Scope and Planning document and submitted these to YMPO for approval.
- o F&S controlled their Title I design activities using their approved QA Program Plan (QAP-002) and implementing procedures (QAPs, PPs, and DCPs)
- o YMPO controlled their Title I design activities using the NNWSI QA Plan, the YMPO QA Plan, SOPs, APs, and QMPs.
- o A 50% Design Review was held for the Title I Design and action to resolve the comments is in progress. Most of the comments requiring action (408 out of 418) have been completed.
- o A technical assessment was conducted for the ESF at the 100% design completion. This assessment appeared to be well planned and effectively conducted.
- o It was not evident that YMPO had an adequate Design Control Overview Program in place during the performance of the Title I Design performed by F&S.
- o Several management plans and QA procedures remain to be issued and implemented before the YMPO Design Control Overview Program can be considered fully qualified and effective.

ATTACHMENT 3

OBSERVATIONS OF REECO'S QA PROGRAM

- o The REECO QA Program is in the process of being updated to meet the latest revision of the NNWSI QA Plan (88-9, Rev. 1). Except for Sections 1 and 2, the REECO QA Program Plan appeared to be primarily a repeat of the QA requirements as listed in NNWSI 88/9, Rev. 0, rather than describing how REECO will meet the requirements of 88/9 (i.e., describing the system to be used for implementing the 88-9 requirements and identifying the individual responsibilities).
- o At the present time REECO is not performing any Quality Level 1 or 2 work.
- o REECO's QA staff presently consists of a QA Manager and one QA Specialist. They plan to hire 4 more people to support the Level 1 and 2 activities.
- o QA program orientation has been provided to the REECO staff by the QA Manager.
- o No specific training has been given on QA Program procedures although there had been training given on technical procedures by the responsible Technical Managers.
- o REECO has not performed any internal audits in 1988 and they do not have a qualified lead auditor on their staff.
- o REECO indicated that personnel performing quality affecting activities had been "certified" by their management. However, the certification did not include training in the QA Program Procedures which apply to their work.
- o REECO QA has performed several surveillances during 1988.
- o Many of these observations were previously identified in the suspension of work order issued to REECO in July 1986. The suspension of work order was lifted in January 1987 based on promised corrective actions by REECO. It appears that many of the deficiencies had not, in fact, been corrected at the time work suspension was lifted.

ATTACHMENT 4

OBSERVATIONS OF LLNL'S QA PROGRAM

- o Staff training was initiated in July 1987, and 103 staff members have completed the general orientation session training course. Attendance is mandatory.
- o Specialized training, in accordance with specific procedures, has been given and tailored to staff performing specialized tasks. To date 15 specialized training sessions have been completed.
- o An overall training matrix and schedule was not available at the time of the review but was planned for preparation in the near future.
- o Qualification of staff personnel performing activities affecting quality has been completed.
- o One management assessment was conducted during the second quarter of 1987. There has been no formal response from upper management and no other management assessments have been planned.
- o A management assessment procedure has been developed and is undergoing internal LLNL review.
- o A revised procedure for control of nonconformances has recently been approved by YMPO but has not been issued.
- o In response to the 1987 YMPO audit, monthly status reports are being issued.
- o The last trend analysis was performed August 5, 1987, with no formal response received from upper management.
- o Corrective action is taken through the NCR, audit, and surveillance systems because deficiencies are primarily procedural or isolated events that can be resolved in a relatively short time.
- o A revised procedure for corrective action has recently been approved by YMPO but has not been issued. The system has been developed but no CARs have been issued.
- o The surveillance procedure was rescinded (early 1987) and has not been reissued. After the procedure was rescinded no surveillances were scheduled or performed.
- o Audits have been scheduled and performed in accordance with the existing procedure. Internal audits appear to concentrate on programmatic aspects.
- o The lead auditor certifications were not completed at the time of the review.