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NEVADA NUCLEAR WASTE STORAGE

INVESTIGATIONS

QUALITY ASSURANCE PLAN

NNWSI/88-9

REVISION 1

SIGNATURE PAGE

WMPO PROJECT QUALITY MANAGER   DATE 7/21/88

PROJECT MANAGER, WMPO   DATE 7/20/88

OCRWM DIRECTOR, OFFICE OF QUALITY ASSURANCE   DATE 8/12/88

Effective Date: 8.26.88

LIST OF EFFECTIVE REVISIONS

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The data collection activities result from scientific investigations and produce design input. Data analysis includes the initial step of data reduction as well as broad level systems analyses (such as performance assessments which integrate many other data and analyses of individual parameters.

It is the policy of the NNWSI Project that a completed or final design of a facility or item evolves from a sequential order of design activities (or phases) wherein each phase becomes more detailed in nature than the preceding phase. It is recognized that the number and length of design phases required to produce a completed or final design of any particular item or facility may vary, among organizations responsible for design, according to the timeliness and availability of pertinent information and the complexity of the item or facility. It is also recognized that all Project design activities, although undertaken by different organizations, which may progress at different rates, are dependent on and require an interface with each other to produce a unified facility design.

2.1.2 QUALITY ASSURANCE LEVEL ASSIGNMENT

All design phases shall be assigned a Quality Assurance Level prior to execution in accordance with the methods specified in the NNWSI Project Administrative Procedures Manual.

2.1.3 QUALIFICATION OF PERSONNEL

Personnel performing design work shall be indoctrinated, trained, and qualified in accordance with the requirements of Section II of this document. Instructions, procedures and drawings for design work shall be in accordance with the requirements of Section V of this document.

2.1.4 PEER REVIEW

For design activities including design output documents which involve use of untried or beyond state-of-the-art testing and analysis procedures and methods, or where detailed technical criteria and requirements do not exist or are being developed, a peer review shall be conducted. The peer review shall meet the requirements of Paragraph 4.0 of this section of the NNWSI Project Quality Assurance Plan (QAP). | 1

2.2 DESIGN INPUT

2.2.1 IDENTIFICATION, REVIEW AND APPROVAL OF INPUT

Applicable design input, such as site characterization data, criteria letters, design bases, performance and regulatory requirements, codes, standards, manufacturer's design data, and quality standards, shall be identified, documented, and their selection reviewed and approved by the responsible design organization and the responsible QA organization. The purpose of the QA review is to assure that the documents are prepared, reviewed, and approved in accordance with documented procedures and quality assurance requirements. | 1

consider the interchangeability, function and safety of the item. The evaluation shall be documented.

2.2 PROCUREMENT DOCUMENT REVIEW

A review of the procurement documents and changes thereto shall be made to assure that documents transmitted to the prospective supplier or suppliers include appropriate provisions to assure that items or services will meet the specified requirements. The review shall be performed and documented prior to contract award. Procurement document reviews shall be performed by personnel who have access to pertinent information and who have adequate understanding of the requirements and intent of the procurement documents. The review shall include, as a minimum, the cognizant technical organization and QA organization. The review by the QA organization shall assure that the following requirements are met:

- QA requirements are correctly stated, inspectable, and controllable.
- There are adequate acceptance and rejection criteria.
- Procurement documents have been prepared, reviewed, and approved in accordance with this QA Requirements document.

2.3 PROCUREMENT DOCUMENT CHANGES

Procurement document changes shall be subject to the same degree of control as utilized in the preparation of the original documents. Changes that are made as a result of the bid evaluation or precontract negotiations shall be incorporated into the procurement documents. The review of such changes and their effects shall be completed and documented prior to contract award. Review of changes shall include the following considerations:

- Appropriate content shall be included in procurement documents as required by Paragraph 2.1 of this Section.
- Additional or modified design or site investigation criteria shall be determined.
- Analysis of exceptions or changes requested or specified by the supplier and determination of the effects such changes may have on the intent of the procurement documents or quality of the item or service to be furnished.

2.4 DISTRIBUTION OF PROCUREMENT DOCUMENTS

Participating Organizations and NTS Support Contractors shall forward to the SAIC/T&MSS Project QA Department (QA Verification Division Manager),

8.2 METHODS

Inspection methods shall be established and executed to verify that the characteristics of an item continue to remain within specific limits. Inspection methods shall include evaluation of performance capability of essential emergency and safety systems and equipment, verification of calibration and integrity of instruments and instrument systems, and verification of maintenance, as appropriate.

9.0 QUALIFICATION REQUIREMENTS

Appendix I of this document defines the requirements for the qualification of inspection and test personnel who perform inspection and testing to verify conformance to specified requirements for the purpose of acceptance. Appendix I defines the requirements for qualification of nondestructive examination personnel.

9.0 RECORDS

The following are the requirements for inspection records which shall be retained in accordance with Section XVII of this QAP.

9.1 INSPECTION RECORDS

As a minimum, inspection records shall identify the following:

- Item or activity.
- The date of the inspection.
- Name of individual performing the inspection.
- Name or names of personnel contacted during the inspection.
- A description of the type of observation (method of inspection).
- Inspection criteria including identification of drawing, specification, etc. (and applicable revision).
- Equipment used during the inspection.
- Evidence as to the acceptability of the results.
- Acceptance statement.
- References to information on action taken in connection with conditions adverse to quality, nonconformances and/or actions taken to resolve any discrepancies.

DOCUMENT TRANSMITTAL RECORD

N-QA-C22
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REMOVE - Scientific Investigation & Design Control page, No. III-10, Rev. 1, dated 7/27/88.

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