

71-9080

QUALITY ASSURANCE PROGRAM PLAN

FOR THE

CEER, MAYAGUEZ PROJECT

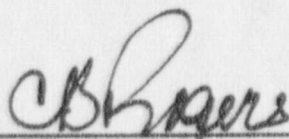
JOB NO. 18967

BECHTEL NATIONAL, INC.

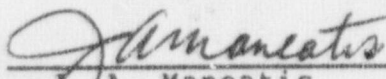
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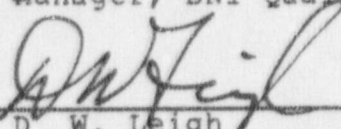
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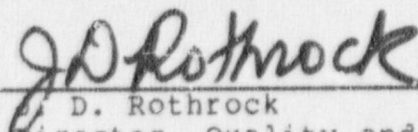
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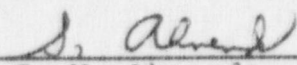
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28464

TABLE OF CONTENTS

| <u>SECTION</u> | <u>DESCRIPTION</u> | <u>PAGE</u> | <u>REV</u> |
|----------------|---|-------------|------------|
| 1.0 | INTRODUCTION | 1 | |
| | 1.1 Purpose | 1 | |
| | 1.2 Objective | 1 | |
| | 1.3 Policy | 2 | |
| | 1.4 Program Implementation | 2 | |
| 2.0 | ORGANIZATION | 2 | |
| | 2.1 Project Team Responsibilities | 2 | |
| 3.0 | DOCUMENTATION | 9 | |
| | 3.1 Safety Related Items | 9 | |
| | 3.2 Quality Assurance Assessment | 10 | |
| | 3.3 Quality Action Plans | 10 | |
| | 3.4 Safety Assessment | 10 | |
| | 3.5 Documentation | 11 | |
| 4.0 | DESIGN CONTROL | 11 | |
| 5.0 | PROCUREMENT CONTROL | 11 | |
| 6.0 | DOCUMENT CONTROL | 11 | |
| | 6.1 Document Control Center | 11 | |
| | 6.2 Records Retention and Turnover | 12 | |
| 7.0 | MATERIAL CONTROL | 12 | |
| 8.0 | PROCESS CONTROL | 13 | |
| | 8.1 Work Procedures | 13 | |
| | 8.2 Health and Safety | 13 | |
| | 8.3 Indoctrination and Training | 13 | |
| 9.0 | INSPECTION AND TESTS | 13 | |
| 10.0 | CONTROL OF MEASURING AND TEST EQUIPMENT | 14 | |
| 11.0 | NONCONFORMANCE CONTROL | 14 | |
| 12.0 | CORRECTIVE ACTION | 15 | |
| 13.0 | SITE SECURITY | 15 | |
| 14.0 | QUALITY ASSURANCE RECORDS | 15 | |
| 15.0 | AUDITS | 16 | |
| 16.0 | QUALITY ASSURANCE PROGRAM REVIEW | 16 | |
| EXHIBIT 1 | MATRIX - IMPLEMENTING PROCEDURES | | |
| EXHIBIT 2 | ORGANIZATION CHART | | |

1.0 INTRODUCTION

1.1 PURPOSE

- A. The Project Quality Assurance Program Plan (QAPP) defines the quality assurance program for the decontamination and decommissioning of the CEER, Mayaguez Facility and for the disposal of associated hazardous materials and waste.
- B. The QAPP incorporates the policies contained in the Bechtel Quality Assurance Manual and client requirements, and will be implemented by the procedures listed in the matrix in Exhibit 1. The QAPP complies with the following standards as deemed necessary for this project.
 - 1. DOE Order 5700.6B, Quality Assurance
 - 2. DOE Order OR5700.6, Quality Assurance
 - 3. DOE FUSRAP/SFMP Plan for Quality Assurance
 - 4. ANSI/ANS-15.10-1981 Decommissioning of Research Reactors.
 - 5. ANSI N402-1976 (ANS-15.8) Quality Assurance Program Requirements For Research Reactors

1.2 OBJECTIVE

The objective of the QAPP is to provide clear requirements by which project procedures and instructions are prepared and their implementation verified. These requirements govern all activities of the project including:

- A. Project Management
- B. Engineering
- C. Decontamination
- D. Dismantlement
- E. Restoration
- F. Health Physics
- G. Environmental, Health, and Safety
- H. Radwaste Handling.

1.3 POLICY

It is the policy of Bechtel National, Inc. (BNI) and the CEER, Mayaguez Project that the project QAPP applies to all work being performed on the project. Each subcontractor will comply with the requirements of the project quality assurance program.

1.4 PROGRAM IMPLEMENTATION

The individual performing the work is responsible for the quality of the work. Control and verification of quality are the responsibility of the group performing the activity. Personnel performing verification functions may be members of the same group responsible for the work, provided they are not directly responsible for the operation being verified.

Quality assurance monitoring and auditing of work activities are performed by the quality assurance group who are independent of the project.

2.0 ORGANIZATION

The President of Bechtel National, Inc. is responsible for the total program and promulgates policy for quality assurance. Formulation of quality assurance policy and direction of the quality assurance program is the responsibility of the BNI Manager of Quality Assurance who reports to the President of Bechtel National, Inc. The Quality Assurance Manager is responsible for developing and controlling the project quality assurance program and coordinating its implementation with the project manager.

2.1 PROJECT TEAM RESPONSIBILITIES

The key personnel are shown on Exhibit 2, and a brief description of their responsibilities follows:

2.1.1 Project Manager

A. Responsibility and Authority

The project manager is BNI's management representative for the project and has the responsibility for its successful completion. He has the authority to fulfill the responsibilities of the project and is accountable for the overall management and execution of the contract, client requirements, and Bechtel commitments.

B. Summary

During the course of a project, the project manager is responsible for:

1. Selecting, assembling, organizing and coordinating the project team.
2. Directing the preparation of the Project Management Plan to define Bechtel's functions and responsibilities.
3. Obtaining appropriate permits and licenses required for decommissioning operations.
4. Directing the implementation of the project quality assurance program and ensuring that it is complied with by all project personnel, including subcontractors.
5. Directing the implementation of and ensuring compliance with all aspects of safety with respect to site, personnel, property and environment.
6. Ensuring thorough documentation of plans, procedures, activities, and results; and the effective and efficient storage and retrieval of all pertinent project information.
7. Establishing the requirements for project reporting systems, directing their implementation, and directing and reviewing project reports.
8. Reviewing and submitting for approval the project final report and record of completion.

2.1.2 Quality Assurance Manager

A. Responsibility and Authority

The quality assurance manager is a BNI management representative for the project. He has the responsibility for working closely with the project manager in the development and subsequent implementation of the Project QAPP. However, the quality assurance manager is independent of the project manager and has the authority to perform scheduled and unscheduled surveillances and audits of project activities, and to stop any work activity that he determines to be improperly controlled or nonconforming.

B. Summary

During the course of the project, the quality assurance manager is responsible for:

1. Directing the development and maintenance of the quality assurance program in accordance with appropriate standards and orders.
2. Providing an independent monitoring and auditing quality assurance function.
3. Maintaining effective coordination and liaison with the project manager on subjects related to quality.
4. Reviewing appropriate implementing procedures, specifications, drawings, procurement documents, and other work related documents for quality assurance program requirements, including the review of subcontractor quality assurance documents.
5. Identifying the need for corrective action and initiating, recommending, and providing solutions to quality problems.
6. Providing to Bechtel management, reports and recommendations concerning the status and effectiveness of the quality program for the project.
7. Planning, coordinating, and providing quality assurance program indoctrination and training for all project personnel, including subcontractors.
8. Issuing corrective action reports or stop work orders when any part of the project is determined to be improperly controlled, and immediately informing the project manager and the manager of quality assurance, San Francisco.

2.1.3 Environmental, Health, and Safety Manager

A. Responsibility and Authority

The environmental, health, and safety (EH&S) manager reports to the project manager and directs the health and safety, radiological engineering and worker training programs, and certifies all radiological measurements, analyses, and data. The EH&S manager has the authority to stop any work activity

that he determines to be detrimental to the health and safety of personnel and/or to the environment.

B. Summary

During the course of the project the environmental, health, safety manager is delegated authority by the project manager and is responsible for the following:

1. Ensuring compliance with the project quality assurance program within his organization.
2. Providing project procedures, work practice reviews, audits, and administrative controls to eliminate or minimize potential health risks.
3. Ensuring that all occupational and environmental radiation exposures are in compliance with ALARA principles and objectives.
4. Ensuring compliance with all CSHA and DOE regulations and orders to provide environmental protection, safety, industrial hygiene, health physics, occupational medicine, emergency response, fire protection, and accident investigation and prevention.
5. Directing the preparation of the Health and Safety Plan, the Site Characterization Plan, the Site Surveillance and Maintenance Plan, the Site Release Plan, the Health and Safety Procedures, and reviewing and issuing for approval.
6. Ensuring that program inconsistencies, problems, and deficiencies are identified and resolved by utilizing appropriate internal audit procedures.
7. Ensuring that all DOE subcontractors have health, safety, and environmental programs comparable to and compatible with Bechtel's project programs.
8. Directing the preparation of the Permitting Plan and ensuring that all requisite permits and licenses are obtained for decommissioning operations and that there is compliance with all regulations and conditions governing their use.
9. Establishing appropriate logs, records, reports, and files in accordance with project and DOE requirements.

2.1.4 Waste Management and Shipment Manager

A. Responsibility and Authority

The waste management and shipment manager reports to the project manager and is responsible for arranging for and coordinating transportation of radioactive materials and ensuring compliance with standards and regulations.

B. Summary

During the course of the project, the Waste Management and Shipment Manager is delegated authority by the Project Manager and is responsible for the following:

1. Coordinating the processing, packaging, storage, and shipping of all project wastes.
2. Ensuring project compliance with all relevant OSHA, DOE, and DOT regulations governing safety.
3. Assisting in the development of procedures to assure safe processing, handling, and control of all radioactive waste and non-radioactive hazardous toxic waste.
4. Providing adequate project procedures and work practice reviews to eliminate safety risks associated with: heavy lifts and rigging, transportation equipment, structural openings, material handling equipment, engines and movers, machinery and parts, hand tools and pressurized equipment, electrical conductors and apparatus, and walking and working surfaces.
5. Providing on-the-job training and direction of personnel assigned to these functions to assure effective and safe operations.
6. Establishing, maintaining, and preserving appropriate logs, records, reports, and files in accordance with project requirements.

2.1.5 Decontamination, Dismantlement, and Restoration Manager (Cleveland Wrecking Co.)

A. Responsibility and Authority

The decontamination, dismantlement and restoration manager is responsible for managing work activities associated with the

decontamination and restoration of the Mayaguez Facility including the BNI subcontractors identified below:

B. Summary

During the course of the project, the Decontamination, Dismantlement, and Restoration Manager is delegated authority by the Project Manager and is responsible for the following:

1. Accomplishing decontamination of all surfaces and systems in compliance with the SSDP activity specifications.
2. Accomplishing disassembly and dismantlement of piping equipment and systems.
3. Demolishing all structures in accordance with the project requirements.
4. Handling, packaging, and loading all waste materials as directed by the Waste Management and Shipment Manager (paragraph 2.1.4).
5. Performing restoration to leave the site suitable for unrestricted use. Ensuring that all personnel have received indoctrination in safe working procedures and perform their work consistent with the procedures established for industrial safety, radiological safety, and industrial hygiene.
6. Establishing, maintaining, and preserving appropriate logs, records, reports, and files in accordance with project requirements.

The Cleveland Wrecking Company will provide the local labor force to support decontamination and radwaste processing operations and will provide the technical expertise to perform dismantlement operations where needed.

2.1.6 Radiological Engineering Manager

A. Responsibility and Authority

The radiological engineering manager reports to the project manager on a day-to-day basis and functionally to the environmental, health, and safety Manager. The radiological engineering manager is responsible for protecting the environment, general public, and project personnel from the adverse effects of radiological and hazards associated with the project and has the authority to stop any work activity that he determines to be detrimental to the health and safety of personnel and/or to the environment.

B. Summary

During the course of the project, the radiological engineering manager is responsible for:

1. Ensuring compliance with the project Health and Safety Plan.
2. Establishing and maintaining project logs, records, reports, and files in accordance with project requirements as related to the health, safety, and environmental aspects of site work activities.
3. Providing a radiation data base for all personnel on the site and a continuing record of personnel exposures through the use of dosimetry and bioassay.
4. Preparing, reviewing, and evaluating calculations, plans, and designs for shielding, systems and equipment.
5. Ensuring health and safety in operations through training, inspection, monitoring, and enforcement to produce a acceptable-risk work environment.
6. Providing environmental and work area surveillance, and emergency procedures.
7. Ensuring that accident prevention and fire protection services are provided.
8. Ensuring that adequate controls are applied to keep contamination and radiation levels ALARA.
9. Inspecting work areas and appraising radiological conditions prior to issuing radiological work permits.

2.1.6.1 The EC Corporation

The EC Corporation Site Lead Health Physicist reports to the BNI radiological engineering manager (Paragraph 2.1.6) and will provide decontamination and health physics technicians to perform the radiological monitoring of decontaminated surfaces, the sampling and analytical study of soil and water, the environmental monitoring of work areas, the maintenance of a personnel health physics program and the radiological characterization of waste products.

2.1.7 Project Administration

Project administration reports to the project manager and has the responsibility for establishing and maintaining a control system for recording, tracking, retaining, retrieving and ultimately disposing of all project correspondence, documents, and quality assurance records as required by the project quality assurance program.

2.1.8 Procurement Manager

A. Responsibility and Authority

The procurement manager reports to the project manager and is responsible for purchasing, subcontract administration, and property control.

B. Summary

During the course of the project, the procurement manager is responsible for:

1. Procuring, planning, purchasing, and ensuring on-time delivery of materials, equipment, and services to the project site.
2. Establishing, maintaining, and preserving appropriate logs, records, reports, and files in accordance with project requirements.

3.0 DOCUMENTATION

3.1 SAFETY RELATED ITEMS

- a. A graded approach to quality assurance will be employed based on a formal assessment by the project team, of the potential risks and effects of an activity on health, safety, environmental impact, costs, schedule delays, programmatic goals, public reaction, or any other factor important to achieving project objectives.
- b. Normal industrial standard practice includes many actions of a quality assurance nature which are considered routine. These actions are sufficient to assure the quality of work being performed, and may be relied upon when formal evaluation (assessment) indicates that quality problems will not have significant consequences. However, when the formal evaluation indicates that the consequences of risk of

failure are unacceptable or unknown, additional deliberate actions to identify and prevent quality problems are mandatory.

3.2 QUALITY ASSURANCE ASSESSMENTS (QAA)

- a. A formal evaluation will be made by the project team of the consequences of failure of equipment, facilities, or personnel to perform satisfactorily during the conduct of the project. A quality assurance assessment will be performed as an adjunct to preliminary engineering with subsequent modifications as may be required.
- b. If the consequences of failure are not significant, normal industrial practice may be considered adequate protection against failure. If failure to perform satisfactorily will have significant and unacceptable consequences, then the risk of failure must be formally considered, taking into account the state-of-the-art, experience, normal industrial practices, and the organizations involved. If failure will have unacceptable consequences, and the risk is unknown or significant, special attention to prevention of failure is required and specific quality action plans will be prepared.

3.3 QUALITY ACTION PLAN (QAP)

Action Plans will be specific in describing the measures to be taken for the prevention of unacceptable failures, and designating those responsible for each of the preventive actions. Each plan will call for evaluation and reporting of quality status at periodic intervals and the intervals will be chosen to limit the impact in the event that deficiencies are found.

3.4 SAFETY ASSESSMENT

In accordance with DOE Order OR-5481.1B, dated 5/23/84, a Safety Assessment (SA) will be performed prior to beginning site work to identify potential health and safety problems and to establish the need for any additional safety documentation. The SA will be specifically directed at activities which may present a significant hazard to site personnel or to the public. The completed SA will be forwarded to the DOE Project Manager for review, approval, and management authorization to proceed with site activities. A Safety Assessment will be performed for any modifications or deviations from the original work scope prior to the performance of the work.

3.5 DOCUMENTATION

Decontamination, decommissioning, and radwaste activities will be performed using plans and procedures that have been reviewed and approved by the Environmental Health and Safety Manager or his delegated representative and Project Manager. Activity plans will also be reviewed by the Quality Assurance Manager. Documentation requirements will be described in the respective procedures.

4.0 DESIGN CONTROL

Design of equipment, facilities or structures for support of decommissioning activities shall be as defined in client design criteria. Independent peer review by technical specialists of calculations, specifications, drawings, activity work plans, methodologies/procedures, and compliance with program requirements will be performed. All engineering and design work will be performed exclusively in the Continental United States.

5.0 PROCUREMENT CONTROL

- A. Procurement activities will be performed by procurement personnel in accordance with approved procurement procedures. Bechtel will perform the necessary quality surveillance in the supplier's facilities as required by the purchase or contract documents. This surveillance will be performed in accordance with the Procurement Supplier Quality Manual, to ensure that material and equipment produced and shipped to the jobsite meet contractual requirements.
- B. Procurement documents will be reviewed by the responsible engineer to assure that supplier/subcontractor quality verification documentation conforms to the quality and technical requirements of the procurement documents and coordinated with the Quality Assurance Manager.

6.0 DOCUMENT CONTROL

6.1 DOCUMENT CONTROL CENTER

A project document control system will be established and implemented to ensure that project documents such as correspondence, procedures, drawings, specifications, contract documents, and changes to documents will be controlled. The document control system will identify and/or include:

- a. The documents to be controlled

- b. An index and filing method
- c. Control logs to identify the document, its subject, identification number, status, and tracking and closeout of response items

6.2 RECORDS RETENTION AND TURNOVER

A records retention and turnover plan will be prepared early in the project to describe the system for processing project-related documents for Bechtel retention and turnover to the client. The plan will address the following items:

- a. List of document types
- b. Organization responsible for the documents
- c. Microfilming requirements/frequency
- d. Bechtel records retention requirements
- e. Client records turnover requirements
- f. Authorized client contact and location

7.0 MATERIAL CONTROL

The identification, control, shipment and ultimate disposal of material and wastes will be identified in detailed work procedures.

- A. Radioactive and toxic waste material will be collected, identified, stored and shipped in approved containers. The containers will be marked with standard radioactive or hazardous material labels and will contain information relative to content, source, degree of contamination and destination.
- B. Special handling, packing, and shipping criteria will be defined in detailed work procedures.
- C. Material handling equipment will be subject to periodic inspection and testing, and results documented.
- D. Shipment of radioactive and other hazardous materials will be controlled and monitored to assure client, state, and federal requirements are being met.

8.0 PROCESS CONTROL

8.1 WORK PROCEDURES

All work operations requiring special safety precautions, including those involving sampling or wastes, will be performed in accordance with established Bechtel health and safety requirements and project work procedures approved by the project manager. Project procedures are listed in Exhibit 1.

8.2 HEALTH AND SAFETY

Requirements for health and safety are defined and accomplished through the implementation of procedures for radiation monitoring, radiation control, and environmental control. The project Health and Safety Plan is established to provide for the radiological protection of personnel and to ensure compliance with state and federal regulations on personnel exposure limits. Personnel exposure is monitored and controlled and detailed records maintained to assure individual safety.

8.3 INDOCTRINATION AND TRAINING

1. All personnel assigned to the project will receive project indoctrination and training relative to their work responsibilities and health and safety. The project manager has the responsibility for ensuring the implementation of the indoctrination and training procedures with assistance from the quality assurance Manager.
2. The basic indoctrination includes an introduction to the project quality assurance program, and health and safety program, and the training of project personnel to cover the use and application of project control and work procedures. Project personnel will be instructed in the use of the applicable project procedures prior to starting the work.

9.0 INSPECTION AND TESTS

- A. Inspection and tests shall be performed by personnel other than those performing the work to verify compliance with the QAPP, applicable procedures, drawings and project criteria.
- B. Verification of compliance with project health and safety requirements will be monitored by the radiological engineering manager. He will also review the results of environmental sampling and personnel examinations and testing

documents to verify compliance with government regulatory agencies and the Health and Safety Plan.

- C. Inspection and testing procedures, including performance, guidelines and checklists will be used to verify the satisfactory performance of decontamination, dismantlement, and restoration activities.
- D. For subcontracted work, surveillance will be performed to verify and assure compliance by the subcontractor with the quality and specification requirements of the contract documents. Quality control activities will be performed in accordance with field quality control procedures or checklists.

Subcontractors will provide their quality assurance programs, when applicable, as described in the respective contractual documents and technical specifications. Included in their quality assurance program will be a description of the procedures that will be used for the performance of their work and the qualifications of their personnel performing the work.

10.0 CONTROL OF MEASURING AND TEST EQUIPMENT

A metrology program for measuring and testing devices used in surveying, monitoring, and analysis of samples will be established. Calibration is to be performed with standards which have a known valid relationship to nationally recognized standards or using techniques recognized by ASTM, NBS, the nuclear industry, or by the US EPA.

11.0 NONCONFORMANCE CONTROL

- A. Nonconforming items will be identified and the nonconformance will be documented, and dispositioned by the responsible manager. The nonconforming item will be controlled until the nonconformance is resolved.
- B. Quality-related deficiencies encountered during the normal course of a project will be identified, corrected, and controlled, as defined in the procedures contained in Exhibit 1, and the Quality Assurance Department Standards Manual.

12.0 CORRECTIVE ACTION

A. Incident Reports

Incidents which involve actual or potential fatalities, injuries, unplanned release of radioactive or toxic materials, exposure of personnel, or significant property damage will be reported immediately to the project manager and the project radiological engineering manager. Documenting, investigating, operating, and corrective action of such incidents shall be in accordance with project health and safety procedures.

B. Management Corrective Action

Quality deficiencies which warrant management attention or actions will be reported using a management corrective action report (MCAR). Corrective actions will include those actions necessary to minimize or preclude recurrence of the deficiencies.

C. Stop Work

The authority to stop work is an authority given to the quality assurance manager, the environmental, health and safety manager, and the radiological engineering manager. It permits suspension of any activity in the event that, in their respective opinion, the project or any segment of the project is determined to be improperly controlled, or nonconforming, or personnel or the public is endangered. Stop work activities will be directed through the Project Manager.

D. Quality Assurance Audits

Corrective actions resulting from quality assurance audits will focus on the cause of the finding and action to preclude recurrence.

13.0 SITE SECURITY

A Site Security Plan will be developed and implemented to assure the safety and protection of personnel and government property. The Safety Plan will address, as a minimum, controlled entry to facilities and emergency and unusual occurrence reporting.

14.0 QUALITY ASSURANCE RECORDS

The project manager establishes the requirements for collection, storage, maintenance and disposition of project records. Two

categories of quality assurance records will be established, long term and non-permanent.

- A. Long term records are those which meet one or more of the following criteria and will be maintained by BNI and the client (at their discretion) for a period of time both of which will be determined at the start of the project:
 - 1. Of significant value in demonstrating capability for safe operation of equipment, a structure, or facility
 - 2. Of significant value in determining the cause of an accident or malfunction
 - 3. Of significant value in maintaining, reworking, repairing, replacing or modifying equipment, structures, or facilities.
- B. Non-permanent records are those which are required to show evidence that an activity was performed in accordance with the applicable requirements but need not be retained following completion of the project.

15.0 AUDITS

- A. Quality assurance audits within the project and of organizations affiliated with the project will be scheduled and conducted by the quality assurance manager to verify compliance with the QAPP and to determine the effectiveness of the program. Audits will be formally documented and distribution will include, the President, BNI; the BNI Manager of Quality Assurance, the Vice President and Manager of the Oak Ridge Office and managers responsible for the CEER, Mayaguez Project.
- B. Audit plan and schedule will be prepared and maintained by the Quality Assurance Manager and coordinated with the Project Manager.

16.0 QUALITY ASSURANCE PROGRAM REVIEW

Management will be routinely advised of the status and effectiveness of project quality assurance activities through scheduled monthly quality assurance management review meetings. These meetings will be chaired by the quality assurance manager and will be attended by the project manager, key project personnel, and Oak Ridge departmental managers at their discretion.

Exhibit A
MATRIX - IMPLEMENTING PROCEDURES

| ANSI N402-1976 QA PROGRAM REQUIREMENTS SECTION NO: | PROJECT QUALITY ASSURANCE PROGRAM PLAN SECTION NO: | IMPLEMENTING PROCEDURES/DOCUMENTS |
|--|---|--|
| 1. INTRODUCTION | 1.0 INTRODUCTION 1.1 Purpose 1.2 Objective 1.3 Policy 1.4 Program Implementation | |
| 2. PROGRAM REQUIREMENTS | 2.0 ORGANIZATION | PROJECT MANAGEMENT PLAN, SECTION II |
| 2.1 Responsibility | 2.1 Project Team Responsibility | |
| 2.2 Organization | | |
| 2.3 Documentation | 3.0 DOCUMENTATION 3.1 Safety Related Items 3.2 Quality Assurance Assessment 3.3 Quality Action Plans 3.4 Safety Assessment 3.5 Documentation | FUSRAP PI 5.6.1 QA ASSESSMENTS FUSRAP PI 5.6.1 QA ASSESSMENTS FUSRAP PI 5.7.1 QUALITY ACTION PLAN DOE ORDER OR 5481.1B dated 5/23/84 PI-18967-MN-1, COMMUNICATIONS PROJECT DATA BASE AND RECORDS MANAGEMENT |
| 2.4 Design Control | 4.0 DESIGN CONTROL | NO DESIGN ANTICIPATED. IF NECESSARY, ENG'G DEPARTMENT PROCEDURES |
| 2.5 Procurement Control | 5.0 PROCUREMENT CONTROL | PROJECT PROCUREMENT PROCEDURES |

| ANSI N402-1976 QA PROGRAM REQUIREMENTS SECTION NO: | PROJECT QUALITY ASSURANCE PROGRAM PLAN: SECTION NO: | IMPLEMENTING PROCEDURES/DOCUMENTS |
|--|---|---|
| 2.6 Document Control | 6.0 DOCUMENT CONTROL 6.1 Document Control Center | PI-18967-MN-1, COMMUNICATIONS PROJECT DATABASE AND RECORDS MANAGEMENT PLAN FUSRAP FQCP-3, DESIGN DOCUMENT CONTROL FUSRAP FQCP-9, DOCUMENTATION AND RECORDS CONTROL |
| 2.7 Material Control | 7.0 MATERIAL CONTROL | FUSRAP FQCP-5 FIELD HANDLING, PACKAGING, TRANSPORTATION, SPECIAL PROCESS AND TEST CONTROL PI 300G01, PROVISIONS FOR STORAGE AND STOCKPILE OF MATERIAL PI 300G03, REMOVE AND PACKAGE CONTROL MATERIAL PI 300G04, REMOVE AND PACKAGE Co60 SOURCE FOR SHIPMENT PI 300G05, SHIP Co60 SOURCE AND CONTROL MATERIALS PI 300G10, PROCESS L-77 REACTOR FOR SHIPMENT PI 300G30, OPERATE DECONTAMINATION AND WASTE PACKAGING OPERATIONS (INCLUDES MOVEMENT OF PACKAGES TO STORAGE AND SHIPMENT FOR LOADING) |
| 2.8 Process Control | 8.0 PROCESS CONTROL 8.1 Work Procedures | PROJECT WORK PLAN PROJECT CHARACTERIZATION PLAN PROJECT SITE RELEASE PLAN PROJECT MANAGEMENT PLAN SECTION VIII |
| | 8.2 Health and Safety | PROJECT HEALTH AND SAFETY PLAN PROJECT PERMITTING PLAN PROJECT SURVEILLANCE & MAINTENANCE PLAN |

ANSI N402-1976
QA PROGRAM REQUIREMENTS
SECTION NO:

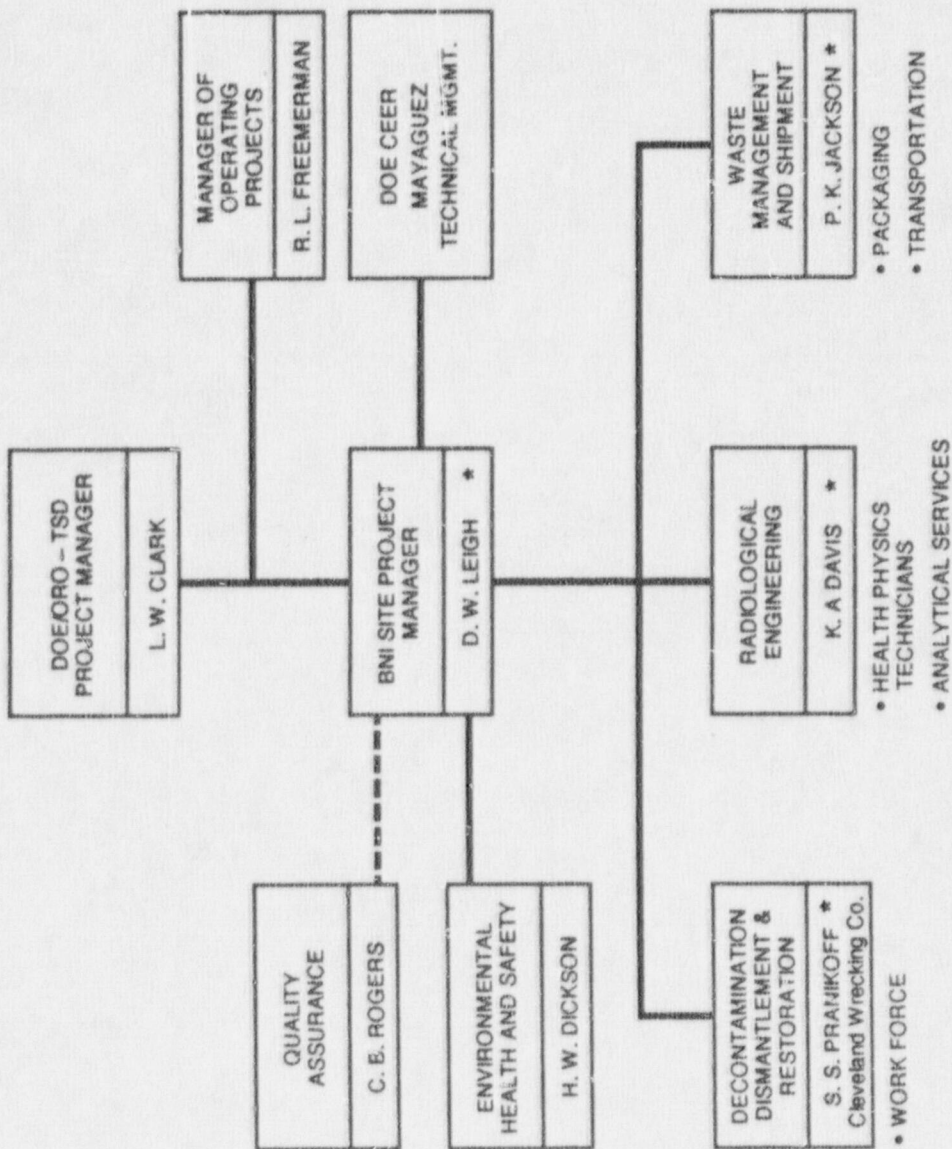
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PROGRAM PLAN:
SECTION NO:

IMPLEMENTING
PROCEDURES/DOCUMENTS

| | | |
|---|---|--|
| PROJECT ENVIRONMENTAL, HEALTH AND SAFETY PROCEDURES | | |
| PI-18967-HS-1 | MEDICAL SURVEILLANCE | |
| PI-18967-HS-2 | RESPIRATORY PROTECTION | |
| PI-18967-HS-3 | CONTAMINATION CONTROL | |
| PI-18967-HS-4 | PERSONNEL EXPOSURE CONTROL | |
| PI-18967-HS-5 | RADIATION AND CONTAMINATION SURVEY | |
| PI-18967-HS-6 | GENERAL SAFETY AND HYGIENE | |
| PI-18967-HS-7 | TRAINING | |
| PI-18967-HS-7 TRAINING | | |
| FUSRAP FQCP-2, | INDOCTRINATION AND TRAINING | |
| FUSRAP FQCP-6, | INSPECTION, EXAMINATION, AND TEST CONTROL | |
| FUSRAP FQCP-8, | CONTROL OF MEASURING AND TEST EQUIPMENT | |
| EDP-4.61, | NONCONFORMANCE REPORTS | |
| FUSRAP FQCP-7, | CONTROL OF DISCREPANT AND NONCONFORMING ITEMS | |
| BNI QA MANUAL, | SECTION VII, PART 6.0 | |
| 8.3 | Indoctrination and Training | |
| 9.0 | INSPECTIONS AND TESTS | |
| 10.0 | CONTROL OF MEASURING AND TEST CONTROL | |
| 2.9 | Inspection | |
| 2.10 | Test Control | |
| 2.11 | Control of Measuring and Test Equipment | |
| 2.12 | Nonconforming Material and Parts | |
| 2.13 | Corrective Action | |
| 11.0 | NONCONFORMANCE CONTROL | |
| 12.0 | CORRECTIVE ACTION | |

| ANSI N402-1976 QA PROGRAM REQUIREMENTS SECTION NO: | PROJECT QUALITY ASSURANCE PROGRAM PLAN: SECTION NO: | IMPLEMENTING PROCEDURES/DOCUMENTS |
|--|---|--|
| 2.14 Experimental Equipment -(Not Applicable) | | |
| 2.15 Quality Assura- nce Records | 13.0 SITE SECURITY | PROJECT SITE SECURITY PLAN |
| 2.16 Audits | 14.0 QUALITY ASSURANCE RECORDS | PROJECT DATA BASE AND RECORDS MANAGEMENT FUSRAP FQCP-9, DOCUMENTATION AND RECORDS CONTROL |
| 2.17 Existing Facilities (Not Applicable) | 15.0 AUDITS | BNI QA MANUAL, SECTION VIII |
| | 16.0 QUALITY ASSURANCE PROGRAM REVIEW | BNI QA MANUAL SECTION VII BNI QA STANDARDS MANUAL SECTION 2 |

Exhibit B CEER MAYAGUEZ PROJECT ORGANIZATION CHART



* KEY PERSONNEL