

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
REGION I/

Report No. 99900711/80-02

Program No. 51400

Company: Leckenby Incorporated  
2745 11th Southwest  
Seattle, Washington 98124

Inspection Conducted: August 18-21, 1980

Inspector:

V. H. Hunter  
V. H. Hunter, Contractor Inspector  
Components Section I  
Vendor Inspection Branch

9/16/80  
Date

Approved by:

D. E. Whitesell  
D. E. Whitesell, Chief  
Components Section I  
Vendor Inspection Branch

9/16/80  
Date

Summary

Inspection on August 18-21, 1980 (99900711/80-02)

Areas Inspected: Implementation of 10 CFR 50 appendix B criteria, applicable codes and standards; including general activities; action on previous findings; QA manual review, control for special processes. The inspection involved twenty-eight (28) inspector hours on site.

Results: In the four (4) areas inspected there were no apparent deviations or unresolved items identified.

DETAILS SECTIONA. Principal Persons Contacted

B. E. Weeks, Chairman  
A. E. Kunzler, President  
P. D. Moore, Quality Assurance Manager  
R. D. Pittsenbarger, Chief Engineer  
J. A. Smistad, Production Manager  
J. W. Bowman, Manufacturing Supervisor  
J. E. Weedman, Quality Control Supervisor  
S. E. Templin, Quality Assurance Technician  
J. Strothers, Quality Assurance Technician

All of the above attended the exit interview meeting.

B. General Activities

Leckenby Incorporated is a non-ASME fabrication shop employing 212 technical and administrative personnel. The facility covers approximately 28,000 square feet of office space and several hundred thousand square feet of fabrication facilities.

Leckenby has fabricated such nuclear components as:

1. Reactor shield walls
2. Pipe whip restraints
3. "Wagon Wheel" pipe rupture restraints
4. Spray pond pipe supports
5. Sacrificial shield wall
6. High density poison spent fuel storage racks

The above types of components have been installed in approximately thirteen (13) commercial nuclear power plants. However the current work load consists of spent fuel racks for the Dresden and Zion plants which amounts to 10% of the present work load.

C. Action on Previous Inspection Findings

1. (Closed) Deviations (Items A-1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H, 13.H, and B-1.H and 2.H. Notice of Deviation, Inspection Report No. 80-01): It was verified that the above referenced deviations

concerned products that have been shipped to customers and contracts terminated. However, it was further determined that corrective actions are being requested by the customers on a case by case basis. Leckenby corporate officers have instituted the following actions to prevent recurrence of the conditions that caused the noted deviations;

- a. Consultants (Olympic Engineering) has been contracted to review the QA program and assist in implementing the required changes.
- b. The Leckenby President has decreed that all personnel within the company shall be informed and shall comply with the requirements.
- c. All contractual and code requirements were re-reviewed and contract changes obtained as necessary.
- d. The Leckenby President has conducted training sessions to insure that all personnel are aware of managements commitment to the QA program.
- e. The Leckenby QA Manager has generated and implemented checklists and procedures for all activities affecting quality.
- f. The Leckenby President originated and had all affected personnel sign the following statement: "It is Leckenby Company's policy to provide accurate documentation sufficient to establish that the quality requirements of a contract have been satisfactorily accomplished throughout the course of the contract." No Leckenby Company employee shall ever falsify a quality document or cause any other person to falsify a quality document.

No Leckenby Company employee shall sign, initial, stamp or in any other manner indicate on a quality document that inspection activities were performed by anyone other than the person who performed the activities.

Any violations of this policy shall be immediately reported to the Leckenby Company Quality Assurance Manager with a copy of the Chief Engineer.

Any violation of this policy shall be cause for immediate discharge."

- g. All Corporate officers have decreed that the Quality Assurance Program shall be implemented and audited to insure continued compliance.

2. (Closed) Deviations (Items A.10, 11, and 12, Notice of Deviation, Inspection Report No. 80-01): It was verified that all NDE inspectors qualification folders were reviewed and re-examinations given where needed.
3. (Closed) Deviation (Item A.14, Notice of Deviation, Inspection Report No. 80-01): QA Manual not submitted to customer for approval; it was verified that the QA Manual had been revised and submitted for customer approval.
4. (Closed) Deviation (Item A.15, Notice of Deviation, Inspection Report No. 80-01): Rejected material not identified; it was verified that all responsible personnel were retrained on May 16, 1980 and that a weekly surveillance of the reject material area has been implemented.
5. (Closed) Deviation (Item A.16, Notice of Deviation, Inspection Report No. 80-01): Inspection operations by-passed; it was verified that procedure No. 6130 and checklist was developed and implemented to preclude this type of error.
6. (Closed) Deviations (Items A.17 and A.18, Notice of Deviation, Inspection Report 80-01): Welding without an approved procedure and no verification of weld wire travel speeds; it was verified that procedure 614.0 and checklist was developed and implemented to control these functions. In addition, all affected personnel were trained in the use of the procedure and checklist on June 18, 1980.
7. (Closed) Deviation (Item C, Notice of Deviation, Inspection Report No. 80-01): QA Manual did not provide for a system to translate customer design criteria into related drawings and procedures; it was verified that the QA Manual had been revised to include procedure No. 330.0 dated July 7, 1980 for the purpose of translating customer design criteria, into in-house drawings, procedures and/or purchase documents.

In addition, project manuals were developed for each in-house project that included;

- a. QA manual
- b. QA requirements
- c. Drawings
- d. Weld procedures
- e. Inspection procedures
- f. Log for special instructions.

D. QA Manual Review

1. Objectives

The objectives of this area of the inspection were to ascertain whether the Leckenby quality assurance program is documented by written policies, procedures and/or instructions and the safety related functions are being performed in accordance with those written policies, procedures, and instructions, in a manner which is consistent with its contract commitments, and the NRC rules and regulations.

2. Method of Accomplishment

The foregoing objectives were accomplished by review of the following:

- a. Review of contract no. 6938; and the Design Drawings and Technical Specifications for contract 6739 to ascertain the quality requirements imposed on Leckenby by the customer.
- b. The Leckenby Quality Assurance Manual, Revision 7, dated August 8-21, 1980 to verify that the program is documented by written policies, procedures or instructions and provides for systems to control the quality activities associated with the design, manufacture, test and inspections of nuclear components, to the extent consistent with their importance to safety. Also to ascertain whether the company has expressed a quality assurance policy, and provided the QA staff with sufficient authority to effectively achieve its assigned responsibilities.
- c. Review of the organization charts to ascertain whether the QA organization was structured within the Company in a manner which provides the following:
  - (1) Access to a level of management who has the authority to enforce positive and effective implementation of the QA program within the across the several lines of departmental responsibilities and authority.
  - (2) The QA staff has been provided with organizational independence and freedom to identify quality problems, to initiate and/or recommend resolution, to verify that corrective actions have been properly implemented, and have been vested with authority to stop work until the problem is appropriately dispositioned.
- d. Review of the several sections of the QAM to ascertain whether procedures were required, developed, and were available at the point of use, to effectively control the quality activities necessary to design, manufacture, inspect, and test nuclear

components, or items, in a manner consistent with the NRC rules and regulations, and contract requirements and the company's commitments.

- e. Discussions with the company's cognizant personnel.

### 3. Findings

- a. The contract documents specified that the Leckenby Company were to provide a QA program in compliance with Appendix B to 10 CFR 50, and ANSI N45.2.
- b. The documents reviewed demonstrated that the QA staff had access to a level of management which has the authority to effectively implement the QA program, across departmental lines of responsibility and authority. It also has the independence and freedom from pressures of costs and scheduling, to identify quality problems, initiate, or recommend resolution.
- c. There were no apparent deviations or unresolved items identified.

## E. Control of Special Processes

### 1. Objectives

The objectives of this area of the inspection were to verify that special processes such as welding and NDE, are controlled in a manner consistent with procedures used by the vendor and that they meet applicable requirements of the contract and NRC rules and regulations. Also, verify that NDE and welding was being performed by qualified personnel in accordance with approved procedures and the vendor's quality assurance program.

### 2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of Section 9.0 of the ASME accepted QA Manual, revision 7, titled "Control of Special Processes."
- b. Review of the following documents:
  - (1) Rack mandrel test procedure No. 673-PA, revision 1.
  - (2) Procedures for minimum weld visual quality standards No. S6738-P8 and 6739-P8, revision 7.
  - (3) Material specification procedure No. 6738, revision 3.

- (4) Magnetic Particle procedure No. QCP 9.2, revision 2.
  - (5) Liquid penetrant procedure No. QCP-9.3, revision 4.
  - (6) Weld procedure No. 101, revision 0.
  - (7) Weld procedure No. 281-6739, revision 0.
  - (8) Weld procedure No. 1002-6738, revision 2.
  - (9) Weld repair procedure No. 1002-6738, revision 2.
  - (10) Plasma arc cutting procedure No. 1004, revision 0.
  - (11) Personnel qualification records for seven (7) NDE technicians.
  - (12) Qualification records for six (6) welders.
- c. Observed in-process welding of two (2) tube clusters for job No. 6738 in accordance with drawing No. 14, revision 1 and QCP 10.3.

3. Inspection Findings

- a. There were no apparent deviations or unresolved items identified.
- b. It was observed that the vendor had accomplished the following:
  - (1) Complete review of all NDE and welding procedures.
  - (2) Requalification of NDE personnel.
  - (3) Complete review and update of all NDE personnel records.
  - (4) Numerous training sessions for all affected personnel.

F. Exit Interview

The inspector met with management representatives at the conclusion of the inspection on August 18-21, 1980. The inspector summarized the scope and findings identified during the inspection. Management acknowledged the inspector's comments regarding the scope and findings as presented.