

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

Report No. 99900026/80-01

Program No. 51300

Company: Swepeco Tube Corporation  
One Clifton Boulevard  
Clifton, New Jersey 07015

Inspection Conducted: April 14-18, 1980

Inspector: *D M Hunnicutt* 4/28/80  
*for* R. E. Oller, Contractor Inspector Date  
Components Section II  
Vendor Inspection Branch

Approved by: *D M Hunnicutt* 4/28/80  
D. M. Hunnicutt, Chief Date  
Components Section II  
Vendor Inspection Branch

Summary

Inspection on April 14-18, 1980 (99900026/80-01)

Areas Inspected: Implementation of 10 CFR 50, Appendix B criteria, other NRC requirements and applicable codes and standards including: action on previous inspection findings, nonconformances and corrective action, internal audits, equipment calibration and NRC IE Bulletin No. 79-03A dated April 4, 1980. The inspection involved twenty-nine (29) inspector-hours on site.

Results: In the five (5) areas inspected, no deviations or unresolved items were identified.

Production Devoted to Nuclear Products: Approximately thirteen per cent of Swepeco's production activity was devoted to nuclear components. No in-process welding or fabrication of piping or fittings for nuclear components was observed during the inspection.

8007160 157

DETAILS SECTIONA. Persons Contacted

- C. Annunziata, Welding Engineer
- \*V. Battistuz, QA Manager
- W. Contrini, Level III NDE Examiner
- V. Harris, Documentation and Materials Coordinator
- O. Olson, QC Coordinator
- \*A. Ridella, Executive Vice President
- \*J. Seme, Vice President of Engineering

\*Attended the exit meeting.

B. Action on Previous Inspection Findings

1. (Closed) Deviation (Report No. 79-02): Failure to prepare and qualify new welding procedure specifications (WPSs) to replace WPS H-304-HN, Revision 4, as committed to in Swepeco Tube Corporation's letter dated June 12, 1979. The NRC inspector found that Swepeco has developed, prepared and qualified five (5) machine WPSs to replace WPS H-304-HN formerly used in machine welding A-312/SA-312 piping. In addition, Swepeco has prepared and qualified: five (5) additional WPSs for use in machine welding of A-358/SA-358 piping; two (2) WPSs for machine welding of austenitic stainless steel fittings with filler metal added, and two (2) manual WPSs for welding austenitic stainless steel with filler metal added. Thirteen (13) of the WPSs employs the gas tungsten arc welding process and one (1) employs the machine submerged arc process. All WPSs were prepared and qualified in accordance with the ASME Code Section IX requirements.

C. Nonconformances and Corrective Action1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME requirements.

- a. A written system has been established to assure that nonconformances are controlled and corrective action is taken.
- b. Documented procedures or instructions are implemented for identification, documentation, segregation and disposition of nonconforming materials parts or components, and notification to affected organizations.

- c. Nonconforming items are reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures.
- d. Conditions adverse to quality are promptly identified and corrected.
- e. The causes of significant conditions adverse to quality are determined and corrected to preclude repetition.
- f. The condition adverse to quality, the cause and the corrective action are documented and reported to appropriate levels of management.

2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of QA Manual Sections: No. 15 "Nonconformance" and No. 16 "Corrective Action."
- b. Review of the following record documents for Nuclear Orders M-4520-9, M-4792-0, M-4540-9, and M-4265-9, as applicable:
  - (1) Nonconformance Reports
  - (2) QC Inspection Checklists
  - (3) Radiographic Inspection Reports
  - (4) Appraisal - Rejection slips
  - (5) Nonconformance Report Log
  - (6) Master Log for Hold Tickets
- c. Review of records of six (6) Material Review Board meetings during the period of December, 1978 through March, 1980.
- d. Discussions with cognizant personnel.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

D. Internal Audits

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME code requirements:

- a. A written system has been established to assure that internal audits are performed and controlled in accordance with applicable codes to verify compliance with all aspects of the QA program.
- b. Planned and periodic internal audits are performed in accordance with written procedures or checklists by qualified personnel not having direct responsibilities in the areas being audited.
- c. Audit results are documented and reviewed by management having responsibility in the area audited.
- d. Followup action, including reaudit of deficient areas, is taken where indicated.

2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of QA Manual Section 18 "Management Audits."
- b. Review of Swepeco's generic procedure "Management Audit."
- c. Review of records of Management Audits performed on February 7-11, 1980 and July 25-27, 1979, consisting of checklists and reports.
- d. Review of Corrective Action Reports and Management Audit Follow-up Reports common to deficiencies found during the February, 1980 and July, 1979 internal management audits of the QA program implementation.
- e. Discussions with cognizant personnel.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

E. Equipment Calibration

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME Code Requirements:



- a. A written system has been established to assure that equipment calibration is performed and controlled in accordance with applicable codes.
- b. A written procedure has been developed and approved which contains provisions to assure that tools, gages, instruments and other inspection, measuring and testing equipment and devices used in activities affecting quality, are of the proper range, type and accuracy, and are calibrated and properly adjusted at specified periods or use intervals.
- c. The devices are identified in the documented system and/or procedure and are calibrated in accordance with the system and procedure.
- d. The calibration is performed against certified measurement standards which have known relationship to National Standards, where such standards exist.
- e. The control measures include provisions for test equipment identification and calibration status by marking, or on records traceable to the equipment.
- f. The manufacturer determines and implements corrective action for materials and items checked using measurement or testing equipment later found to be out of calibration.

2. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of QA Manual Section 12 "Control of Measuring and Test Equipment."
- b. Review of procedure QA-3007, Revision 2 "Swepco Quality Equipment Calibration Procedure."
- c. Observation of the calibration status of the following types of devices located in the shop and laboratory:
  - (1) Outside and Inside Micrometers
  - (2) Deadweight Tester Set
  - (3) Radiographic Density Step Tablet Film Strip
  - (4) Radiographic Densitometer
  - (5) Hydrostatic Test Pressure Gages

- (6) Heat Treatment Furnace Indicator-Controllers and Multi-point Temperature Recorders for Furnaces No. 11 and No. 12.
  - (7) Ammeters and voltmeters on four (4) Gas Tungsten Arc Machine Welding Stations and on one (1) Submerged Arc Machine Welding Station.
  - (8) Ultrasonic Test Flaw Detector
  - (9) Ultrasonic Test Strip Chart Recorder
  - (10) Ultrasonic Thickness Measuring Instrument
  - (11) Tensile Tester
  - (12) Extensometer Measurement Device
  - (13) Rockwell Hardness Tester
  - (14) Two (2) Master Gage Block Sets
- d. Review of the records of the Temperature Uniformity Survey performed in November, 1972, for furnaces No. 11 and No. 12.
  - e. Review of Swepeco records of calibration and subcontractor's certificates of calibration, where applicable, for the above devices.
  - f. Review of the Master Log calibration recall record for the above devices.
  - g. Discussions with cognizant personnel.

### 3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

## F. NRC IE Bulletin No. 79-03A Dated April 4, 1980

### 1. Introduction

Prior to this routine inspection of the Swepeco QA program implementation, the NRC IE Bulletin No. 79-03A, dated April 4, 1980, was issued. This bulletin dealt with center-line lack of weld penetration (CLP) in SA-312, type 304 pipe furnished for safety related piping systems. Page one of the bulletin also referenced a piece of pipe, manufactured by Swepeco, which was found to contain CLP and was not properly reported

on by the responsible licensee. During the inspection at the Swepeco plant, Swepeco management indicated they were not informed about the incident of CLP in their pipe. They also indicated they needed specific information about the incident to determine their position with respect to NRC defect reporting requirements.

## 2. Objectives

The objectives of this area of the inspection were to discuss the matter with Swepeco management and secure specific information with respect to the bulletin which referenced Swepeco pipe with the CLP defect.

## 3. Method of Accomplishment

The preceding objectives were accomplished by:

- a. Review of NRC IE Bulletin No. 79-03A.
- b. Discussions with cognizant Swepeco management personnel.
- c. Telephone conference on 4/17/80, among the NRC Inspector, Swepeco management personnel, and Mr. D. M. Hunnicutt, NRC Region IV, VIB.

## 4. Findings

- a. Within this area of the inspection, no deviations or unresolved items were identified.
- b. Other findings
  - (1) Mr. D. M. Hunnicutt provided the following information from NRC IE Region II Inspection Report No. 50-413/414/80-02. CLP was found in a piece of Swepeco SA-312, Type 304 pipe by radiography at Duke Power Catawba Nuclear Station Units 1 and 2. The affected pipe was 8" diameter, schedule 40, for use in the containment spray system.
  - (2) Two (2) pages of NRC IE Region II Inspection Report No. 50-413/414/80-02 containing the findings, were mailed to Swepeco management on 4/17/80 by Mr. D. M. Hunnicutt.
  - (3) During the telephone conference, Mr. J. Seme asked if it was necessary that Swepeco report to the NRC on this matter. Mr. Hunnicutt indicated it was not necessary at this time.

G. Exit Interview

1. The inspector met with management representatives denoted in paragraph A above, at the conclusion of the inspection April 18, 1980.
2. The following subjects were discussed:
  - a. Areas inspected.
  - b. Status of corrective and preventive action for the previously identified deviations.
  - c. The absence of deviations resulting from this inspection.
  - d. The NRC IE Bulletin No. 79-03A.
3. The manufacturer's representative's questions related to clarification of the above items.