VENDOR INSPECTION REPORT

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

Report No. 99900390/80-01 Program No. 51300

Company: Irwin Steel Fabricators
1545 Whipple Road S. W.
Canton, Ohio 44708

Inspection Conducted: May 13-16, 1980

Inspectors: Ross L. Brown 5/23/80
Ross L. Brown, Contractor Inspector Date
Components Section I, VIB

Approved by: D. E. Whitesell 5/23/80
D. E. Whitesell, Chief Date
Components Section I, VIB

Summary

Inspection on May 13-16, 1980 (99900390/80-01)

Areas Inspected: Implementation of 10 CFR 50, Appendix B including control of non-conformances and corrective action, weld control, audits and action on previous inspection findings. The inspection involved twenty six (26) inspector hours on-site by one NRC inspector.

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

Detail Section

A. Persons Contacted

*E. J. Jaquay, Quality Assurance Manager
*G. Knierien, Quality Assurance Engineer

*Attended Exit Interview

B. Action on Previous Inspection Findings

(Closed) Unresolved Item (Report No. 79-01). The inspector verified that the certification of examination form has been revised and requires the qualified technician to include the approved procedure number and addenda prior to their signature.

C. Control of Nonconformances and Corrective Action

1. Objectives

The objectives of this area of the inspection were to verify that procedures have been established and implemented for:

a. Disposition of nonconformances that provide for:

(1) The control of nonconforming materials, parts, or components to prevent their inadvertent use or installation.

(2) Identification, documentation, segregation, and disposition of nonconforming items and notification to affected organizations.

b. Corrective Action that provides for:

(1) Review and evaluation of conditions adverse to quality to determine the cause, extent, and measures needed to correct and prevent recurrence.

(2) Reporting these conditions and the corrective action to management.

(3) Assuring that corrective action is implemented and maintained.

2. Method of Accomplishment

The above objectives were accomplished by a review of the following documents.

a. Irwin Steel Fabricators (ISF) Nuclear Quality Assurance Program, Revision 8, date May 5, 1978 (QAP) Paragraph 15.0, "Nonconformities and Corrective Action."

b. Inspection Reports for Nonconforming Material (IRNM) Numerical Log.

c. IRNM - No.'s 300 through 321.

3. Findings

No deviations or unresolved items were identified in this area of the inspection. The following information was obtained.

a. The QAP defines nonconformities, assigns the responsibility for the identification, disposition, approvals, and distribution of IRNM's.

The procedure also requires the Quality Assurance Manager (QAM) to initiate corrective action to preclude repetition, and the QAM shall periodically review with the General Manager, all corrective actions to determine if possible trends can be noted that would require additional preventive measures.

b. The Numerical Log lists IRNM numbers and appropriate shop order numbers.

c. The IRNM reports identifies the discrepant item and describes the nonconformity. The reports also specifies the deficiency correction and action to prevent recurrence.

The General Manager initialed many of the reports, signifying he has reviewed the significant discrepancies and concurs with the disposition and more especially the described preventive action to be taken as assigned by the QAM.

D. Weld Control

1. Objectives

The objectives of this area of the inspection were to verify that:

a. Welding Material Control

(1) The manufacturer has established procedures and instructions for purchasing, receiving, storing, disbursing, and handling of welding materials including welding electrodes, filler material, consumable inserts, fluxes and gases.

(2) The welding materials are clearly identified at all times in accordance with approved procedures.

(3) The ASME code required tests are performed on each lot of covered, flux cored or bare electrodes, rod, or wire, for each heat of consumable inserts and for each combination or bare electrodes and dry blend of flux mix to be used for welding.

(4) The welding material storage procedures contain requirements for environmental (moisture) control.

(5) The disbursement of welding materials is controlled in accordance with approved procedures.

b. Weld Heat Treatment

(1) The approved procedures are available for weld joint preheating when required by a welding procedure specification.

(2) Approved procedures are available for the conduct of postweld heat treatment (PWHT) and that the fabricator has a system capable of meeting the heating and cooling rates, metal temperature, temperature uniformity and control limits specified in Section III of the ASME code.

(3) The PWHT temperature and holding time is specified, is adhered to and is consistent with ASME code requirements based on the material type and wall thickness.

(4) Measures are taken to avoid sensitization of austenitic stainless steel and high-nickel alloys.

2. Method of Accomplishment

The above objectives were accomplished by a review of the following documents:

a. QAP - Paragraph 8.0 "Welding Quality Assurance."

b. Standard Operating Procedure SOP No. 12, Revision 7, "Welding Material Control for Manufacturing Under ASME Section III Division 1 and Division 2."

c. Six (6) Certified Welding Material Control Cards.

d. Three (3) Material Test Reports (MTR).

e. One Wire-Flux Combination qualification report.

f. QAP - Paragraph 9.0 "Heat Treating."

g. One post weld heat treating (PWHT) procedure.

h. Two (2) PWHT furnace temperature charts.

i. Four (4) shop orders (traveler).

3. Findings

No deviations from commitment or unresolved items were identified. The inspector obtained the following information in this area.

a. QAP - Paragraph 8.0 states in part, "all welding material shall be controlled in strict accordance with ISF's SOP No. 12 Rev. 7. . . ."

b. SOP No. 12 defines a procedure to assure proper receiving, inspection, storage, handling, and dispensing of all welding material through the point of actual use.

c. The dispensing of all welding materials is controlled by the welding supervisor by issuing a request (via a Certified Welding Material Control Card) for the appropriate welding material.

The control card identifies as a minimum; the assigned welder, electrode size and type, electrode heat and/or lot number, amount dispensed and returned (if applicable) and date and time of material issue and return.

d. The MTR's includes the chemical characteristics and physical properties (including Charpy "V" Notch, Drop Weights and ferrite percentage as appropriate).

The MTR's includes the suppliers ASME - Certificate number and expiration date.

e. ISF performs the majority of the wire-flux combination qualification and certification of weld material used in their shop.

f. QAP - Paragraph 9.0 requires all PWHT to be performed in accordance with an approved written procedure that includes as a minimum: Handling, protection, loading, thermocouple location, time, temperature, heating and cooling rate, and holding time at temperature.

g. The travelers identifies if and when a PWHT is required.

E. Audits

1. Objectives

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

a. A written system has been established to assure that audits are performed and controlled in accordance with applicable codes to verify compliance with all auditable aspects of the QA program.

b. Planned and periodic 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. Methods of Accomplishment

The preceding objectives were accomplished by:

a. Review of QAP - Paragraph 16.0 "Auditing the Quality Assurance Program.

b. Review of the audit checklist.

c. Review of two (2) internal audit reports.

d. Review of audit report distribution list.

e. Review of three (3) follow-up audit reports.

3. Findings

No deviations or unresolved items were identified. The following information was verified:

a. QAP - Paragraph 16.0 requires a periodic audit of the quality program in accordance with a prepared checklist by qualified personnel not having responsibility in the area(s) being audited. It also establishes the audit schedule.

b. The audit reports dated August 1979 and February 1980 were signed by the responsible auditors, QA Supervisor and General Manager.

The ISF management stated the audit report form will be revised to clearly state the areas of the program audited by each auditor.

c. The follow-up audits of identified deficiencies were performed by the assigned auditors. The reports were signed by and distributed to the management personnel as the original report.

F. Exit Interview

The inspector conducted an exit meeting with the Irwin Steel Fabricators management representative at the conclusion of the inspection. Those persons indicated by an asterisk in Paragraph A. above were in attendance. In addition, the following were present:

P. T. Irwin, President
J. C. McArdle, General Manager

The inspector discussed the scope of the inspection and the details of the finding identified during the inspection.

The ISF management's comments were for clarification only.