

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

Report No. 99900390/80-02

Program No. 51300

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

Inspection conducted: November 18-21, 1980

Inspectors: *J. W. Sutton for* 12-5-80
Ross L. Brown, Contractor Inspector Date
Components Section I, VIB

Approved by: *J. W. Sutton for* 12-5-80
D. E. Whitesely, Chief Date
Components Section I, VIB

Summary

Inspection on November 18-21, 1980 (99900390/80-02)

Areas Inspected: Implementation of 10 CFR 50, Appendix B including training, welding procedure specifications and welder qualifications. The inspection involved twenty six (26) inspection hour on site by one (1) NRC inspector.

Results: In the three (3) areas inspected there were no deviations from commitments identified, however, the following two (2) unresolved items were identified.

Unresolved Items: The vendor management organization is undergoing major changes. (see Details Section Paragraph B.2)

Procedures to implement the personnel training does not specifically include all persons performing activities, affecting quality. (see Details Section, Paragraph E.3.c)

DETAILS

A. Persons Contacted

- *K. L. Hladek, Vice President of Operations
- *E. J. Jaquay, Quality Assurance Manager
- *G. Knierien, Quality Control Supervisor
- R. Lower, Plant Superintendent

*Attended Exit Interview

B. General Vendor Information

1. Irwin Steel Fabricators (ISF) has thirty two (32) shop orders for ASME Class 2 and MC assemblies extending through December 1982.
2. The inspector was informed that the ISF management organization is undergoing major changes, the full extent of the reorganization has not been announced, however, the acting plant management stated that ISF intends to have the new management in place prior to the expiration of their present ASME certificates in May 1981. Also ISF will request an ASME recertification survey in April 1981.

The inspector stated that this condition will be considered as an unresolved item pending the reorganization and will be inspected during a subsequent NRC inspection.

C. Training1. Objectives

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

- a. Formal indoctrination and training or retraining programs for new employees and reassigned employees.
- b. Training of inspection personnel (except NDE) that provide for:
 - (1) Indoctrination with the technical objectives of the project the codes and standards to be used, and the quality assurance elements that are to be employed.
 - (2) On the job participation through actual performance of processes, tests, examinations and inspections.
 - (3) Retraining and recertification if evaluation of performance shows individual capabilities are not in accordance with specified qualifications.

- (4) Records of training received by each person including applicable certification of qualification and results of tests.
 - c. Training of audit personnel, including technical specialists, that provide for:
 - (1) Orientation with applicable standards and procedures.
 - (2) General training in audit performance including fundamentals, objectives, characteristics, organization, performance and results.
 - (3) Specialized training in methods of examining, questioning, evaluating, documenting specific audit items, and methods of closing out audit findings.
 - (4) On the job training, guidance, and counseling under direct supervision of an experienced, qualified auditor to include planning and performing audits; reporting and followup action; and review and study of codes, standards, procedures, instructions, and other documents related to QA and QA program auditing.
 - d. Training programs for other personnel performing quality related activities that include:
 - (1) A description of quality assurance material to be presented and method of presentation.
 - (2) Schedules for conducting the training sessions.
 - (3) Identification of individuals by job description or titles or groups required to attend sessions.
 - e. Documentation of attendance and retention of other applicable records for all formalized training accomplished.
2. Method of Accomplishment

The above objectives were accomplished by a review of the following documents and discussion with cognizant personnel:

- a. ISF Quality Assurance Program Revision 8, dated May 5, 1979 (APP) Paragraph 3.0, "The Quality Assurance Organization, Subparagraph 3.4.
- b. File title "Meetings of Personnel Performing Operations that Affect Quality."

3. Findings

a. The inspection verified the following:

- (1) The QAP requires the General Manager and the Quality Assurance Manager (QAM) to provide an indoctrination or training program for all responsible personnel performing activities affecting quality as necessary to assure that proficiency to perform QA functions and duties are achieved and maintained.

The QAP also requires the QAM to select individual to be used for auditing on the basis of their educational level, prior training and background of work experience.

- (2) The file of meetings of personnel includes a brief description of subjects covered, attendees (generally management and quality department personnel) length of sessions. Their file includes meetings held since 1975 to October 30, 1980.

b. Deviations

No deviations from commitments were identified.

c. Unresolved Item

The vendor did not have procedures to completely implement the indoctrination and training program required by the QAP (except welders and nondestructive examiners) that outlines the procedure for personnel training that includes: Person to receive training, training program, schedule, course requirements, qualification levels, required certification of qualifications and maintenance of proficiency.

This area will be inspected during the next NRC inspection to evaluate the corrective action and its implementation.

D. Weld Control

1. Objectives

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

a. Welding Procedure Specification

- (1) The manufacturer has established procedures or instruction for preparation, qualification approval/certification distribution and revision of welding procedures specifications (WPS).

- (2) The WPS define all essential variables supplementary essential variables and nonessential variables in accordance with the applicable editions of Section IX and III of the ASME Code.
- (3) Each of the above procedures has been qualified in accordance with Section IX and III of the ASME code and that the supporting Procedure Qualification Records (PQR) are on file.
- (4) Any changes or revisions of the WPS essential variable are supported by requalification of the original WPS or a new WPS.
- (5) Any changes in the WPS nonessential variables are properly identified and documented either as revisions to the original WPS or a new WPS.

b. Welder Qualifications

- (1) The manufacturer has established procedures for qualification of welders and welding operators in accordance with Section IX of the ASME Code.
- (2) The manufacturer has a workable system for maintaining a continuous record of the qualification status of all welders and welding operators and that this system is effectively utilized and accurate.

2. Method of Accomplishments

The preceding objectives were accomplished by a detailed review of the following:

- a. QAP Paragraph 8.0 "Welding Quality Assurance."
- b. Standard Operating Procedure (SOP) No. 2, Revision 7 "Welding Procedure and Performance Qualification and Assurance of Welder Identification Symbols."
- c. Procedure Qualification Records (PQR) for ten (10) Welding Procedure Specifications (WPS).
- d. Performance Qualification Test Reports three (3) welders.
- e. Welder Qualification Tickler File.
- f. Two (2) Wire-Flux Combination Certifications.

3. Findings

No deviations or unresolved items were identified in this area of the inspection. The inspector verified the following:

- a. The QAP requires all welding procedures, welders and welding operators qualifications to be in accordance with ISF's, SOP No. 2, Rev. 7.
- b. SOP No. 2, requires for welding procedures and performance qualification to be in accordance with the applicable part(s) of the ASME Code Section III and IX.

The SOP also assign the responsibilities for the activities related to the qualifications.

- c. The PQR covered Shielded Metal Arc Welding (SMAW) and Submerged Arc Welding (SAW) of groove and fillet weld, with and without Post Weld Heat Treatment (PWHT) and test results that included Charpy "V" notch testing at minus -10 and -30 degree F.

The PQR's were in accordance with the code requirements.

- d. The performance qualification test reports included the results of qualification welds performed in accordance the WPS as qualified by the PQRs in D.3.c.

These reports appear to be in accordance with the requirements of the code.

- e. The tickler file is used to maintain a record of the welders use of the procedures for which he is qualified and to assure the maintenance of these qualifications.
- g. The qualifications of the wire-flux combinations was conducted per ASME Section II, Part C. Specification SFA 5.23 and ASME Section III NX2000 and NX2400.

E. Exit Interview

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

- W. E. Daugherty, Purchasing Manager
- G. A. Earhart, Process Engineer

R. W. Krajewski, Project Engineer
L. J. Miller, Contract Administrator
R. Petrovich, Q. A. Department
G. S. Ridolfi, Engineer

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

The vendor was informed that a response to the unresolved items is not required, however, if the report includes any proprietary information they should request it to be deleted.

The ISF management's comments were for clarification only.