

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

REPORT OF LCVIP INSPECTION

Inspection Report No. 99900021/76-01 Docket No. 99900021

Company Name: Pullman Kellogg Company Program No. 44020

Post Office Box 1007

Address: Williamsport, Pennsylvania 17701

Type of Inspection: Routine Announced

NA-4000 (Phase II)

Date(s) of Inspection January 20-22, 1976

Date(s) of Previous Insp. February 12-14, 1975

Lead Inspector: R. E. Oller Date: 1/30/76
R. E. Oller, Contractor Inspector, LCVIP Branch

Accompanying Inspector(s): H. M. Wescott Date: 1/30/76
H. M. Wescott, Contractor Inspector, LCVIP Branch

R. E. Oller for Date: 1/30/76
P. I. Verrios, Contractor Inspector, LCVIP Branch

R. E. Oller for Date: 1/30/76
W. Rutherford, Observer

Date: _____

Date: _____

Reviewed By: D. E. Whitesell (m) Date: 1-30-76
D. E. Whitesell, Section Leader, LCVIP Branch

SUMMARY OF FINDINGS

A. Deviations From Commitments

1. The QA Manual, Issue Number 3, dated September 1, 1975, Section III, "Quality Assurance Program," paragraph 2.1 states, "The QA program as outlined in this manual represents the requirements which will be applied over all fabrication and shop assembly work under the rules of the Code." Paragraph 2.2 states in part, "These requirements establish specific actions to assure compliance."

Contrary to the above, the inspection established that there was evidence in areas inspected that the QA Manual commitments were not being implemented. (Details Section III, paragraphs 2.c.(1), 2.c.(2), 3.c.(1), 3.c.(2) and 3.c.(3))

B. Vendor Action on Previously Identified Enforcement Matters

LCVIP Report Number 99900021/75-01, Deviations From Commitments, Details, (All items are closed).

1. Item 8.b., Marking Procedure (Details, paragraph 3.c.(1)).
2. Item 9.b.(1)(c), Nondestructive Examination Procedure, NDE Qualification Records (Details, paragraph 3.c.(2)).
3. Item 9.b.(1)(e), Low Hydrogen Weld Rod (Details, paragraph 3.c.(3)).
4. Item 9.b.(1)(f), NDE Procedure (Details, paragraph 3.c.(4)).
5. Item 9.b.(1)(g), Welding Procedure (Details, paragraph 3.c.(5)).
6. Item 11.b., Calibration Instruments (Details, paragraph 3.c.(6)).
7. Item 13.b., Audit Procedure (Details, paragraph 3.c.(7)).

C. Status of Previously Reported Unresolved Matters

LCVIP Report Number 99900021/75-01, (All items are closed).

1. Item 2.b., Organization Charts (Details, paragraph 4.c.(1)).
2. Item 3.b.(2), Training and Indoctrination (Details, paragraph 4.c.(2)).
3. Item 5.b., Notification to Subcontractors (Details, paragraph 4.c.(3)).
4. Item 9.b.(1)(a), Visual Examination and Inspection Procedure (Details, paragraph 4.c.(4)).

5. Item 9.b.(1)(b), Radiographic Film Procedure (Details, paragraph 4.c.(5)).
6. Item 9.b.(1)(d), Liquid Penetrant Material (Details, paragraph 4.c.(6)).
7. Item 12.b.(2), Record Storage Procedure (Details, paragraph 4.c.(7)).

D. Other Significant Findings

1. Current Findings

None.

2. Unresolved Matters This Inspection

- (1) Procedures Numbers ES-203 and ES-416 for Job Numbers N-8738, N-8739 and N-8740, were not available in the Project Procedures Book, located at the welding station. The omission was corrected prior to the end of the inspection.

This matter is closed. (Details Section II, paragraph 2.c.)

E. Management Interviews

A post inspection conference was held on January 22, 1976, with the following persons:

M. W. Kellogg Company (MWK)

J. E. Bowes	Plant Manager
E. F. Gerwin	Quality Assurance Manager, Central Staff
W. J. Mitchell	Plant Quality Assurance Manager
J. A. Koch, Jr.	Manufacturing Engineering Manager
J. J. Krommenhok	Production Manager
A. Bair	Nondestructive Examiner-Supervisor
R. T. Walter	Quality Assurance Engineer
F. J. Richards	Welding Engineer
K. A. Swisher	Quality Assurance Supervisor

The following summarizes the items discussed which are identified in the Details Section as follows:

1. The inspection established that there was evidence in the areas inspected that the QA Manual, Issue Number 3, dated September 1, 1975, commitments were not being implemented.

This is considered a deviation. (Details Section III, paragraph 2.c.(1), 2.c.(2), 3.c.(1), 3.c.(2) and 3.c.(3))

2. Procedures ES-203 and ES-416 for Job Numbers N-8738, N-8739 and N-8740 were not available in the Project Procedures Book, located at the welding stations. This omission was corrected prior to the end of the inspection.

The matter is considered resolved. (Details Section II, paragraph 2.c.)

3. The outstanding items identified during the previous NRC inspection are closed. (Details Section I, paragraphs 3 and 4.)

DETAILS SECTION I

(Prepared by R. E. Oller)

1. Additional Persons Contacted

R. T. Walter	Quality Assurance Engineer - Central Staff
T. Daniels	Quality Assurance Auditor - Construction
V. W. Messner	Code Engineer
K. Weiss	Project Engineer
S. T. Venturini	Cutting Supervisor
J. P. Paucke	Layout and Welding Foreman
H. A. Dunlap	Welding Foreman
R. A. Stricker	In-Process QC Instructor

2. General

- a. This inspection was conducted to verify that the M. W. Kellogg Company, Williamsport plant, nuclear pipe fabricating operations were being conducted in accordance with their commitments established in their ASME accepted QA program manual, Issue Number 3, dated September 1, 1975, and the detailed written procedures.
- b. Revision Number 3 of the QA Manual, dated September 1, 1975, was issued for implementation, and the plant was resurveyed on September 9, 1975, by the ASME. Certificates of N stamp authorizations for the "N" symbol and "NPT" symbol were authorized on October 27, 1975. These authorizations expire October 27, 1978.
- c. The name of the company has been officially changed to Pullman Kellogg Company. This includes the Houston, Texas, Division and the Paramount, California, plant.

3. Corrective Action On Outstanding Items, Deviations From Commitments, LCVIP Report Number 99900021/75-01, Report Details, paragraphs 8.b., 9.b.(1)(c), 9.b.(1)(e), 9.b.(1)(f), 9.b.(1)(g), 11.b. and 13.b.

a. Inspection Objectives

The purpose of this inspection was to ascertain whether the MWK Company had implemented corrective actions concerning previously identified enforcement items, in accordance with its commitments as established in its letter dated May 9, 1975, in response to NRC letter and enclosure dated April 9, 1975.

b. Objectives Were Accomplished by:

- (1) Review of Issue Number 3 of the QA Manual.
- (2) Review of records and procedures generated and/or revised subsequent to the NRC inspection in February, 1975.
- (3) Discussions with cognizant personnel.
- (4) Observations in the shop.

c. Findings

- (1) Item 8.b., Procedure Number ES-151, "Standard Marking Requirements For Nuclear Piping Components ASME III," Not Followed.

Observation at the shop pipe cutting station established the subject procedure is now available at the station. Discussions with the supervisor of cutting and a workman established that they are familiar with the procedure requirements and the procedure was being implemented. Review of an interoffice memorandum dated April 30, 1975, established that the cutting supervisor acknowledged receipt of the procedure Number ES-151, Revision 6, from the QA supervisor on April 30, 1975.

This item is closed.

- (2) Item 9.b.(1)(c), NDE Procedure Qualification Records Not Available.

Procedure Qualification Records (PQR) attached to the following NDE procedures, in the Project Procedures Book for Job Numbers 8773, 8774 and 8775, were identified in the NDE shop area office.

- (a) MT Procedure Number ES-405, Revision 2, and PQR dated March 28, 1970.
- (b) UT Procedure Number ES-406, Revision 2, and PQR dated September 29, 1970.
- (c) RT Procedure Number ES-414, Revised May 10, 1972 and September 26, 1972, and PQR dated May 9, 1972.

This item is closed.

- (3) Item 9.b.(1)(e), No Record Verification of Return and Reconditioning of Unused Low Hydrogen Weld Rod.

This practice was discontinued.

Review established Procedure Number XIII-6, "Instructions For Control of Portable Rod Ovens," revised December 11, 1975, was issued in accordance with the QA Manual, Section VIII, dated September 1, 1975, to supercede prior rod handling requirements. Observation established the portable hot ovens were in use and the procedure was being implemented.

This item is closed.

- (4) Item 9.b.(1)(f), NDE Procedure Number ES-404, Revision 3, Not Identified to Related Traveler Package.

Discussion established Job Procedures Books were not referenced in the former QA Manual covering the subject matter, but have been included in Issue 3 of the QA Manual. Review of Section 2 of the new QA Manual dated September 1, 1975, established that all procedures in a Job Procedure Book will be identified to the specific job. Review of a randomly selected traveler package established the procedures were referenced on the fabrication sketch.

This item is closed.

- (5) Item 9.b.(1)(g), Welding Procedure Unavailable at Work Area.

Examination of selected Job Procedure Books, Numbers 8416 and 8756, located at the welding foreman's substation established that the welding procedure specifications with the related procedure qualification records were available in the work areas. Discussion with the foreman established that the welders were informed of the procedures parameters.

This item is closed.

- (6) Item 11.b., Reference Instruments For Calibrating Welding Machines and Magnetic Particle Tester Not Calibrated.

Examination of the ammeters in the Tong Tester kit and the Simpson volt-ohm milliammeter device established that the instruments were calibrated by a contracted laboratory in February 1975, and July 1975, respectively.

Certificates of calibration were with the instruments and the instruments had properly filled out calibration stickers. Further review established that MWK procedure Number XII-1, revised January 5, 1976, "Procedure For Calibration of Tools and Other Measuring Equipment," which controlled subvendor calibration services, was available.

This item is closed.

(7) Item 13.b., Implementing Procedure For In-Plant Audits Unavailable.

Review established that MWK procedure Number XVIII-1, "Internal Audit Procedure" was issued on May 1, 1975. Review of the QA Manual, Section XVIII, "Audits," dated September 1, 1975, established that this activity is now the responsibility of the QA Auditor-Central Staff. Review of audit records dated August 16, 1975, August 16, 1975, and August 18, 1975, verified that in-plant audits were performed.

This item is closed.

4. Status of Previously Reported Unresolved Matters, LCVIP Report Number 99900021/75-01, Details, paragraphs 2.b., 3.b.(2), 5.b., 9.b.(1)(a), 9.b.(1)(b), 9.b.(1)(d) and 12.b.(2).

a. Inspection Objectives

The purpose of this inspection was to verify that the MWK Company had implemented corrective action for unresolved matters identified during the prior NRC inspection.

b. Objectives Were Accomplished by:

- (1) Review of applicable revisions to the QA Manual and generation of implementing procedures.
- (2) Review of records.
- (3) Discussions with cognizant personnel.
- (4) Observations in the shop.

c. Findings

- (1) Item 2.b., QA Manual Organization Charts Inadequate.

Review of the organization chart in Section I of the QA Manual, Issue Number 3, dated September 1, 1975, established that the plant QA Manager reported to the Plant Manager on an administrative basis, and to the General QA Manager-Central Staff on a technical and functional basis.

This item is closed.

- (2) Item 3.b.(2), Written Procedures For Training and Indoc-
trination of Audit Personnel Unavailable.

Review established that MWK procedure Number 11-1, "Qualification of Quality Assurance Program Personnel," was issued on May 1, 1975, and revised on January 1, 1976.

This item is closed.

- (3) Item 5.b., Notification to Subcontractors of Changes
in Product Characteristics Not Defined in Procedure.

Review of a selected revised MWK procedure Number IV-2, "Purchasing Specification Stainless Steel Fusion Welded Pipe, Filler Metal Added - ASME III, Class I," established that paragraph 4.0, "Changes in Product Characteristics," was added to provide notification to subvendors of changes in product characteristics. Further review of a Purchase Order Number 7636-587, dated May 6, 1975, and Change Order "A" dated June 11, 1975, verified that requirements of above paragraph 4.0 was implemented.

This item is closed.

- (4) Item 9.b.(1)(a), Implementing Procedure for Visual Exam-
ination and Inspection Unavailable.

Review established requirements for visual examination and inspection were contained in procedures separate from the QA Manual as follows:

- (a) ES-721, Final inspection.
- (b) ES-722, Receiving inspection.

(c) ES-724, In-Process inspection.

(d) ES-725, Welding inspection.

This item is closed.

- (5) Item 9.b.(1)(b), Procedure for Handling, Storage, and Interpretation of Radiographs Unavailable.

Review of a selected Contract Procedure Book for job order Numbers 8738, 8739, and 8740, identified customer specification requirements section, "QA Requirement II," Revision 0, issued October 4, 1973, which listed conditions for final radiograph interpretation, packaging and handling for shipment. Further review of MWK Specification ES-414, issued September 29, 1972, identified provisions for performance and interpretation of radiographic inspection by MWK personnel qualified to the MWK QA program and ASME Code, Section III.

This item is closed.

- (6) Item 9.b.(1)(d), Liquid Penetrant Material in Unidentified Containers.

Shop observations established that the penetrant identity was transferred from the bulk container onto the one gallon containers used in the shop.

This item is closed.

- (7) Item 12.b.(2), Procedure for Storage Protection of Records Unavailable.

Review established that MWK procedure Number XVII-2, "Quality Assurance Record Procedure General Requirements," was issued on August 21, 1975. This procedure contained provisions for storage, preservation and safekeeping.

This item is closed.

5. Welding

a. Objectives

The objectives of this inspection were to verify:

- (1) That welding procedure specifications (WPS) used in production welding are prepared, qualified and controlled

in accordance with the QA program.

- (2) That welding materials purchase, acceptance, storage, issuance and use are controlled and documented in accordance with detailed procedures.
- (3) That weld joint fitup alignments meet requirements.
- (4) That requirements of essential variables and other welding procedures parameters are concurred with to produce weldments which are capable of having the required properties for the intended application.
- (5) That completed welds meet visual acceptance standards of the program.
- (6) That welders are qualified in accordance with the ASME Code.

b. Objectives Were Accomplished by:

- (1) Review of applicable requirements in the following sections of the QA Manual, Issue 3, dated September 1, 1975.
 - (a) Section II, "Quality Assurance Program."
 - (b) Section IV, "Procurement Document Control."
 - (c) Section V, "Instructions, Procedures and Drawings."
 - (d) Section VII, "Control of Purchased Material, Equipment and Services."
 - (e) Section VIII, "Identification and Control of Material, Parts and Components."
 - (f) Section IX, "Control of Special Processes."
- (2) Work area inspection of: parameters in a welding procedure for job Number 8773, F-29; checking of preheat temperature, use of portable (hot can) ovens, completed weld root pass, and traveler envelope signoffs by MWK personnel and the AI.
- (3) Work area examination of Material and Document Checklists for job Number 7883, F-29, for acceptance by QA of: receiving inspection, MTRs and welding and fabrication documents.

- (4) Examination of a partially completed piping subassembly for job Number N-8641, F-3212 for the condition of several root passes and finished welds.
- (5) Identified four welders who worked on the above subassembly and verified they were qualified to the ASME Code, Section IX.
- (6) Verified that procedure P8-K1-F5-SMAW-5G, Revision 2, used to make Weld A of the above subassembly, was qualified to the ASME Code, Section IX.
- (7) Reviewed a bound volume of current welding procedures and verified that the related procedure qualification records were available for each procedure.
- (8) Reviewed one of several welder qualification continuity records maintained by the welding foremen.
- (9) Reviewed a welding material purchase requisition Number 19-04-00-75, dated September 11, 1975, prepared by the welding engineer.
- (10) Verified the weld material purchase order Number 19-04-00-75, dated September 17, 1975, was: approved by QA, the receiving notice supplied by the vendor was reviewed by the welding engineer, the MTR dated November 10, 1975, supplied by the subvendor was reviewed and approved by the welding engineer, and the receiving inspector correlated the quantity, heat number and lot number of the material with the MTR.
- (11) Examined the locked and caged hold and release bins for welding material.
- (12) Reviewed a welding material shop requisition ticket, dated January 21, 1975, for job Number 8273, F-33, prepared by the welding foreman and used by the welder to withdraw welding rod.
- (13) Observed the method for checking pipe spools weld end alignment by use of a Weld Height Gage.
- (14) Other observations in the shop.

c. Findings

No deviations from commitments or unresolved matters were identified.

6. Nondestructive Examinations (NDE)

a. The objectives of this inspection are to verify that:

- (1) Final acceptance (NDE) are performed in accordance with detailed instructions, procedures and drawings which delineate requirements and acceptance standards.
- (2) NDE tests are performed by qualified persons other than those performing the activity being examined.
- (3) Appropriate calibrated instruments are used.
- (4) Test results are documented and evaluated to assure that the component or material examined contain no rejectable defects.

b. Objectives Were Accomplished by:

- (1) Review of applicable requirements in the following sections of the QA Manual, Issue 3, dated September 1, 1975.
 - (a) Section I, "Organization."
 - (b) Section V, "Instructions, Procedures and Drawings."
 - (c) Section VI, "Document Control."
 - (d) Section IX, "Control of Special Processes."
 - (e) Section X, "Inspection."
 - (f) Section XII, "Control of Measuring and Test Equipment."
- (2) Observations of preparations for radiographing of butt Weld "A" in a 14" diameter piping subassembly for job Number 7935 F-1732.
- (3) Reviewed the traveler package documents for the above assembly.
- (4) Reviewed RT procedure ES-416, "QA Program Radiographic Procedure," contained in the Project Procedure Book for job Numbers 7935 and 7936.
- (5) Reviewed radiographic inspection reports for completed welds A and C in subassembly Number 1-RHO-1B18-35, for job Number 7935.

- (6) Reviewed two ultrasonic test reports for welds A and B in subassemblies Number 1-HP05B10-27, F-37, and Number 1-HP05B10-37, F-39.
- (7) Reviewed "Ultrasonic Examination Procedure" Number 1X-37, dated September 8, 1975, used for examination of the above assemblies.
- (8) Reviewed magnetic particle inspection reports for job Number 7935 and the implementing procedure Number ES-405, Revision III.
- (9) Reviewed liquid penetrant inspection reports for job Numbers 7935 and 7936, and the implementing procedure Number ES-404, Revision 5.
- (10) Examined calibration stickers on one ultrasonic thickness measurement device and one UT examination device for pipe welds, also the calibration block sets and the transducers.
- (11) Observed a demonstration of PT examination of a completed butt weld in a stainless steel piping subassembly for job N-8756, F-1160, performed in accordance with procedure Number ES-404.
- (12) Reviewed procedure Number II-5, "Nondestructive Examination Personnel and Training," dated May 1, 1975.
- (13) Reviewed attendance records for the NDE technique course for the period of June 1974 through December 1975.

c. Findings

No deviations from commitments or unresolved matters were identified.

7. Authorized Inspector (AI)

a. Objectives

The purpose of this inspection was to verify that:

- (1) The AI has direct contact with the cognizant plant QA/QC representative.
- (2) The AI has free access to all parts of the plant concerned with supply or manufacture of ASME Code work.

- (3) All applicable documents are available to the AI for review.
- (4) The AI identified and signoff on witness hold points on process control documents and witnesses qualification of special NDE procedures.
- (5) The AI maintains a log of activities reviewed and/or witnessed.

b. Objectives Were Accomplished by:

Discussions with the AI.

c. Findings

The AI has been in residence at the plant since August 1975. He maintains a log of work inspected. He did not identify any problems related to the above objective areas which were discussed with him. He has completed formal training for N stamp certification.

DETAILS SECTION II

(Prepared by H. M. Wescott)

1. Additional Persons Contacted

H. A. Dunlap	Welding Foreman
B. S. Saggu	Manufacturing Engineer
A. Duncan	Production Manager
C. P. Mihal	Maintenance Foreman
H. McGraw	Authorized Inspector

2. Document and Drawing Control

a. Objectives

The objectives of this inspection was to verify that M. W. Kellogg Company's QA program was being implemented to control the issuance and disposition of documents, such as purchase specifications, instructions, procedures, and drawings, including changes thereto, which prescribe the activities affecting quality.

The measures shall assure that documents, including changes, are reviewed for adequacy and approved by the same organization that performed the original review.

b. Objectives Accomplished by:

- (1) Review of the M. W. Kellogg Company's Quality Assurance Program Manual, Section VI, titled "Document Control," date issued September 1, 1975.
- (2) Review of QA Manual, Section V, titled, "Instructions, Procedures and Drawings," date issued September 1, 1975.
- (3) Review of QA Manual, Section X, titled, "Inspection," date issued September 1, 1975.
- (4) Review of the "Project Procedure Manual," Number 2, for job Number N-8738, N-8739 and N-8740.
- (5) Review of the "Project Procedures Manual" for job Number N-7935 and 7936.
- (6) Review of the "Project Procedures Manual" for job Number N-8756.

- (7) Review of Engineer Specifications (ES) as follows:
- (a) ES-10, dated September 18, 1972, "Fabrication of Type 304 and Type 306 Stainless Steel ASME P-8 Materials."
 - (b) ES-11, "Desiccant Protection and Shipping Preparation for Stainless Steel Piping Assemblies."
 - (c) ES-151, "Standard Marking Requirements for Nuclear Piping Components."
 - (d) ES-203, "Type 304 and Type 316 Stainless Steel ASME P-8 Materials, Fabrication and Field Installation Specifications For Nuclear Power Plant Components, Piping Systems and Appurtenances," date revised, May 8, 1972.
 - (e) ES-416, "Radiographic Procedure Source IR-192, "Opposite Wall Technique Butt Weld Pipe," dated September 17, 1973.
- (8) Discussion with QC personnel.
- (9) Observations made in shop area.
- (10) Discussion with NDE personnel.
- (11) Review of completed documentation files for job Number N-8738 and N-8739.

c. Findings

Inspection of the "Project Procedure Book" for job Number N-8738, N-8739 and N-8740 located at the weld area location, revealed that ES-203 titled "Type 304 and Type 316 Stainless Steel ASME P-8 Materials Fabrication and Field Installation Specifications For Nuclear Power Plant Components Piping Systems and Appurtenances," and ES-416 titled, "Quality Assurance Program Radiographic Procedure Source IR 192, Opposite Wall Technique Butt Weld Pipe," had not been included in the manual. As of the completion of this inspection, these procedures, (ES-203 and ES-416) had been included in the manual.

This item is considered to be closed.

3. Equipment Calibration

a. Objectives

The objectives of this inspection was to verify that M. W. Kellogg Company's QA program effectively establishes measures to document that tools, gauges, instruments and other measuring and testing devices used in activities affecting quality are calibrated and adjusted at specified intervals to maintain accuracy within necessary limits.

b. Objectives Accomplished by:

- (1) Review of the M. W. Kellogg Quality Assurance Program Manual, Section XII titled, "Control of Measuring and Test Equipment," date issued, September 1, 1975.
- (2) Random selection of four (4) calibration control cards and checking items selected for calibration dates.
- (3) Review of the loose leaf binder labelled, "Calibration, Certifications, and Certifications on Marking Devices, Paints, Tapes, Adhesives, Cleaners, Wheels, Gases, Furnace."
- (4) Random selection of calibration certifications to check calibration status of calibrated equipment.
- (5) Discussion with QA and maintenance personnel.
- (6) Observations made in shop area and NDE laboratory.

c. Findings

No deviations from commitments or unresolved matters were identified.

DETAILS SECTION III

(Prepared by P. I. Verrios)

1. Additional Persons Contacted

H. Haines	Production Planner
B. Krainak	Chief Draftsman
K. Doyne	Process Sheet Writer
V. Messner	QA Code Engineer
J. Fornwalt	Receiving Inspector
S. Shinko	Final Inspector
J. Miller	Senior Mill Test Report Validator

2. Design Control

a. Objectives

The purpose of this inspection was to ascertain whether the QA program implemented to control quality activities during the design processes provides for the following:

- (1) The implementation of approved detailed written procedures, or instructions, to assure that the requirements of the design specifications and the code, standard, regulation, and/or commitments, as applicable, are correctly translated into drawings, specifications, procurement documents, procedures or instructions.
- (2) The implementation of the system governing control of deviations from design requirements and quality standards. The verification that deviations are properly identified, documented and subjected to review and approval actions.
- (3) The overall designs, including calculations, material selection, stress analysis reports or load capacity data sheets, are reviewed for compliance with design specifications and code requirements.
- (4) The reviews and checking of the design documents are performed by qualified personnel other than those responsible for the original.
- (5) Revisions, changes, and/or addenda to design documents are reviewed in the same manner as the original.

- (6) Procedures are implemented for the review, approval, release and distribution of design documents, including changes thereto, by participating design organizations.
- (7) Measures established requiring that any deviations from the design document identified by in-process or final inspections, to be reported to the responsible design organization for review, evaluation and appropriate disposition.

b. Objectives Obtained by:

- (1) Review of the applicable QA Manual, dated September 1, 1975, sections as follows:
 - (a) Section 1. - Organization.
 - (b) Section 3. - Design Control.
- (2) Review of the following records reflecting the customer's and ASME Code design requirements:
 - (a) A specific customer order, M-201B (Q), Jobs 8251-8260.
 - (b) Specification Number 61-6200, Revision 4g, dated March 11, 1975.
 - (c) Observations of areas where work was performed.
 - (d) Shop drawings:
 - 206767-A-8791, Revision 13
 - 207460-A-8844, Revision 8
 - 207465-A-8808, RevisedShop sketches:
 - 7935-1554, Revision 1
 - 8416-6346, Revision 4
 - 7935-2550, Revision 0
 - 8756-1160, Revision 2
 - 7935-2413, Revision 0
 - 8773-F39, Revision 0
 - 8775-F61, Revision 0
- (3) Interviews with cognizant design and management personnel.

c. Inspection Findings

- (1) Section III of the QA Manual, paragraph 3.3.5 states in part ". . .Prior to release for work, the traveler is sent to the QA department where the shop drawing or revision thereto and the process sheet are checked and approved for code compliance by the Code Engineer, QA department, or his representative, and is submitted to the AI to establish hold points as he deems appropriate."

Contrary to the above, there was no documented evidence that the authorized inspector reviewed any travelers prior to release for work.

- (2) Section VI of the QA Manual, paragraph 5.4 states. "Distribution of revisions to Shop Drawings is made by the Document Control Co-ordinator. . . .He distributes revisions to each department and picks up the earlier version for destruction or record of any pertinent information."

Contrary to the above, obsolete revisions of drawings and sketches were not removed from in-process traveler packages.

The MWK representative acknowledged these deviations.

3. Nonconformances

a. Objectives

The objectives of this inspection were to verify that measures to control materials, parts or components which do not conform to requirements are not inadvertently used. Also, to establish that measures for identification, documentation, segregation and disposition of conditions adverse to quality be promptly identified and corrected to preclude repetition, and reported to appropriate levels of management.

b. Inspection Objectives Obtained by:

- (1) Review of Section 15, Nonconforming Materials, Parts or Components.
- (2) Section 7, Control of Purchased Material, Equipment and Services.
- (3) Internal procedure XV-1 and XV-2, "Processing and Handling of Nonconformances."

- (4) Discussions with QA personnel.
- (5) Observations in the shop.

c. Inspection Findings

- (1) Section 7 of the QA Manual, paragraph 5.1 states in part ". . .As purchased items are received, they will be segregated from accepted items by the receiving department until inspection is performed and documentation verified."

Contrary to the above, materials were not segregated in two of the areas designated as hold. Some of the materials were identified with an accept tag, were stored with materials identified with hold tags.

- (2) Section XV of the QA Manual, paragraph 7.1 states, "Forms referred to in this section are exhibited in the back of this manual. They are considered typical and it is not intended that they preclude the use of equally effective alternate forms which may be required. This is subject to the acceptance of the Authorized Inspection Agency."

Contrary to the above, there was no evidence the AIA had accepted record forms in use which were different from these referenced in the QA Manual.

- (3) Section XV of the QA Manual, paragraph 3.5 states, "In cases of repair, the Engineering Department will issue instructions, drawings, repair procedures. . .required to properly affect the repair to acceptable quality."

Contrary to the above, there was no evidence on the weld repair sheets that the Engineering Department issued instructions for the repairs.

The MWK representative acknowledged these deviations.