

NOTICE OF DEVIATION

- A. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Section A-3 of the QA Manual states in part, "Traveler: A check list associated with each individual spool which includes sequence of steps for specific operations"

Section J-3 of the QA Manual, paragraph J-3-3B, states in part, "Upon partial or full completion of welds such examinations as may be required by Code shall be performed and acceptance be indicated by the Bay Inspector entering his clock number on the appropriate line of the traveller"

Contrary to the above, the Bay Inspector had not entered his clock number on the appropriate line of the traveler to indicate acceptance of completed welds E and F on Job No. 312261 DWG A996, and the weld procedure or the weld operator had not been recorded, although the operation for radiography was completed February 7, 1979. The inspector also noted on Job Nos. 312251-577 DWG 5897 and 312251-572 DWG 5884 that the operation for verification of dimension did not indicate acceptance on the traveler although the data report had been completed and the Code stamp had been applied to the piping sub-assembly.

- B. Criterion X of Appendix B to 10 CFR 50 states in part, ". . . Examinations, measurements, or test of materials or products processed shall be performed for each work operation where necessary to assure quality"

Paragraph NB-4440 of the ASME Section III Code states, "All welds shall be examined in accordance with the requirements of NB-5000."

Paragraph NB-5250 of the ASME Section III Code states, "Fillet and socket welds shall be examined by either the magnetic particle or liquid penetrant method."

Paragraph NA-4930 of the ASME Section III Code states in part, "The Manufacture . . . shall maintain a file of records of . . . examination"

Contrary to the above, the manufacturer (Tubeco) did not maintain records of examination, in that there were no records of the required liquid penetrant examination of the fillet welds attaching Code Plates to ASME Code Class I and II piping sub-assemblies.

- C. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Tubeco Procedure G-101, Documentation (Traveler), paragraph 2.8.1, states in part, ". . . After grinding off the tack weld a LP shall be performed and the report be attached to the traveler."

Contrary to the above, the LP report was not attached to the traveler after grinding off the tack welds on production order BH2, Job No. 312261 Dwg. 8766 and 8769.

- D. The Tubeco, Inc. (TC), corrective action response letter dated March 30, 1978, states in part with respect to Enclosure Item No. 10 in Inspection Report No. 78-01, ". . . Procedure W-602 (Welding Material Control) will be revised to include all requirements of NB/NC-2400"

Contrary to the above, Procedure W-602 was not revised to include either the impact test criteria utilized by NB/NC-2400 or the requirements relative to postweld heat treatment cooling rate. (See Details Section II, paragraph B.2.)

- E. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Paragraph 2.11, sub-paragraph 2.11.1, in Procedure G-101, Revision 2, states, "Any weld repair shall use form ZQL to record pertinent information." Sub-paragraph 2.11.2 states, "The Tubeco NDE personnel shall initiate the traveler after the test (RT or LP/MP, etc.) has determined that a repair is necessary." Sub-paragraph 2.11.3 states, "The Bay Inspector shall complete the traveler and attach it to the QC traveler." Sub-paragraph 2.11.4 states, "The authorized inspector shall be notified prior to any repair for his review and possible Hold Point assignment."

Contrary to the above, the inspector observed the following during documentation review of a completed ASME Code, Section III, Class 2 Main Steam assembly (Job No. 312261, Drawing A438) with a signed data report:

1. Two (2) weld repair cycles were performed on Weld B following rejections by radiography.
2. Form ZQL was not initiated by Tubeco NDE personnel for either repair.
3. The first repair cycle was documented by the Bay Inspector on the QC traveler.
4. The second repair cycle (Station 7-8) was not documented, i.e. no records were available relative to identity of welder, welding procedure, welding materials, or date of performance.

- F. The TC corrective action response letter dated July 11, 1978, states with respect to Enclosure Item No. 12 in Inspection Report No. 78-01, "A procedure will be written dealing with nameplates. This procedure will include provisions for welding procedures selection and for documentation. The procedure will be completed by September 15, 1978."

Contrary to the above, a procedure dealing with nameplates had not been written as of this inspection.

- G. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Paragraph P-1-6B in Section P-1 of the QA Manual states in part, "The bay inspector shall verify . . . that the procedure specified is being used."

Contrary to the above, the bay inspector did not verify that the procedure specified for Weld C in Job No. 312261, Drawing A459 and A444, was used, in that the welds had been made using a different process and procedure to that permitted by the drawing.

This is a repeat deviation, first identified in Inspection Report No. 78-01. (See Details Section II, paragraph B.6.a.)

- H. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Welding Procedure Specification (WPS) SA1-1B, which was documented on the traveler for Job No. 312261, Drawing A459, as being utilized for submerged arc welding of Welds C and D, requires use of a 1G (flat) position.

Contrary to the above, submerged arc welding was established as having been performed in the 2G (horizontal) position for the referenced welds (See Details Section II, paragraph B.6.b.).

- I. Criterion VII of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that purchased material, equipment, and services . . . conform to the procurement documents"

Item 001 of Purchase (PO) 8E2584C required the supply of SA155 KCF 70 Class 1 welded pipe (34 in. O.D. X 1.375 in. minimum wall) in accordance with ASME Code, Section III, Class 2, 1971 Edition through the Winter 1973 Addendum. Note 3 of the PO required Charpy impact tests to be performed at 40^oF.

Contrary to the above, SA 155 KCF70 Class 1 pipe was accepted from a vendor for the referenced item with reported weld metal Charpy impact properties not in conformance with ASME Code requirements (See Details Section II, paragraph B.6.c.).

- J. The TC corrective action response letter dated March 30, 1978, states in part with respect to Enclosure Item No. 15 in Inspection Report No. 78-01, ". . . The NQAM will be revised to provide criteria for control and documentation of attachment welds."

Contrary to the above, the NQAM (Nuclear Quality Assurance Manual) was not revised to provide criteria for the control and documentation of attachment welds with respect to paragraph NB/NC-4435 requirements in the ASME Code, Section III, relative to use of qualified welding procedures and identified attachment materials. (See Details Section II, paragraph B.7.)

- K. The TC corrective action response letter dated March 30, 1978, states with respect to Enclosure Item No. 18 in Inspection Report No. 78-01, "1. Existing PQA's will be researched to determine whether sufficient records are presently available to justify the limits of weld thickness specified by the WPS (SMI-2B) and (SA1-1B). 2. In the event that additional tests are required such tests will be performed. 3. Other procedures will be re-examined to assure compliance with ASME Section IX Code."

Commitment dates of April 15, 1978; May 15, 1978; and May 15, 1978; respectively, were assigned for items 1, 2, and 3.

Contrary to the above:

1. Documentation was a file indicating the need for additional testing to be performed.

2. The procedure qualification status was the same as reported in Inspection Report No. 78-01.

- L. The TC corrective action response letter dated July 11, 1978, states with respect to Enclosure Item No. 20 in Inspection Report No. 78-01, "A procedure will be written dealing with qualification of weld materials to comply with Section NB-4330 of the Code. This procedure will include provisions for determining the holding time at heat treatment temperature to reflect the maximum possible accumulated post weld heat treatment time. This procedure will be completed by September 15, 1978."

Contrary to the above, a procedure dealing with qualification of weld materials to comply with Section NB-4330 of the ASME Code had not been written as of this inspection.

- M. Criterion IX of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that special processes, including welding, heat treating . . . are controlled and accomplished . . . in accordance with applicable codes"

Paragraphs NB/NC/ND-4333 in the ASME Code, Section III, state in part with respect to heat treatment of ferritic procedure qualification welds, ". . . The postweld heat treatment time at temperature shall be at least 80% of the maximum time to be applied to the component weld material"

Contrary to the above, measures were not established for the control of welding and heat treating to assure that ferritic procedure qualification welds had been heat treated for at least 80% of the maximum time to be applied to the component weld material, as evidenced by the acceptance of heat treat chart 9-A-19 for Job No. 312261, Drawing A438, which had utilized a welding procedure (GT1-1, Revision 1) that was qualified only in the as welded condition.

This is a repeat deviation first identified in Inspection Report No. 78-01.

- N. The TC corrective action response letter dated March 30, 1978, states in part with respect to Enclosure Item No. 21 in Inspection Report No. 78-01, ". . . Instructions will be issued to the furnace operators to set rate controllers at 25^oF/hour less than maximum rate permitted by Code to avoid possibility of localized areas of higher than allowable rate of heating."

Contrary to the above, Job No. 312261, Drawing A444 (Heat Treat Chart 9-A-31), was not heat treated with the rate controllers set at 25^oF/hour less than the maximum Code permissible rate, as evidenced by the use of a 282^oF/hour heating rate for an assembly that was permitted by Code to be heated at a maximum rate of 270^oF/hour.

- O. Criterion IX of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that special processes, including . . . heat treating . . . are controlled and accomplished . . . using qualified procedures in accordance with applicable codes"

Paragraph J-2-5 A in Section J-2 of the QA Manual states in part, "Heat treatment shall be performed in a furnace surveyed and certified for uniformity of temperature, or, as an alternate by placing controlling and recording thermocouples in direct contact with the material being treated"

Contrary to the above, postweld heat treatments were not being performed by Tubeco using either furnaces, which had been surveyed and certified for uniformity, or, by placing thermocouples in direct contact with the material being treated. (See Details Section II, paragraph B.13.)

- P. Criterion IX of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that special processes, including . . . heat treating . . . are controlled and accomplished . . . using qualified procedures in accordance with applicable codes"

Paragraph 4-303.1, sub-paragraph A.7, in heat treat procedure, H-303.1, states in part, "A heat treat log, Form ZRF, . . . shall be prepared by the Q. C. inspector assigned to furnace control" Sub-paragraph A.9 states in part, "The inspector shall determine the governing postweld heat conditions and record these on the line containing the critical item" Sub-paragraph A.11 states, "On completion of the heat treatment, the log and the furnace pyrometer record shall be submitted to the Quality Assurance Section for review and approval." Sub-paragraph A.14 states in part, "If the governing conditions have not been met, the QA reviewer shall initiate a Non-Conformance Report" Sub-paragraph B.1 states in part, "Above 80^oF the rate of heating and cooling shall not exceed 40^oF/hour divided by the maximum thickness in inch of the material being heat treated"

Contrary to the above, the inspector observed the following with respect to a sample of three (3) heat treatments:

1. The log for heat treat chart 9-A-19 (Job No. 312261, Drawings A438 and A446) was incorrectly prepared by the QC inspector with respect

to allowable heating rate, i.e. a rate of 400^oF/hour was entered for a 1.5 inch wall thickness assembly, whereas the ASME Section III Code and Procedure H-303.1 permit a maximum rate of 267^oF/hour to be used above 800^oF for this thickness.

2. An actual maximum heating rate of 340^oF/hour was utilized by the furnace operator and so recorded by Tubeco QA personnel.
3. An actual maximum heating rate of 282^oF/hour was utilized by the furnace operator for Job No. 312261, Drawing A444 (heat treat chart 9-A-31), when the log and Procedure H-303.1 permitted a maximum rate of 270^oF/hour.
4. Heat treat charts 9-A-19 and 9-A-31 were accepted by the Tubeco QA reviewer without issue of a Non-Conformance Report.
5. The logs for heat treat charts 9-A-19 and 9-A-31 were incorrectly prepared by the QC inspector with respect to allowable cooling rate, i.e. respective cooling rates of 290^oF/hour and 300^oF/hour were entered on the logs, whereas the correct maximum rates were, respectively, 270^oF/hour and 267^oF/hour.

This is a repeat deviation first identified in Inspection Report No. 78-01.

- Q. Criterion V of Appendix B to 10 CFR 50 states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings . . . and shall be accomplished in accordance with these instructions, procedures, or drawings"

Paragraph P-1-2 A in Section P-1 of the QA Manual states in part, "It shall be the responsibility of the Project Engineer to direct the preparation of the spool drawings 1. Spool drawings shall be consistent with the geometry and specific requirements of the clients order and shall be checked against all relevant provisions of the Code 3. Approved procedures applicable for each controlled operation shall be indicated in the procedure section of the spool drawing with the alphabetic identification of the critical point involved" Paragraph P-1-2 B states, "All drawings ready for release to the Manager of Production shall be reviewed and signed by the Director of Quality Assurance for conformance with the Code, provisions of this Manual and approved procedures."

Contrary to the above, the inspector observed the following with respect to Job No. 312261, Drawing B245 (ASME Code, Section III, Class 1, 0.821 inch minimum wall):

1. The welding procedures listed in the procedure section of the spool had not received the required client approval for the intended application.

2. The welding procedures had not been qualified with respect to the fracture toughness requirements of Sections III and IX of the ASME Code, which were applicable to this assembly.
 3. The drawing required performance of a cold bend for which the requirements of paragraph NB-4213 (Qualification of Forming Processes and Acceptance Criteria for Formed Material) of the ASME Code, Section III, were applicable to the assembly. The inspector was informed that the procedure qualification required by NB-4213 had not been conducted and it was also noted that the exemption permitted by NB-4213 (allowing impact testing of each heat after forming) was not stipulated or referenced by the spool drawing.
 4. The drawing had been approved by Quality Assurance.
- R. Criterion II of Appendix B to 10 CFP 50 states in part, . . . "The (Quality Assurance) program shall take into account the need for special controls . . . and skills . . . and the need for verification of quality by inspection and test. The program shall provide for indoctrination and training of personnel performing activities affecting quality The applicant shall regularly review the status and adequacy of the quality assurance program."

Procedure No. G-103.0, dated January 19, 1977, paragraph 4.B.1, states, "Both internal and external audits shall be performed by auditors qualified in accordance with this procedure." Paragraph 4.c. states in part, "Auditors shall be evaluated (and) A total of 10 points shall be required to qualify as an auditor for nuclear related audits" Paragraph 4.E.2. states in part, "The candidate shall pass a written examination"

Contrary to the above, a review of nuclear related audits performed up to and including February 6, 1979, revealed that external audits were not performed by auditors qualified in accordance with the procedure, in that an evaluation of auditors requiring 10 points to qualify had not been performed, nor had the candidates passed a written examination. (For additional information, see Details Section III, paragraph P.3.a.)

- S. Criterion XVIII of Appendix B to 10 CFR 50 states in part, "A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program"

QA Manual Section G-1, paragraph G-1-4, states in part, . . . "Active suppliers shall be audited at least annually following their acceptance by Survey, unless a certificate has been issued to the vendor by the

ASME." Paragraph G-1-6 states in part, ". . . Vendors may be maintained on the list (AVL) . . . by an audit performed . . . in accordance with written procedures."

Contrary to the above, an active supplier of heat treatment services, not holding an ASME issued certificate, was maintained on the AVL without being audited at least annually, in that the records show the last audit was performed on July 7, 1977, and the AVL shows this supplier to be valid until August 25, 1979.

Similar deviations were previously identified and reported in report numbers 77-01 and 78-01. (For additional information, see Details Section III, paragraph C.3.a.(1).)

- T. Criterion XVIII of Appendix B to 10 CFR 50 states in part, "A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits shall be performed in accordance with the written procedures or check lists "Audit results shall be documented"

QA Manual Section G-1, paragraph G-1-5 states in part, "The auditor shall fill out all the applicable sections of the Vendor Survey/Audit Form ZQW and shall submit it . . . for review in accordance with Proc. No. G-115. Alternate forms may be used"

Procedure G-115 requires an evaluation of a vendors's QA Manual against ASME NCA-3800 requirements using Audit Check List, Form ZQW. The results are to be recorded on Checklist for Review of Vendor's QA Manual, Form ZAH. After acceptance of the Vendor's QA Manual, an audit is to be performed to verify implementation, using Audit Check List, Form ZQW. After acceptance of the Vendor, a Vendor Evaluation Form (ZQV) shall be completed.

Contrary to the above, a review of ten (10) vendor files revealed that the vendor audit program is not consistent with the QA Manual or procedure requirements, in that certain files do not contain the required forms, and in those that do, certain forms have not been completed. (See Details Section III, paragraph C.3.a.(2).)

- U. Criterion XV of Appendix B to 10 CFR 50 states in part, "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation. These measures shall include, as appropriate, procedures for identification, documentation, segregation, disposition"

QA Manual Section Q-1, paragraph Q-1-2.A. states, "Deficient and non-conforming items shall be clearly identified by means of tags affixed to the item."

Contrary to the above, a review of the two (2) "open" nonconformance reports (numbers 214 and 221, dated December 15, 1978, and February 8, 1979, respectively, written against Job No. 312261) and observation of the nonconforming parts, revealed that the parts were not identified by means of an affixed tag.

- V. Criterion XV of Appendix B to 10 CFR 50 states in part, "Measures shall be established to control materials, parts, or components which do not conform to requirements in order to prevent their inadvertent use or installation

"Nonconforming items shall be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures."

QA Manual Section Q-1, paragraph Q-1-3, states in part, "Upon discovery of a deviation (defined in QA Manual Section A-3, as 'Any deviation from required geometry or specifications') A 'Deficiency Report' (DR) shall be prepared in accordance with Proc. No. G-102. . . . If the DQA (Director of Quality Assurance) determines that the deviation constitutes a nonconformance, he shall prepare a Nonconformance Report (NCR) in accordance with Proc. No. G-107 The inspector shall record the Nonconformance Log Number . . . in the comments section of the traveler . . . All reports of nonconformance to the Code requirements including proposed disposition, shall be presented to the ANI for his concurrence."

Contrary to the above:

1. A review of six (6) closed and two (2) open NCRs revealed that the control of nonconformances is not consistent with the QA Manual or procedure requirements, in that certain DRs and NCRs were not complete, DRs could not be located, NCRs were not referenced on travelers, and repair travelers were not initiated for those nonconformances requiring repair, as required by Procedure G-107, paragraph 3.7.
2. All reports of nonconformance to ASME Code requirements have not been presented to the Authorized Nuclear Inspector (ANI) in that:
 - (a) A DR, dated February 5, 1979, was written against ASME Code, Class 2 Main Steam Piping, Drawing A438, for Job 312261.
 - (b) This was determined to be a nonconformance and NCR 221, dated February 8, 1979, was initiated.

- (c) An ASME Code Data Report, NPP-1, was prepared, completed, and signed off by Tubeco on January 23, 1979, and the ANI on February 8, 1979.
- (d) NCR 221 is still considered open, in that the "Final QA Acceptance" and "Authorized Inspector Review" blocks have not been signed off and/or dated.
- (e) The NCR was not in the final documentation package, however, the DR was.

(See Details Section III, paragraph D.3.a.(2).)

W. Criterion XVI of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that conditions adverse to quality, such as . . . nonconformances are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management."

1. QA Manual Section Q-1, paragraph Q-1-2.B. states, "Nonconforming items shall be withheld from further processing, except for those operations which have been authorized by the Corrective Action Report (CAR).

Contrary to the above, nonconforming items were not withheld from further processing, unless authorized by the CAR, as evidenced by the fact that since January 5, 1978, through February 12, 1979, there were approximately forty-four (44) Nonconformance Reports written against nonconforming items (NCRs 177-221), and only one (1) CAR pertaining to a nuclear job (CAR No. 7, dated November 14, 1978) was written.

2. Procedure G-109.0, paragraph 2.0, states in part, "The Director of Quality Assurance (DQA) is responsible to: . . . verify corrective action; perform follow-up to assure that actions are effective and are accomplished in a timely manner" Paragraph 3.6 states, "The CQE maintains records of all Corrective Action Requests and performs audits to assure timely completion of the action." Paragraph 3.7 states, "The CQE shall distribute the CAR's to the appropriate department management."

Contrary to the above, neither the DQA nor the CQE performed follow-up/audits to assure that actions are effective or to assure timely completion of the action in that CAR No. 7, dated November 14, 1978,

remains open. In addition, the CAR was not distributed to the appropriate department management, in that the "Distribution" block was left blank. (See Details Section III, paragraph E.3.b.)

- X. Criterion IV of Appendix B to 10 CFR 50 states in part, "Measures shall be established to assure that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by the applicant or by its contractors or sub-contractors"

Procedure W-602.1, paragraph 4, states in part, "4.2 Purchase Orders shall contain the following note:

The welding electrode and wire supplied to this order shall be from a minimum number of heats and batches of flux. Permission to furnish more than two heats of bare wire electrodes or flux for a given size, must be obtained from Tubeco. The electrode container shall be legibly marked with the heat number of the bare wire, and, in addition, for covered electrodes and flux the batch number of each mix of flux; or an identifying lot number that can be traced to a heat and batch number. The material may be subject to a receiving inspection which shall include, but not be limited to, an as-deposited weld metal composition test

"4.4 Purchase Orders for austenitic stainless steel electrodes and wire shall contain the following additional note. The material shall deposit a weld composition that contains a Ferrite content of 5 to 15 percent when the deposited analysis is compared to the Schaeffler Diagram (Fig. NB-2433-I, "Delta Ferrite Content," ASME III)."

Contrary to the above, purchase orders for welding materials other than austenitic stainless steels, did not contain the requirements of paragraph 4.2, above, and purchase orders for austenitic stainless steel welding materials did not contain the requirements of paragraphs 4.2 and 4.4, above.

In addition, P.O. 05360 dated November 27, 1978, placed with Prest-O-Sales, for austenitic and carbon steel weld material, contained the following note: ". . . Minimum 5% Delta Ferrite on Magna Gage or Severn taken in 6 readings for items 1 and 2" (both E316-16 covered electrodes), and "Range of 10-25% Delta Ferrite or Schaeffler Diagram for item 3" (Type 308-16 Spool wire), which is contrary to paragraph 4.4, above.

- Y. Criterion VIII of Appendix B to 10 CFR 50 states in part, "Measures shall be established for the identification and control of materials These measures shall assure that identification of the item is maintained by heat number, part number, serial number, or other appropriate means, either on the item or on records traceable to the item, as required throughout fabrication, erection, installation, and use of the item. These identification and control measures shall be designed to prevent the use of incorrect or defective material"

QA Manual Section G-2, paragraph G-2-3-A.4. states in part, "A distinct MTN (Material Traceability Number) shall be assigned by the Receiving Foreman to any material item" Procedure W-602.1, paragraph 5.1.2. states in part, "A Material Traceability Number (MTN) shall be assigned to purchased welding material by the Receiving Department. A separate MTN shall be assigned to: (1) electrodes and bare wire with the same bare wire heat number"

Paragraph 7.1 states in part, "The welding supply clerk shall issue welding material to welders upon presentation of a completed requisition form The Welding Supply Clerk shall mark all copies of the requisition form with the MTN." Paragraph 7.2 states in part, ". . . Electrodes of different classification shall be segregated and stored in separate ovens."

Tubeco's practice is to identify the welding material within the storage ovens by placing a map on the exterior side of the storage oven door, which indicates the type material, size, heat number, lot number, and MTN number. This is done because the cans containing electrodes within the oven are reused; therefore, identification on the cans is obliterated (Carbon steel shop only).

Contrary to the above, the map on the storage oven identified as type 7018 electrodes, showed the following as being contained in the oven: 1/8", Heat No. 07P038, Lot No. 03-3-D713R, MTN 9B266E, and 3/32", Heat No. 421C8671, Lot No. 02-2-G8111, MTN-9195C. As a result, the welding supply clerk had been issuing the appropriately sized welding electrodes in accordance with the identified MTN numbers. However, in addition to the identified welding electrodes in the oven, were two (2) additional type 7018, 1/8" electrodes, both of which have different heat numbers, lot numbers, and MTN numbers. Thus, welding has been performed on ASME Code jobs in which the incorrect identification (MTN number and heat number) has been recorded on permanent record documentation.