

ORGANIZATION: AIRCO WELDING PRODUCTS
ARCRODS PLANTS
SPARROWS POINT, MARYLAND

REPORT NO: 99900774/82-01	INSPECTION DATE(S) May 17-21, 1982	INSPECTION ON-SITE HOURS: 56
CORRESPONDENCE ADDRESS: AIRCO Welding Products Arcrods Plants ATTN: Mr. J. J. Heidelmaier, Manager, QA P. O. Box 6686 Sparrows Point, MD 21219		
ORGANIZATION CONTACT: Mr. David C. Nenstiel, QA Engineer TELEPHONE NUMBER: (301) 477-3300 Ext.245		
PRINCIPAL PRODUCT: Welding filler metals		
NUCLEAR INDUSTRY ACTIVITY: The Arcrods Plants' nuclear product is approximately 1% of their 150x10 ⁶ lb. of filler metals produced per year.		
ASSIGNED INSPECTOR: <u>I. Barnes</u> for J. Conway, Reactive and Components Program Section (R&CPS)		<u>8-4-82</u> Date
OTHER INSPECTOR(S): D. Norman, R&CPS		
APPROVED BY: <u>I. Barnes</u> I. Barnes, Chief, R&CPS		<u>8-4-82</u> Date
INSPECTION BASES AND SCOPE:		
A. <u>BASES</u> : 10 CFR Part 50, Appendix B; and 10 CFR Part 21.		
B. <u>SCOPE</u> : This inspection was made as a result of a potential 10 CFR Part 50.55(e) notification which reported coated stainless steel welding rods mislabeled as E-7018 carbon steel rods. The notification was made by Baldwin Associates at the Illinois Power Company, Clinton Station site, Clinton, Illinois. In addition to reviewing AIRCO'S implementation of Baldwin Associates' corrective action recommendations (cont. on next page)		
PLANT SITE APPLICABILITY:		
Incorrect welding filler metal - Docket Nos. 50-461/50-462/50-395		

DESIGNATED ORIGINAL

Certified By Katherine Jouts

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SCOPE: (cont.)

to prevent recurrence of the reported problem, the following areas were inspected: organization (training/certification), procurement, document control, process and material control, inspection, handling/storage/shipping, calibration, housekeeping, nonconformance, corrective action, special processes, records, and audits (internal/external).

A. VIOLATIONS:

Contrary to Section 21.21 of 10 CFR Part 21, required documentation or procedures were not available to provide for the evaluation of deviations or for notification of the licensee or purchaser of uncorrected deviations.

B. NONCONFORMANCES:

1. Contrary to Criterion V of Appendix B to 10 CFR Part 50, established procedures (ref. Cleveland/Sparrows Point memo dated March 9, 1982) addressing the handling of Military/Nuclear Core Wire, and QAB 1-81 "Handling of Tote Cans" (September 14, 1981), inspection of a designated hold-area for in-process Military/Nuclear material revealed the following:
 - a. Approximately 20 tote cans out of a total of 49 did not contain proper identification to indicate that the cans had been inspected to detect any residual wire prior to filling the cans.
 - b. One can did not contain a Military/Nuclear identification tag.
 - c. Three cans did not contain covers.
2. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and Section 2.1.9 of QAI 16.1.1, a review of an internal audit of the Cleveland facility indicated that Sparrows Point QA personnel had not verified the implementation of corrective action relating to handling of Military/Nuclear wire at the Cleveland facility.
3. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and Sections 2.1.3 and 2.2.1 of QAI 2.4.1, a review of QA personnel records indicated that six individuals had not been indoctrinated and trained in all aspects of the QA program.

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<p>4. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and Section 2.4.2 of QAI 7.1.1, a review of the Vendor Quality Survey Report (VQSR) from 1978 thru March 1982 revealed that six suppliers were not audited yearly and/or resurveyed once every 3 years.</p> <p>5. Contrary to Criterion V of Appendix B to 10 CFR Part 50, Section 3.7.1 of QAP 3.1 and Sections 2 and 3.2.1 of QAP 6.1, a review of Weld Test Reports revealed that a welding procedure for shielded metal arc welding of Cr-Mo weld metals was not at the designated welding station.</p> <p>6. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and Section 2.4 of QAP 14.1, a review of eight internal audit reports from October 1979 through February 1982 revealed that management's response to many audit deficiencies did not address the cause and long term corrective action to preclude repetition of the conditions adverse to quality.</p> <p>7. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and Section 2.1.1 a of QAI 14.1.2, a review of the QA/QC Stamp Log indicated that the inspectors had not dated the log as required.</p> <p>C. <u>UNRESOLVED ITEMS:</u> None</p> <p>D. <u>STATUS OF PREVIOUS INSPECTION FINDINGS:</u> None, this was the initial inspection.</p> <p>E. <u>OTHER FINDINGS OR COMMENTS:</u> A detailed review of documentation (e.g., QA manual, procedures, instructions, bulletins, training and qualification records, purchase orders, nonconformance reports, inspection records, audit reports, etc.) led to the identification of seven nonconformances (8 of above) and the following findings:</p> <p>1. <u>Corrective Action</u> - Following the discovery at Clinton Station of the stainless steel electrode which was identified as low hydrogen mild steel, Baldwin Associates conducted an inspection of AIRCO's facility at Sparrows Point in February 1982 to verify the implementation of AIRCO's QA program and to observe special weld tests of E309 wire with an iron powder flux (low hydrogen E7018) coating. The inspection</p>		

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resulted in five corrective action recommendations, three of which were verified by the NRC inspector as being implemented. Nonconformances B.1 and B.2 above addressed one of the corrective actions; i.e., handling of tote-cans. Two of the corrective actions were under investigation by Manufacturing Engineering. This item will be reviewed further during a future inspection.

2. QA Organization - The QA Organizational Chart, Figure 1.1-4 of QAP 1.1, Revision 1, shows the Material Handler and Quality Control Inspectors reporting to the QA Engineer. As implemented, this chart applies during military and nuclear production runs which amounts to approximately 3% of total production. During commercial production runs, the personnel, except for one lead inspector, report to production management.

A request was made by AIRCO to ASME on July 9, 1979, for concurrence of the organization with personnel assigned dual functions in Quality and Production. ASME responded on August 22, 1979, that a decision on the acceptability of the organization would be made during the upcoming survey of AIRCO for recertification of the Quality System Program. The survey was performed and a Quality System Certificate was issued on December 7, 1979; however, there is no evidence to indicate that the organization was reviewed or discussed with AIRCO. The organization chart (Figure 1-1.4) and the text of QAP 1.1 do not adequately describe the existing organization. This item will be reviewed further at a future inspection.

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DOCUMENTS EXAMINEDPage 1 of 2

1	2	TITLE/SUBJECT	3	4
1	8	SHIPPING NOTICES WITH QUALITY CONFORMANCE REPORTS TO BALDWIN ASSOCIATES	10/81 11/81	-
2	4	QUALITY SYSTEM MANUAL	11/79	2
3	5	P.O. for SOUTH CAROLINA ELECTRIC & GAS (SUMMER)	8/82	-
4	5	P.O. for TEXAS UTILITIES (COMMANCHE PEAK)	1/82	-
5	8	QA MANUAL LOG	4/82	2
6	8	DOCUMENT DISTRIBUTION/RECEIPT FORM	-	-
7	8	QA BULLETIN INDEX	-	-
8	5	P.O.'S FROM AIRCO TO CARBON STEEL SUPPLIERS (4)	-	-
9	2	GENERAL SPEC. R-46XX-D 'CARBON & LOW ALLOY STEEL ROD'	-	-
10	2	THREE A.W.P. SPECS - RIL (Carbon Steel Rod) - WIJ (Carbon Steel Wire) - R6C (Carbon Steel Rod)	-	-
11	5	P.O.'S FROM AIRCO TO CHEMICAL SUPPLIERS (6)	-	-
12	5	P.O.'S FROM AIRCO TO STAINLESS STEEL SUPPLIERS (5)	-	-
13	8	APPROVED VENDORS LIST	8/82	
14	8	VENDOR QUALITY SURVEY REPORT (1978 thru 1982)		

Document Types:

- | | |
|---------------|---------------------------------|
| Drawing | 5. Purchase Order |
| Specification | 6. Internal Memo |
| Procedure | 7. Letter |
| QA Manual | 8. Other (Specify-if necessary) |

Column Nos.

1. Sequential Item No.
2. Type of Document
3. Date of Document
4. Revision No., if applicable

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DOCUMENTS EXAMINEDPage 2 of 2

1	2	TITLE/SUBJECT	3	4
15	8	QUALIFICATION RECORDS OF QA PERSONNEL (9)	-	-
16	8	INDOCTRINATION & TRAINING RECORDS (11)	-	-
17	8	QUALIFICATION RECORDS OF WELDERS (3)	-	-
18	3	WELDING PROCEDURES (6)	-	-
19	8	QUALIFICATION RECORDS OF NDE PERSONNEL (3)	-	-
20	8	WELD TEST REPORTS (2)	-	-
21	8	INSPECTION STAMP LOG	-	-
22	8	NONCONFORMANCE REPORT LOGS FOR 1980 & 1981	-	-
23	7	AIRCO LETTER TO ASME RE: ORGANIZATIONAL CHANGE	9/79	-
24	8	NONCONFORMANCE REPORTS (2)	-	-
25	8	GENERAL INFORMATION OFFICE BULLETIN - NO. 598	2/78	-

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Inspector D. NORMANDocket No. 999007AReport No. 82-01

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DOCUMENTS EXAMINED

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1	2	TITLE/SUBJECT	3	4
01	4	Quality Assurance Policies	2-24-80	1
02	3	Quality Assurance Instruction 7.2.1. "Receiving Inspection"	10-19-81	6
03	3	Quality Assurance Instruction 19.1.2. "Process Control- Sparrows Point"	2-19-81	7
04	3	Quality Assurance Instruction 8.1.1. "Identification and Marking"	3-3-80	2
05	3	Quality Assurance Instruction 8.1.2. "Checklists"	7-29-78	1
06	3	Quality Assurance Instruction 8.1.3. "Control of Raw Material"	3-3-80	5
07	3	Quality Assurance Instruction 17.1.1. "Establishment of Records"	3-3-80	2
08	3	Quality Assurance Instruction 17.1.2. "Certified Material Test Reports"	3-3-80	2
09	3	Quality Assurance Instruction 17.2.1. "Maintenance and Access to QA Records"	3-3-80	2
10	3	Quality Assurance Instruction 18.1.1. "Quality Assurance Audits"	10-29-81	-
11	3	INTERNAL Audit checklists.	-	-
12	8	Internal Audit Reports, Oct 1979 - Feb 1982	-	-
13	8	Management Audit Reports, Feb 1977 - Jan 1981	-	-
14	5	Purchase order CPF 1450-5, Texas Utilities Generating Co (Attn Brown & Reed)	3-22-80	-

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DOCUMENTS EXAMINED

1	2	TITLE/SUBJECT	3	4
15	8	Inspection Records for P.O. 1454-S, Heat 53150, Lot 026B307, 5/32" x 14.7018 Quality Conformance Report Weld Test Reports Vendor Certifications Reports for wire Rod Grade Verifications Chemical Analysis Report Q.C. Inspector Checklist Production Letter Supervisor's Checklist Release Report	-	-

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