



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

April 8, 1983

~~Grant~~
File
Jay - I agree.
We need to discuss
with Grant & RIV.

MEMORANDUM FOR: Jay Harrison, Chief, Office of Special Cases, Section 2

FROM: R. J. Cook, Senior Resident Inspector, Midland Site

SUBJECT: QUALITY PROGRAM AND MANUFACTURING DEFICIENCIES FOR VICTOREEN, INC. RADIATION DETECTION INSTRUMENTATION

Reference: Memorandum from W. B. Grant, Radiation Specialist, to RIII files, dated February 28, 1983

Interim 50.55(e) Report No. 82-09 #3, Quality Program and Manufacturing Deficiencies at Victoreen, Inc.

Mr. Grant's memo referenced above, addresses but does not reflect the unacceptable actual "hardware" discrepancies in safety related radiation detection instrumentation manufactured by Victoreen, Inc., and delivered to the Midland plant. The memo indicates that Mr. Grant received misleading information and does not describe the true situation pertaining to the manufacture of modules of questionable quality for Midland and other plants. Therefore, this memo and attached supporting information is intended to clarify and accurately describe the condition of the Midland instrumentation and to offer some insight associated with the poor quality modules. Hopefully, this memo will alter Mr. Grant's opinion that "no further action should be taken by Region III".

First, the licensee has made a determination that the events leading to the poorly manufactured modules for the safety related radiation detection instrumentation are reportable under the provisions of 10 CFR 50.55(e) (Consumers Power Company interim report 82-09 #3, attached).

Mr. Grant states that the Victoreen QA Manager said that "no defects reportable under Part 21 were found". However, as stated in his memo, Region IV notified Victoreen, Inc. by letter dated January 19, 1983, of two items of noncompliance regarding Part 21 violations. Obviously there is some disagreement between the two statements. Mr. Grant has also stated that Victoreen, Inc. has revised their "workmanship standards" such that the identified defects similar to those identified for the Midland equipment would no longer be in nonconformance with their "workmanship standard". Changing the standards to a lesser degree of excellence does not guarantee an acceptable product. The original standards were quite acceptable and reflected the state of the art for industrial practices. Therefore, no change was necessary in the workmanship standards. However, compliance to the original standards would have

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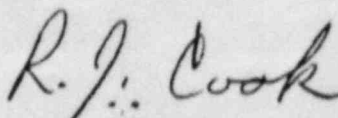
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avoided insufficient soldering, excessive soldering, cold solder joints, excessive heat, capacitor body enamel protruding into the plated-through holes, diode bodies partially embedded in solder, flux not cleaned from boards, circuit board delamination (measling), contamination on wire wrap connectors, duplicate serial numbers on like modules, lifted circuit foil, excessive insulation removal from jumper wires, and components not properly attached mechanically. Approximately 83% of the 877 electronic modules for the Midland plant require some form of rework to rectify the above stated conditions. Changing the workmanship standard will not alleviate the discrepancies stated above and automatically make acceptable quality from poor quality. Also, none of the discrepancies cited appear to be mere "documentation and procedural problems" as claimed by the Victoreen QA Manager.

It must be noted that as a result of the combined Bechtel Power Corporation and Consumers Power Company audit effort which identified the discrepancies, restrictions were placed on only the inspection and testing and shipping of class 1E equipment. Manufacture of modules to the poor quality described was not curtailed, nor could the destination of the modules being manufactured be determined. Only shipment to the Midland Site was stopped and remains in effect until Victoreen can correct all the audit findings. The destination of the modules which were being worked on at the time the discrepancies were identified is unknown.

As a partial response to the nonconformance written against the radiation detection instrumentation, the licensee has stated that "New boards will be fabricated to replace the deficient ones in the 1E area monitors at the job site." Also, "If the boards are reworked, they will be used as spares for use in Non-Q applications to the extent they are useable."

Based on the above information and that contained in the attached 10 CFR 50.55(e) report, other recipients of the modules manufactured during the period of questionable quality should be notified. Also, there should be no attempt by Region III to "close out" this item until such time as Region III has received a final 10 CFR 50.55(e) report pertaining to this item. At such time as this item becomes "closed out" it should be by the direction of the Midland Inspection Site Team and involve personnel with electrical and/or instrumentation expertise.



R. J. Cook
Senior Resident Inspector
Midland Site

cc w/o attach:

R. Warnick
R. Gardner
R. Landsman
B. Burgess



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION IV
 611 RYAN PLAZA DRIVE, SUITE 1000
 ARLINGTON, TEXAS 76011

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File

PRINCIPAL STAFF	
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MEMORANDUM FOR: R. F. Warnick, Acting Director, Office of Special Cases, Region III

FROM: Uldis Potapovs, Chief, Vendor Program Branch, Division of Vendor and Technical Programs, Region IV

SUBJECT: AITS F03040982 - VICTOREEN, INC., DEFECTIVE MODULES FOR RADIATION DETECTION INSTRUMENTATION (VITS 82-255)

A Vendor Program Branch (VPB) inspection was performed at the Victoreen Incorporated, Cleveland, Ohio, plant on November 1-5, 1982, which included the subject item in the scope. The results of the inspection are documented in the attached VPB Inspection Report No. 99900377/82-01.

It was ascertained by inspection that the Nuclear Quality Assurance Program areas of deficiencies identified by Bechtel and Consumers Power Company were valid. Two violations and four nonconformances were issued with respect to the program implementation. However, only 5 of 13 claimed workmanship deficiencies could be substantiated.

The results of this inspection raise concerns pertaining to the adequacy of the previous Bechtel audit and surveillance activities. This subject will be included in a planned integrated inspection of Bechtel procurement activities which is scheduled to be completed in the second quarter of 1983.

This AITS item has now been closed by the VPB. Implementation of corrective actions for the nonconformances by Victoreen, Incorporated, will be accomplished during a future inspection. Should you have any questions or require further information, please contact Mr. L. Parker (728-8199) or Mr. I. Barnes (728-8176).

Uldis Potapovs
 Uldis Potapovs, Chief
 Vendor Program Branch

Attachment: As Stated

cc:
 R. L. Baer, IE
 R. F. Heishman, IE
 J. T. Collins, RIV
 R. L. Bangart, RIV

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Docket No. 99900377/82-01

Victoreen, Incorporated
A Sheller-Globe Corporation Subsidiary
ATTN: Dr. John Ashe
President
10101 Woodland Avenue
Cleveland, OH 44104

Gentlemen:

This refers to the inspection conducted by Mr. L. B. Parker of this office on November 1-5, 1982, of your facility in Cleveland, Ohio, associated with the manufacture of radiation monitoring systems and to the discussions of our findings with you and members of your staff at the conclusion of the inspection.

This inspection was made as a result of the Consumers Power Company 10 CFR Part 50.55(e) report concerning quality program and manufacturing deficiencies which are applicable to radiation monitoring equipment that has been furnished to the Midland Nuclear Plant, Units 1 and 2.

Areas examined and our findings are discussed in the enclosed report. Within these areas, the inspection consisted of an examination of procedures and representative records, interviews with personnel, and observations by the inspector.

During the inspection it was found that the implementation of your QA program failed to meet certain NRC requirements. The specific findings and references to the pertinent requirements are identified in the enclosures to this letter.

This Notice of Violation is sent to you pursuant to the provisions of Section 206 of the Energy Reorganization Act of 1974. You are required to submit to this office within 30 days from the date of this letter, a written statement containing: (1) a description of steps that have been or will be taken to correct these items; (2) a description of steps that have been or will be taken to prevent recurrence; and (3) the date your corrective actions and preventive measures were or will be completed. Consideration may be given to extending your response time for a good cause shown.

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You are also requested to submit a similar written statement for each item which appears in the enclosed Notice of Nonconformance.

The responses requested by this letter are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980; PL 96-511.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you believe to be exempt from disclosure under 10 CFR 9.5(a)(4), it is necessary that you (a) notify this office by telephone within 10 days from the date of this letter of your intention to file a request for withholding; and (b) submit within 25 days from the date of this letter a written application to this office to withhold such information. If your receipt of this letter has been delayed such that less than 7 days are available for your review, please notify this office promptly so that a new due date may be established. Consistent with Section 2.790(b)(1), any such application must be accompanied by an affidavit executed by the owner of the information which identifies the document or part sought to be withheld, and which contains a full statement of the reasons on the basis which it is claimed that the information should be withheld from public disclosure. This section further requires the statement to address with specificity the considerations listed in 10 CFR 2.790(b)(4). The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified periods noted above, the report will be placed in the Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

Uldis Potapovs, Chief
Vendor Program Branch

Enclosures:

1. Appendix A - Notice of Violation
2. Appendix B - Notice of Nonconformance
3. Appendix C - Inspection Report No. 99900377/82-01
4. Appendix D - Inspection Data Sheets (3 Pages)

bcc:

IE Files

AEOD

NRC:QAB

NRC:PuR

Reg. Administrators I, II, III, IV, V

EHJohnson, RIV

RLBangart, RIV

APPENDIX A

Victoreen, Incorporated
Docket No. 99900377/82-01

NOTICE OF VIOLATION

As a result of the inspection conducted on November 1-5, 1982, and in accordance with Section 206 of the Energy Reorganization Act of 1974 and its implementing regulation 10 CFR Part 21, the following violations were identified and categorized in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C), 47 FR 9987 (March 9, 1982):

- A. Section 21.31 of Title 10, Part 21 of the Code of Federal Regulations dated January 1, 1982 states:

Each individual, corporation, partnership or other entity subject to the regulations in this part shall assure that each procurement document for a facility, or a basic component issued by him, her or it on or after January 6, 1978, specifies, when applicable, that the provisions of 10 CFR Part 21 apply.

Contrary to the above, Victoreen, Incorporated (VI) failed to assure that each procurement document specified when the provisions of 10 CFR Part 21 were applicable; e.g., purchase order Nos. 12276 and 12367 for printed circuit boards used in Class 1E modules.

This is a Severity Level V violation (Supplement VII).

- B. Section 21.51(b) of Title 10, Part 21 of the Code of Federal Regulations dated January 1, 1982, states in part:

Each individual, corporation, partnership, or other entity subject to the regulations in this part shall prepare records in connection with the designs, manufacture, fabrication, placement, erection, installation, modification, or testing of any facility, basic component supplied for any licensed facility or to be used in any licensed activity sufficient to assure compliance with the regulations in this part

Contrary to the above, VI failed to prepare records with respect to evaluation of known workmanship defects in electronic modules that have been furnished for use in safety-related circuits.

This is a Severity Level V violation (Supplement VII).

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APPENDIX B

Victoreen, Incorporated
Docket No. 99900377/82-01

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on November 1-5, 1982, it appears that certain of your activities were not conducted in accordance with NRC requirements as indicated below:

Criterion V of Appendix B to 10 CFR Part 50 states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Nonconformances with these requirements are as follows:

- A. Paragraphs 3.2 and 3.2.3 of the Victoreen, Incorporated (VI) Nuclear Quality Assurance Manual (NQAM), Section IV, "Procurement Document Control," Revision 7, dated February 24, 1982, states in part, "The Procurement Document must include provisions for the following as applicable: . . . Basic Technical Requirements - Identification of drawings including latest revision, specifications . . . relating to design, fabrication . . . etc."

Contrary to the above: (1) VI issued purchase order (PO) No. 12276 on March 29, 1982, for printed circuit boards (drawing No. 868B-200-11, Revision H) which identified an obsolete manufacturing specification (i.e., No. IP-103) on the PO, and (2) note 2 of drawing No. 868B-200-11, Revision H, also identified the obsolete manufacturing specification No. IP-103.

- B. Paragraph 3.2 of the NQAM, Section XV, "Nonconforming Materials, Parts, or Components," Revision 7, dated February 24, 1982, states in part, "Nonconforming items may be disposed of by acceptance 'as is', by scrapping or repairing the defective item, or by rework to complete or correct to a drawing or specification. Such measures provide assurance that the item is identified as nonconforming and controlled."

Contrary to the above, VI material inspection report No. 17532, dated August 16, 1982, was improperly dispositioned in that three discrete dispositions were made for the specific material; i.e., two separate "rework" dispositions and one "use as is" disposition.

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- C. Paragraph 3.7 of VI Standard Operating Practices (SOP) Procedure No. 510.001, "Procedure for Wave Soldering of Printed Circuit Cards," Revision 0, dated March 3, 1980, states, "On a quarterly basis a sample of solder shall be analyzed for contamination and the results of the analysis shall be posted in the proximity of the wave solder machine."

Contrary to the above, the analyses were done less frequently than quarterly. Analyses were being performed on an approximately semiannual basis beginning February 27, 1980.

- D. Paragraph 3.4 of VI SOP Procedure No. 510.001, Revision 0, dated March 3, 1980, states, "Pre-heaters and conveyer speed shall be such that the component side of the circuit board shall reach a temperature of 170° to 190°F prior to entering the wave. This maybe checked with temperature tabs, sticks, or pyrometer."

Contrary to the above, a Tempilstick for indicating 200°F was used by manufacturing personnel to determine preheat temperature.

ORGANIZATION: VICTOREEN, INCORPORATED
CLEVELAND, OHIO

REPORT NO.: 99900377/82-01	INSPECTION DATE(S) 11/1-5/82	INSPECTION ON-SITE HOURS: 58
CORRESPONDENCE ADDRESS: Victoreen, Incorporated A Sheller-Globe Corporation Subsidiary ATTN: Dr. John Ashe, President 10101 Woodland Avenue Cleveland, Ohio 44104		
ORGANIZATIONAL CONTACT: Mr. Roger Zimmerman, Quality Assurance Manager TELEPHONE NUMBER: (216) 795-8200 Ext. 267		
PRINCIPAL PRODUCT: Radiation monitoring systems		
NUCLEAR INDUSTRY ACTIVITY: Radiation monitoring systems, required for Class 1E applications, representing approximately five percent of total production.		
ASSIGNED INSPECTOR:	<u><i>L. B. Parker</i></u> L. B. Parker, Reactive and Component Program Section (R&CPS)	<u>1-6-83</u> Date
OTHER INSPECTOR(S):	J. Hamilton, R&CPS	
APPROVED BY:	<u><i>I. Barnes</i></u> I. Barnes, Chief, R&CPS	<u>1-6-83</u> Date
INSPECTION BASES AND SCOPE:		
A. <u>BASES</u> : 10 CFR Part 21 and 10 CFR Part 50, Appendix B.		
B. <u>SCOPE</u> : This inspection was made as a result of the Consumers Power Company 10 CFR Part 50.55(e) report concerning quality program and manufacturing deficiencies which are applicable to radiation monitoring equipment that has been furnished to the Midland Nuclear Plant. Additionally, the following (Cont. on next page)		
PLANT SITE APPLICABILITY:		
Docket Nos. 50-329 and 50-330.		

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REPORT

NO : 99900377/82-01

INSPECTION

RESULTS:

PAGE 2 of 7

SCOPE: (Cont.) areas were inspected: (1) status of previous inspection findings, (2) implementation of 10 CFR Part 21, (3) equipment calibration, (4) training, and (5) manufacturing process control.

A. VIOLATIONS:

1. Contrary to Section 21.31 of 10 CFR Part 21, Victoreen, Incorporated (VI) failed to assure that each procurement document specified, when applicable, that the provisions of 10 CFR Part 21 apply. Printed circuit boards were supplied in Class 1E modules, yet the purchase orders (Nos. 12276 and 12367) failed to cite 10 CFR Part 21 requirements.
2. Contrary to Section 21.51(b) of 10 CFR Part 21, VI failed to prepare records with respect to evaluation of known workmanship defects in electronic modules that have been furnished for use in safety-related circuits.

B. NONCONFORMANCES:

1. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraphs 3.2 and 3.2.3 of the Nuclear Quality Assurance Manual (NQAM), Section IV, Revision 7, dated February 24, 1982:
 - a. VI issued purchase order (PO) No. 12276 on March 29, 1982, for printed circuit boards (drawing No. 868B-200-11, Revision H) which identified an obsolete manufacturing specification (MS) No. IP-103 on the PO;
 - b. Note 2 of drawing No. 868B-200-11, Revision H, also identified the MS as the obsolete IP-103.
2. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 3.2 of the NQAM, Section XV, Revision 7, dated February 24, 1982, material inspection report (MIR) No. 17532 was improperly dispositioned, in that three discrete dispositions were made for the specific material; i.e., two separate "rework" dispositions and one "use as is" disposition.
3. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 3.7 of the procedure for wave soldering (No. 510.001, Revision 0, dated March 3, 1980), solder bath analysis for contamination was not being conducted on a quarterly basis.

REPORT

NO : 99900377/82-01

INSPECTION

RESULTS:

PAGE 3 of 7

4. Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraph 3.4 of the procedure for wave soldering (No. 510.001, Revision 0, dated March 3, 1980), a measuring device to assure circuit board preheat temperature reaches 170° to 190°F was not being used.

C. UNRESOLVED ITEMS:

None

D. STATUS OF PREVIOUS INSPECTION FINDINGS:

1. (Closed) Deviation A (79-01): The NQAM did not describe the functions, responsibilities, and authority of senior management personnel whose activities affect quality.

VI issued Revision 6 of the NQAM on March 1, 1980, with an updated organizational chart along with a narrative description of the functions, responsibilities, and authority of senior management personnel whose activities affect quality.

2. (Closed) Deviation B (79-01): The VI QA manager was not maintaining audit files.

VI hired a full-time trained auditor for the QA staff, updated all audits and audit files, and revised the audit procedure requirements to identify the responsibility of the QA auditor and to clarify record requirements.

E. OTHER FINDINGS OR COMMENTS:

1. NRC Region III Requests: NRC Region III requested that an inspection be performed at VI as a result of the Consumers Power Company (CPCO) 10 CFR Part 50.55(e) report concerning quality program and manufacturing deficiencies which are applicable to radiation monitoring equipment that had been furnished to the Midland Nuclear Plant.

a. Quality Assurance Program Deficiencies: Twelve areas of unsatisfactory compliance to Bechtel procurement specifications and implementation were identified during the September 8-10, 1982, audit of VI by Bechtel and CPCO. The NRC inspection team inspected all of these areas and determined that the findings were valid. Resolutions for QA program deficiencies were agreed to in an October 4 and 5, 1982, meeting between Bechtel and VI.

REPORT

NO. : 99900377/82-01

INSPECTION

RESULTS:

PAGE 4 of 7

Completion dates of the resolutions started in October 1982 and ran into November 1982. Since the changes to the QA program are very recent and some not completed, the program evaluation will be completed during the next inspection. Nonconformances B.1 and B.2 were identified as a result of this item.

VI has rewritten the NQAM and the SOP procedures and has resubmitted them to Bechtel for approval. The new procedures, where applicable, have begun to be implemented.

b. Radiation Monitoring System Electronic Module Workmanship Deficiencies:

One radiation monitoring system electric module (Class 1E) scheduled for Midland was inspected at VI. This module is a qualification sample selected from the 14 modules manufactured in accordance with Bechtel PO Nos. 7220-J289AC and J244AC. Twelve of the fourteen modules are at Midland and were recently rejected. Workmanship Standard No. 1141 7220-J289-83-2 (VI procedure No. 500.002, Revision 0), as imposed by Bechtel, was used for this inspection. The CPCO interim 50.55(e) report of October 15, 1982, cited 12 conditions of nonconformance on 4 modules at Midland in the area of soldered connections. One module was inspected at VI (S/N 102) for similar nonconformances. A summary of findings is as follows:

Identified Nonconformance	Defects per Total Connections	Item Inspected	Applicable Workmanship Std. Page No.
1. Excess solder	1/1268	Scaler 862S-100-91 (R-111)	7220-J289-83-2 Page 124
2. Cap. body protruding into plated-thru hole	26/33	Memory Extension 862ME-210-90 (C-1 thru C-26)	7220J289-83-2 Page 83
	1/25	Controller 862C-210-90 (C-10)	

REPORT

NO. : 99900377/82-01

INSPECTION

RESULTS:

PAGE 5 of 7

3. Flux not removed	2/1268	Controller 862C-210-90 (F-4, R-128)	7220-J289-83-2 Pages 95, 117, and 123
4. Wire wrap contamination	12/1268	Scaler 862 SF-212-90	7220-J289-83-2 Page (none refer- enced)
5. Insufficient solde (not including plated-thru hole solder plugs)	9/1268 88/1524 0/1012 3/336 32/492 0/1428	Controller Memory Exten- sion Scaler Buss Extender Thumb Wheel Memory Expansion	7220-J289-83-2 Pages 86 and 112

As shown above, 5 of the 13 claimed nonconformances for solder connection were confirmed to varying degrees on the unit inspected at VI. Eight claimed nonconformances could not be confirmed; i.e., (1) cold solder joints, (2) excessive heat, (3) diode bodies partially embedded in solder, (4) circuit board delamination (measling), (5) duplicate serial numbers on like modules, (6) lifted circuit foil, (7) excessive insulation removal from jumper wires, and (8) components not properly attached mechanically.

VI personnel stated Bechtel was including in the category of insufficient solder all plated-through holes not plugged with solder. The contractually imposed workmanship standards are confusing concerning the requirement for solder plugged plated-through holes. On page 86 of the workmanship standard, typical interface connections show plated-through holes without solder plugs; however, page 114 shows plated-through holes with solder plugs and provides acceptance criteria. Plated-through holes on the module inspected at VI (S/N 102) were not solder plugged. Additionally, the following printed wiring board (PWB) assemblies were inspected at VI to the requirements of Workmanship Standards No. 7220-J289-83-2:

- (1) Three PWB assemblies from a nonserialized Model No. 876A-1 High Range Containment Area Monitor Readout module were inspected. Three defects were noted: (1) approximately one-half the epoxy capacitors were inserted into the holes, (2) 12 plated-through holes were not solder plugged, and (3) 5% of the component leads did not show evidence of solder on the top side of the PWB.

REPORT

NO.: 99900377/82-01

INSPECTION

RESULTS:

PAGE 6 of 7

- (2) Three Model No. 846-1 area monitor PWBs (serial Nos. 458, 378, and 379) were inspected without disassembly. These units utilized single sided PWBs. Only one of the defects cited in the 10 CFR Part 50.55(e) report was discovered on the three PWBs; i.e., excess solder on 10 of the connections located on the bottom side. However, these units were manufactured in 1970 prior to the implementation of any workmanship standards.
 - (3) Three PWBs for Model No. 842 area monitors were inspected. These PWB assemblies were replacements or spares for area monitors manufactured prior to 1975 and are single sided. No defects were noted on any of the three PWBs.
 - (4) Five Model No. 876A-1 area monitors were inspected. These units had been inspected by Bechtel personnel and repaired by VI personnel in early September 1982 at VI. Additional solder was added to 85 connections and one panel knob was adjusted. These repairs were initialed-off by Bechtel and the modules were placed on hold at VI.
2. Equipment Calibration: This area of the inspection consisted of a review of: (a) four measuring instruments - Veeco MS 170 leak detector, Veeco sensitivity calibrator Type SC-5, Fluke 8050A, and Fluke 8600A multimeters; (b) two secondary standards - 760A meter calibrator and 7552 Type K-2 potentiometer; and (c) calibration repair records and certifications for the above instruments. Traceability to national standards was satisfactorily demonstrated. There were no nonconformances or unresolved items identified.
 3. Manufacturing Process Control: This area of the inspection consisted of reviewing the wave soldering machine; the applicable shop area; manufacturing procedure No. 510.001, Revision 0 concerning wave soldering; and posted records of analysis of solder bath contamination. Nonconformances B.3 and B.4 were identified.
 4. Training: This area of the inspection was performed by reviewing the training records for eight manufacturing and quality personnel. Four manufacturing persons were interviewed to determine their areas of responsibility and levels of training. Additionally, four quality assurance persons that maintained certified training records of QA and manufacturing personnel were also examined. The following was identified:

ORGANIZATION: VICTOREEN, INCORPORATED
CLEVELAND, OHIO

REPORT

NO. 89900377/82-01

INSPECTION

RESULTS

PAGE 7 of 7

Three Quality Assurance persons were certified Level 3 per ANSI/ASME N45.2.6-1978 by a prior QA manager. Records were not available at VI to substantiate his qualifications or capabilities to certify to Level 3. However, the prior QA manager is a 23 year employee of VI and stated he had maintained his QA records with his immediate supervisor, the past president. The prior QA manager stated that he has not been able to locate his records since the past president retired from the company.

5. 10 CFR Part 21 Implementation: Posting of the 10 CFR Part 21 implementing procedure and Section 206 of the Energy Reorganization Act of 1974 were satisfactory. Violations A.1 and A.2 were identified as a result of this item.

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	PO	7220-5244C	7	3/17/82	Rad. Monitor System for Consumers Service, SD, 207017
2	LTR	—	—	July 29, 1982	Fr: D.B. Buell between To: Richard Amador accepting PO, Row 7
3	Spec	MR 7220-5244-1 Attachment B	4	3/11/82	Tech. Spec. for Area Radiation Monitor, Midland Plants 1 & 2
4	Spec	MR 7220-5244-2 Attachment C	4	8/28/81	Tech Spec for Airborne Rad. Monitors, Midland Plants 1 & 2
5	Spec	MR 7220-5244(0) ATTACHMENT S	2	6/15/73	Spec for Gen. Welding Rigids for Shop Fab. Equip. Midland Plants 1 & 2
6	PO	E 219880	—	10/13/82	Series 961, class 4E, Area Monitor w/ interfacing SW for Salem Monitor
7	PRO	901.004	2	10/18/82	QA surveillance Activities
8	PRO	410.301	5	—	Traveler
9	QCD	—	—	4-16-82	Qualification of Frank Dorsey, 1) 45.2.6 Level III
10	PRO	946.302	3	9-20-82	QA internal audit system
11	PRO	946.301	1/2	4-9-82 10-18-82	QA internal audit policy - system
12	PRO	946.303	1	3/24/81	QA Qual of QA Program Audit Personnel
13	QCD	—	—	1979-1982	3 Folders containing all audit reports
14	QCD	—	—	—	Lead Auditor Qual Records, Bruce D. Romano 3/24/81, Charleston 5-10-82
15	QAM	—	4	5-23-77	Nuclear Safety Related QA Manual

TYPE OF DOC:

- DWG - DRAWING
- SPEC - SPECIFICATION
- PRO - PROCEDURE
- QAM - QA MANUAL
- QCD - QC DOCUMENT
- P.O. - PURCHASE ORDER
- INH - INTERNAL MEMO

LTR - LETTER

-
-
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INSPECTOR L.B. PARKER / Hamilton

DOCKET NO. 99900 311

SCOPE Reactive Inspection
VITS 82-255

DOCUMENTS EXAMINED

REPORT NO. 82 - 01
PAGE 2 OF 2

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
16	QAM	—	7	2-24-82	Nuclear Quality Assurance Manual
17	QCD	—	—	—	9 Personnel Records of Certification
18	PO	12276	—	3/25/82	Electronic Support Systems FABRICATED PCB No 868B-200-11
19	INM	—	—	—	Analysis of Spares where 875 Ordine have already been placed (4 pages)
20	Mag	—	—	—	Printed Circuit Tech. Article by Norman S. Emerson, Chapter 12 pages 312 & 313
21	—	—	—	—	Operations Manual pages 15, 16, & 21
22	INM	—	—	Apr 2, 1981	Victorson Hi. Range Containment Monitor Detector, 877-1, Qual. Summary
23	LTR	089639	—	05/15, 82	Bechtel mty notes of 4, 5 Oct 82 mty at Victorson Re: GA program Review
24	PO	16007	—	6/7/82	Dayco Industries; Air Sample Pick-up Tubes
25	PO	13558	—	3/22/82	Aero Welding - Tank Flanges
26	QCD	—	—	—	Various Test Reports & QA Data Sheets
27	QCD	—	—	—	Outdated S.O.P. Review (numerous)

TYPE OF DOC:

- DWG - DRAWING
- SPEC - SPECIFICATION
- PRO - PROCEDURE
- QAM - QA MANUAL
- QCD - QC DOCUMENT
- P.O. - PURCHASE ORDER
- INH - INTERNAL MEMO

LTR - LETTER

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