

ORGANIZATION: PACIFIC AIR PRODUCTS COMPANY  
SANTA ANA, CALIFORNIA

REPORT NO.:	99900769/83-01	INSPECTION DATE(S)	2/7-10/83	INSPECTION ON-SITE HOURS:	25
CORRESPONDENCE ADDRESS: Pacific Air Products Company ATTN: Mr. L. R. Hess President 3133 W. Harvard Blvd. Santa Ana, California 92704					
ORGANIZATIONAL CONTACT: Mr. J. P. Dodson, Director, Quality Assurance TELEPHONE NUMBER: (714) 557-1710					
PRINCIPAL PRODUCT: Air control equipment. NUCLEAR INDUSTRY ACTIVITY: Approximately 80 percent.					
ASSIGNED INSPECTOR:	<u>R. E. Oller</u> R. E. Oller, Reactive and Component Program Section (R&CPS)			<u>4-7-83</u> Date	
OTHER INSPECTOR(S):					
APPROVED BY:	<u>R. E. Norman</u> for: Barnes, Chief, R&CPS			<u>4-13-83</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> : Status of previous inspection findings, procurement document control, nonconformances and corrective action, manufacturing process control and followup on a Comanche Peak report concerning malfunction of fire dampers at Comanche Peak Steam Electric Station.					
PLANT SITE APPLICABILITY: Defectively-mounted locks in safety-related fire dampers: 50-445/446, 50-286, and 50-369/370.					

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PDR GA999 EMVPACAP  
99900769 PDR

DESIGNATED ORIGINAL  
Certified By Shelanne Clark

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A. VIOLATIONS:

None

B. NONCONFORMANCES:

Contrary to Criterion V of Appendix B to 10 CFR Part 50 and paragraphs 6.2 and 7.1 of Procedure No. 15.1 in the Pacific Air Products Company (PAPCO) QA Manual, records had not been maintained which would indicate that an evaluation had been made for either reportability of defectively-mounted blade locks in safety-related fire dampers furnished to the Comanche Peak Steam Electric Station or if other projects were affected.

C. UNRESOLVED ITEMS:

None

D. STATUS OF PREVIOUS INSPECTION FINDINGS:

1. (Closed) Nonconformance A (82-02): The QC department failed to comply with QA Manual Procedure No. 12.0 with respect to providing calibration dates on labels attached to micrometers, calipers, and the "Porto-lab" testing console.

The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, the calibration dates had been entered on the labels and that calibration records were being maintained by QC and monitored every 3 months to assure that labels are correct.

2. (Closed) Nonconformance B (82-02): The QC department failed to store micrometers and calipers under suitable conditions to prevent damage as required by Procedure No. 12.0 of the QA Manual.

The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, the micrometers and calipers were now being properly stored in pull-out drawers and individual cases to provide adequate protection. The NRC inspector also determined that storage practices were being routinely inspected by QC to ensure compliance with requirements.

3. (Closed) Nonconformance C (82-02): The QC department failed to tag a broken air pressure gage in accordance with Procedure No. 12.0 of the QA Manual to prevent its inadvertent use.

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The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, the subject gage had been tagged, repaired, and calibrated. It was additionally determined that air pressure gages are being maintained in a special box by QC which is kept in the QC office, except when the gages are in use. All gages were identified as having a proper calibration status label.

4. (Closed) Nonconformance D (82-02): The QA manager failed to provide a signature as evidence of review in the "Final Review" space on two completed nonconformance reports (i.e., No. 6291-1 dated March 23, 1982, and No. 6351-1 dated May 20, 1982) as required by Procedure No. 15.0 of the QA Manual.

The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, the two nonconformance reports had been signed and that the QA Manager was performing periodic reviews of open nonconformances identified on the "Items On Hold" lists. This review was documented by his signing and dating of these lists.

5. (Closed) Nonconformance E (82-02): Management failed to perform an internal audit of the entire QA program on an annual basis as required by Procedure No. 18.0 of the QA Manual.

The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, an internal audit of the entire QA program was performed on September 20, 1982. To prevent recurrence the annual audit has been rescheduled to be performed in September to avoid conflicts with vacations and other interferences.

6. (Closed) Nonconformance F (82-02): Management failed to use the forms exhibited in the QA Manual for the internal yearly audit schedule and the audit checklist as required by Procedure No. 18.0 of the QA Manual.

The NRC inspector verified that as indicated in the vendor's response letter dated September 30, 1982, Exhibit 18.0-1 had been revised on August 12, 1982, to provide instructions for use of a simplified audit schedule. It was clarified that Exhibit 18.0-2 was to be used only for less than full scope internal audits and for external audit of vendors.

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E. OTHER FINDINGS OR COMMENTS:

1. Procurement Document Control: The NRC inspector reviewed Procedure No. 4.0 of the PAPCO QA Manual to verify that this activity is controlled by the QA program.

A review was made of 12 purchase orders, the current approved vendor list, and survey/audit checklist records for 3 subvendors. This review was performed to verify that procurement documents were being controlled in accordance with procedures; that they suitably included or referenced all necessary requirements for procurement of materials, equipment, and services, and that subvendors are required to provide appropriate QA programs. Within this area, no nonconformances were identified.

2. Nonconformances and Corrective Action: The NRC inspector reviewed Procedure Nos. 15.0 and 16.0 of the PAPCO QA Manual to verify that QA program provides appropriate measures for the control of these activities.

A review was made of 10 nonconformance reports (NCRs), a log of NCRs, 6 corrective action requests (CARs), and 6 CAR log sheets. This review was performed to verify that nonconforming items are reviewed and dispositions are made with respect to acceptability, rejection, repair or rework, and that conditions adverse to quality, including the cause, are promptly identified and corrected. Within this area, no nonconformances were identified.

3. Manufacturing Process Controls: The NRC inspector reviewed five procedures in the PAPCO QA Manual to verify that the QA program provides appropriate measures for the control of this activity.

Observations were made of nuclear safety-related damper material storage, cut and formed damper parts, fit up and welded dampers, weld machine calibration status, bubble testing of a finished damper, and stored weld filler wire.

Additional documents reviewed included: inprocess traveler package records consisting of a production order and traveler; 11 special process procedures of which 8 were welding procedures; welding procedure qualification records; various travelers accompanying inprocess work; inspection status tags attached to dampers in various phases of production; a documentation package for backdraft

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dampers shipped to the Catawba Nuclear Station; travelers for various quantities of dampers shipped to the Clinton Power Station; leakage test reports and cycle test reports for 5 Clinton Power Station dampers; and performance qualification records for 5 active welders.

This review was made to verify that nuclear safety-related dampers are manufactured, inspected and tested, and the results documented in accordance with QA program requirements. Within this area, no nonconformances were identified.

4. Malfunction of Fire Dampers at the Comanche Peak Steam Electric Station:

a. Introduction: Texas Utilities Generating Company submitted a 10 CFR Part 50.55(e) report to NRC Region IV on May 28, 1982, which identified operability problems and deficiencies in fire dampers furnished by PAPCO to the Comanche Peak Station. During preoperational startup testing, the same horizontal fire dampers failed to operate correctly which caused dislodgement of blade locks and closure springs. These failures were attributed to both debris and corrosion related to construction and improper attachment of blade locks in dampers provided by a subsupplier; i.e., Air Balance, Inc. (ABI). Vertical dampers were also identified as failing to close properly due to construction debris and/or air velocity pressure.

b. Findings: Record review by the NRC inspector and discussions with PAPCO personnel provided the following information in regard to the ABI damper problem. Mr. L. R. Hess, President of PAPCO, visited the Comanche Peak site on February 19 and March 1-3, 1982, to review the damper problems. At that time, he took action to have a representative from ABI visit the site and advise him on the ABI equipment problem. During the site meeting held on March 31, 1982, a decision was made to correct the blade lock problem by securing all of the locks on the ABI dampers with poprivets. Lost locks were to be replaced.

Mr. L. R. Hess indicated to the NRC inspector that he had considered and evaluated the need to report the blade lock problem to the NRC under 10 CFR Part 21 requirements after his visit to the site on March 1-3, 1982, but deferred action until ABI could be consulted. He stated that he subsequently determined

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that the item was not reportable. In the same discussions he also indicated that no records of his evaluation were available. Due to this lack of records, the NRC inspector was unable to review the basis for determination of nonreportability and if the generic aspects of the problem had been reviewed.

At the request of the NRC inspector, PAPCO reviewed their procurement document files and verified that two purchase orders were awarded to ABI in October 1980 for similar type safety-related fire dampers. These dampers were furnished to Indian Point Station, Unit 3, and the William B. McGuire Nuclear Station. During the exit meeting, Mr. L. R. Hess indicated he would advise these customers in writing of the potential blade lock problem on the furnished ABI dampers. Subsequent to this inspection, Mr. L. R. Hess furnished the NRC inspector copies of letters he had sent to the above two customers.

One nonconformance was identified (see paragraph B) in regard to the failure of PAPCO management to perform a documented evaluation of the ABI damper problems at the Comanche Peak site and to perform a review for other affected projects.



DOCUMENTS EXAMINED

1	2	TITLE/SUBJECT	3	4
1	4	PAPCo QA manual procedure No. 4.0.	3-8-78	3
2	8	Approved Vendor List	10-28-82	N.A.
3	5	Following purchase orders and the related P.O. checklists		
		(1) P.O. 15299 to Namco Controls	2-29-82	"
		(2) P.O. 15400 " SHUR PLATE Co.	1-20-83	"
		(3) P.O. 15206 " ABC Metals Co	12-2-82	"
		(4) P.O. 15269 " " " "	12-20-82	"
		(5) P.O. 14958 " Contramatic Corp.	10-11-82	"
		(6) P.O. 15049 " Booth Twining Co.	10-27-82	"
		(7) P.O. 14757 " Joslyn Co	9-19-82	"
		(8) P.O. 13726 " National Technical Systems	1-20-83	2
		(9) P.O. 13726 " " " " "	1-10-83	1
		(10) P.O. 15339 " Booth Twining Co	1-18-83	N.A.
		(11) P.O. — " Air Balance Inc.	10-21-80	"
		(12) P.O. 10878 " Air Balance Inc.	10-30-80	1
4	6	Facility Survey-Audit Checklist record for following:		
		(1) Booth Twining Co.	12-15-82	NA
		(2) G.H. Bettis	8-6-82	"

(Cont.)

Document Types:

- |                  |                                 |
|------------------|---------------------------------|
| 1. Drawing       | 5. Purchase Order               |
| 2. Specification | 6. Internal Memo                |
| 3. Procedure     | 7. Letter                       |
| 4. QA Manual     | 8. Other (Specify-if necessary) |

Columns:

1. Sequential Item Number
2. Type of Document
3. Date of Document
4. Revision (If applicable)





DOCUMENTS EXAMINED

Scope/Module R.E. Oller  
Nonconformances  
and Corrective Action

1	2	TITLE/SUBJECT	3	4
1	4	PAPC QA manual procedure No. 150 and 160	1-28-77	0
2	8	Following Nonconformance Reports related to nuclear safety related danger work: (1) No. 6291-1 (2) No. 6351-1 (3) No. 5445-7 (4) No. 6009-1 (5) No. 5800-8 (6) No. 5445-6 (7) No. 5500-2 (8) No. 5551-5 (9) No. 6460-2 (10) No. 6460-1	2-23-82 5-10-82 10-4-82 8-18-82 8-26-82 12-19-81 3-18-80 2-7-83 1-24-83 2-7-83	N.A. " " " " " " " " "
3	8	Log of Nonconformance Reports for 9 entries	VARIOUS	"
4	8	Following corrective Action Requests: (1) No. 5555-1 (2) No. 5445-1	10-1-82 —	" "
		(cont.)		

Columns:  
 1. Sequential Item Number  
 2. Type of Document  
 3. Date of Document  
 4. Revision (If applicable)

Document Types:  
 1. Drawing  
 2. Specification  
 3. Procedure  
 4. QA Manual  
 5. Purchase Order  
 6. Internal Memo  
 7. Letter  
 8. Other (Specify-if necessary)



DOCUMENTS EXAMINED

Scope/Module Manufacturing  
Process Control

1	2	TITLE/SUBJECT	3	4
1	4	PAPCo. QA manual procedures Nos. 80, 80, 91, 100/110	VARIOUS	VARIOUS
2	8	Production Order Traveler for Job # 6337-H-5, IMPROCESS	1-10-82	N.A.
3	8	Traveler record package for NMP-2, Job 5551-H-46 consisting of: (1) Production Order (2) Production Order Traveler (3) Special Process procedures as follows (a) Cleaning/Painting, section D (b) Packaging and Preservation, Section E (c) Visual Inspection Criteria for Welding, Section E (d) WPS 1-0 (e) WPS 7-A (f) WPS 6-A (g) WPS 8-0 (h) WPS 8-A (i) WPS 8-B (j) WPS 8-B (cont.)	2-12-79 2-12-79 5-12-78 4-8-80 4-8-80 12-17-79 12-17-79 12-17-79 12-17-79 12-17-79	1 1 C 6 3 1 2 2 2 2

Document Types:  
 1. Drawing  
 2. Specification  
 3. Procedure  
 4. QA Manual

5. Purchase Order  
 6. Internal Memo  
 7. Letter  
 8. Other (Specify-if necessary)

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DOCUMENTS EXAMINED

1	2	TITLE/SUBJECT	3	4
3(cont.)	8(cont.)	(3)(A) Prequalified Joint Welding Procedure No. 6-0	12-17-79	2
		(2) " " " " " No. 70	12-17-79	2
4	8	Records of welding Procedure Qualification For WPS's Nos. 10, 7-A, 6A, 8-0, 8A & 8-B	VARIOUS	-
5	8	Inspection Status Tags for Bubble Tight Damper Job No. 5551	-	NA
6	8	Following records of documentation package for backdraft dampers for Catawba Station: (1) Certificate of Compliance (2) Travelers Nos 1711, 1712, 1713 and 1714 for dampers on Job No 6239	VARIOUS	"
7	8	Travelers Nos 0681, 1620, 1631 & 1632 for dampers furnished to Clinton Unit 1	VARIOUS	"
8	8	Leak Test Reports for 5 dampers furnished to Clinton Unit 1	VARIOUS	"
9		cycle Test Reports for 5 <sup>other</sup> dampers furnished to Clinton Unit 1	VARIOUS	"
10.	8	Performance Qualification Records for 5 active welders	VARIOUS	NA

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- |                  |                                 |
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Inspector R.E. Oller

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Scope/Module Comanche Peak 10CFR  
Part 50.55(w) Report

DOCUMENTS EXAMINED

1	2	TITLE/SUBJECT	3	4
1	2	Gibbs Hill P.O. Specification No 2323-MS-84, Section 3, Technical Specification for P.O. CPP0084, Comanche Peak	6-8-78	—
2	5	PAPCO P.O. No 07791 to Air Balance for five dampers per list F-1 thru F-24	7-1-78	B
3	8	Damper Data Sheets F-1 thru F-24 for above P.O.	—	NA
4	6	PAPCO internal "Jobsite Inspection Report" Comanche Peak by L.R. Hess	3/1-3/82	"
5	7	PAPCO letter to Air Balance Inc.	4-2-82	"
6	3	Air Balance Inc. Instructions for lock & spring installation on dampers	2-26-82	"
7	8	Texas Utilities Generating Co. Minutes of Meeting.	3-31-82	"
8	7	ABI letter to PAPCO.	4-6-82	"
9	7	Interpace/Tuttle & Bailey letter to PAPCO	3-18-82	"
10	7	PAPCO letter to Tuttle & Bailey/Comanche Peak	3-25-82	"
11	5	PAPCO P.O. No. 10372 to Tempco Equipment (Advanced) Air concerning 60" x 60" dampers	10-10-79	"

(cont.)

- Document Types:
1. Drawing
  2. Specification
  3. Procedure
  4. QA Manual

5. Purchase Order
6. Internal Memo
7. Letter
8. Other (Specify-if necessary)

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