

PROJECTS, ENGINEERING AND CONSTRUCTION -QUALITY ASSURANCE DEPARTMENT

DATE OF ISSUANCE: 7/13/82

PAGE 1 OF

WRBird JEBrunner DECalkins

JWCook

LEDavis

MADietrich

GSKeeley

HPLeonard BWMarguglio

DBMiller. JARutgers

MSkates ESmith RWSoderholm DATaggart RAWells

ALAB-2

MO1-602-2

FILE NO:

18.4.7

DATE OF AUDIT:

May 17 through 20, 1982

ORGANIZATION AUDITED:

The Zack Company-Chicago

PLANT & PROJECT:

Midland Units 1 and 2

SIG. OF AUDIT TEAM LEADER/DATE: Mayerderona 1/1 APPROVED BY/DATED

SCOPE AND OBJECTIVE

The objectives of the audit were:

- 1) Verify the consistency of quality records among MPQAD-Midland Site, Zack Company-Chicago, and various Zack Company Suppliers by direct examination and comparison.
- 2) Determine the status of the implementation by Zack Company of the CAR-014 corrective action commitments established in the Corrective Action Report transmitted to MPQAD via Zack letter 7220-M-151-C/B-522, dated 10/23/81.

The audit scope consisted of 114 Purchase Order (PO) record packages. The packages were selected from the 556 PO packages that had been reviewed and found acceptable as of 5/14/82 by Zack-Chicago. Accepted PO's were chosen because they represented documents revalidated since the initiation of CAR-014, and because they were construed as providing a demonstration of the current effectiveness of the Zack document and records management program. PO's were purposely selected from Zack's Suppliers in the Chicago area to allow a comparison of MPOAD records with Zack-Chicago's records and the records of some of Zack's Suppliers. The PO's and Suppliers selected were as follows:

1) Delta Screw Company - 7 PO's

2) Hobart North Welding Supply - 20 PO's

Weld Star Company - 14 PO's

- () Joslyn Manufacturing and Supply 5 PO's
- 5) Brightly Galvanized Products, Inc. 20 PO's

6) Ryerson Steel - 20 PO's

7) Miscellaneous - 28 PO's

Copies of the MPQAD records were taken to Chicago and compared with the corresponding records on file in the Zack-Chicago Document Control Center. A comparison was made to determine if the documentation was consistent within a particular package and between MPQAD and Zack-Chicago records. During this review Zack-Chicago contacted Suppliers chosen by MPOAD in the Chicago area and made arrangements for a review of their material documentation files. Three Suppliers were selected for comparison. They were Weld Star Company, Ryerson Steel and Delta Screw Company, totaling 41 record packages.

The scope of the CAR-014 review was to determine the status of the corrective action commitments from the 10/23/81 report.

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II. IDENTIFICATION OF AUDITORS

The audit was performed by the following personnel:

M Verderosa - Audit Team Leader (MPQAD)

G Parker - Acting Audit Team Leader (MPQAD)

III. PERSONS CONTACTED DURING THE AUDIT:

	Name	Organization	Title	Audit Entrance	Audit	Audit Exit
C	Zack DeZutel	Zack	President		X	Х
J	DeZutel	Zack	Exec. Vice President		X	X
D	Calkins	Zack	Project Manager	X	X	X
D	Malzahn	Zack	Vice President	X		
M	Skates	Zack	Manager, QA	X	X	
R	Basiaga	Zack	Lead QA Engineer		X	X
E	Houk	Weld Star Co.	Manager Customer Svc.		X	
J	Berry	Weld Star Co.	QA Coordinator		X	
J	Latonia	Delta Screw Co.	Vice President		X	
W	Lawler	Ryerson Steel	Quality Assurance		X	
K	Sellars	Ryerson Steel	QA Manager		X	
G	Parker	CPCo	HVAC QAE Supervisor	X	X	X
M	Verderosa	CPCo	Mech. QAE Supervisor	X	X	X
Н	McGrane	Zack	Document Control Supervisor		X	

IV. AUDIT SUMMARY

- 1) Notification of the audit date, time and scope a provided verbally to Mr. D Calkins of Zack and i... R W Soderholm of Beck by H P Leonard of MPQAD on 5/11/82.
- 2) The audit checklist was developed to compare record package information for any discrepancies among the Zack-Chicago, MPQAD-HVAC QA and Zack Supplier material documentation. The CAR-014 portion of the audit was developed from the 8 commitments identified in the CAR Report.
- 3) An audit entrance meeting was held on 5/17/82 with personnel in attendance as noted in paragraph III. The scope, plan and tentative schedule were discussed. Contacts for the various phases of the audit were identified. Zack was requested to contact the representatives from Ryerson, Delta Screw and Weld Star companies for the purpose of reviewing their records.
- 4) Daily meetings were held with senior Zack Company personnel to keep them appraised of the audit progress and potential findings.
- 5) The audit resulted in 3 findings which are attached to this report.



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CONTINUATION SHEET

- 6) The following observations were made as a result of this audit:
 - 1. The review of Zack records identified some documents where changes to documents appeared to have been made. While consistency between the MPQAD records and Zack records was verified in all cases, Zack should consider requesting from the appropriate Supplier, a new copy of the noted documents. Those documents are as follows:
 - a) C-4451 Delta Screw, chemical analysis, " e out" utilized.

b) C-4349 - Hobart, blurred type for lot number X4817L309L.

c) C-1385 - Brightly Galvanizing/US Steel Supply, hand written properties on verification for 4" by 4" by 2" tubing.

d) C-949 - Central Steel and Wire, hand written values for each certification of heat - 85332.

No response to this observation is required.

- 2. A review of Ryerson Corporation files identified 3 out of 20 purchase orders for which Ryerson was unable to provide supporting documentation at the time of the audit. Those were C-1076, C-1272 and C-1768. Ryerson agreed to locate these documents and provide them to Zack. MPQAD will verify acceptability at that time (AI: S-1502, priority 8, DCUMCO).
- 7) The audit exit meeting was held on 5/20/82, with those in attendance as noted in paragraph III. At that time, the 3 draft audit findings and 2 observations were presented and discussed. The results of the CAR-014 review were also discussed. (See attachment for details of CAR-014 review.)
- 8) Responses to the audit findings and observation are to be forwarded to MPQAD-HVAC QA.

V. EVALUATION OF EFFECTIVENESS

- This audit verifying consistency among the MPQAD-HVAC QA, Zack-Chicago and Zack's Suppliers record packages, resulted in identifying 9 nonconforming documents. The nature of the nonconformances allowed grouping them into 3 findings, 3 items each finding. The 9 nonconforming documents were individual misses in each of the 9 record packages. From 114 packages, approximately 500 to 600 documents were reviewed, usually for several characteristics on each document. The misses were not discrepancies relating to the data describing the material, but were the lack of QA or purchasing signatures. However, other documents in the associated package, had the necessary review and approval signatures indicating that the nonconformances may be classified as signature oversights, rather than the absence of intended reviews. Although the misses are legitimate nonconformances, the document and records control function appears to be providing documentation that the material provided by the Supplier meets the requirements of Technical Specification 7220-M-151A.
- 2) The following is a summary of the 8 commitments specified in the 10/26/81 report. They are identified by the aplha characters A through H, consistent with the designators in the attachment to this audit report.



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CONTRIUNTION SHEET

Actions have been initiated for each of the commitment items.

- A) Items A and B were not completed by the commitment date(s) established and have not been completed to date.
- B) Item C was partially completed, but no satellite records center at Midland has been established.
- C) Items D and E have been addressed through PQCP's, QAI's and Zack Company memos.
- D) Items F, G and H have been completed. Item F however, was initiated several months late.
- E) Partial resolution for items B, D and E in the form of Zack Company memos, PQCP's and QAI's has provided adequate results in terms of an improved document and records management program. However, this method of records management should be amended to incorporate memos, letters and other informal forms of control into the formal Zack procedures.

Continued effort will be required to complete the commitment actions established relative to CAR-014. At the time of this report, no new commitment dates have been established.

3) At the time of this audit, the Zack Document Control group and QA Engineering were going through training and indoctrination (many of the personnel are new to Zack and document control as related to nuclear construction). It was recommended at the exit meeting that the training these people receive continuously emphasize the importance of quality records relative to the end objective, e.g., to provide sufficient assurance that the HVAC system will function correctly and safely during nuclear operations.

VI. LIST OF ATTACHMENTS

- i) CAR-014, Review of Corrective Action Implementation
- 2) Audit Finding Reports M01-602-2-01 through M01-602-2-03
- 3) Audit Plan (file copy only)
- 4) Completed Checklists (file copy only)

PROJECTS, ENGINEERING AND CONSTRUCTION -QUALITY ASSURANCE DEPARTMENT



AUDIT FINDING REPORT

	COMPLTION								CITE	REFERENCES	13
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Zack Co. procedure - QA Instruction #4, Rev. O. "Control, Content and Maintenance of QA Purchase Order/CMTR Files" paragraph 6.3.1 states in part, "Following receipt of the listed documentation (CMTR/C of C) the Document Control Clerk shall attach original and copies in numbered binder."

Contrary to the above, the following PO's lacked the identified CMTR information:

C-4044 - Q0-5,5C (certification) page 1 dated 9/16/80 C-580 - 500 #E6011 heat 102220 certification C-801 - Reliable Galvanizing Certification - Invoice 31777

Each of these documents was located in the MPQAD files.

MO1-603-2-01 PROJ/DEPT AUDITED

Zack Company - Chicago 7/13/82

FILE MAGNET: 18.4.7

DISTRIBUTION:

WRBird JEBrunner

RAWells ALAB-2 DECalkins

DATaggart

JWCook LEDavis MADietrich GSKeeley

HPLeonard BWMarguglio DBMiller JARutgers

MSkates ESmith

RWSoderholm

RECOMMENDED CORRECTIVE ACTION:

Obtain copy of the above documentation and include in the Zack files.

CORRECTIVE ACTION COMMITMENT;

A response to this item is requested by 8/6/82.

DATE OF C/A COMPLETION:

TATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A:

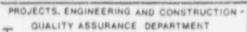
The Zack Company

PERSON MAKING C/A COMMITMENT!

Mark Skates

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(*)) TES NO	IF "YES", DATE OF REPORT TO MRC: N/A
IF "YES", TIME OF KEPORT TO NEC:	IF "TES", MANE OF MRC OFFICIAL TO WHOM REPORTED:
DY TEST, WHO MADE REPORT:	N/A
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C/A VERIFICATION SIGNATURE:	VERIFICATION DATE:





AUDIT FINDING REPORT

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AS IS" COMPLYION VERMAN "AS ASQUERED" / "AS NEEDED" COMPLYION WITH REFERENCE		AFR SER NO:
Zack Co. procedure PQCP-15 "Procurement for	Items used in Fabrica-	M01-602-2-02
tion and Installation of Zack Work" Rev. 1,	paragraph 6.9 states	PAGE/DEPT AUDITED:
in part, "after the P.O. is preparedthe	Purchasing Agent signs	Zack Company - Chicago
the P.O " Also, paragraph 6.11 states i	n part, "The QAM stamps	7/13/82
the PC. He signs and dates"		FILE MARKE
		18.4.7
Contrary to the above, the following PO's 1	acked the identified	DISTRIBUTION:
reviews/signatures:		WRBird DATaggart
		JEBrunner RAWells
C-4344 - Purchasing Agent signature		DECalkins ALAB-2
C-1727 - Purchasing Agent signature		JWCook LEDavis
C-1476 - QA review/signature		MADietrich
		GSKeeley
		HPLeonard
		BWMarguglio
		DBMiller
		JARutg s
		MSkates
		ESmith
		RWSoderholm
		The state of the s
A response to this item is requested by 8/6	/82.	
ATE OF C/A COMPLETION:	ORG, RESP FOR C/AI	PERSON MAKENG C/A COMMITMENT:
ATE OF C/A EPPECTIVENESS:	The Zack Company	Mark Skates
TIL UF S/A SFIRSTINGEN	The Lack Company	Park Draves
ETHOD OF VERIFICATION:		
S AF REPORTABLE PER 50.55(e): YES NO Y	IF "YES", DATE OF REPORT TO MHC:	1/A
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"YES", TIME OF REPORT TO MRC: N/A	LF 123 , MANE OF ARC OFFICIAL TO SHE	w norminal
"TES", WHO MADE REPORT:		
N/A	1	1/ A
TR ORIGINATUR'S SIGNATURE/DATE:	SUPERVISOR'S SIGNATURE DATE	7
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AUDIT FINDING REPORT

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Zack Co. procedure - QA Instruction #4, Rev. O, "Control, Content and Maintenance of QA Purchase Order/CMTR Files" paragraph 6.3.1 states, in part, "following receipt/acquisition of the listed documentation (CMTR/C of C) the DC Clerk shall...deliver to QA Engineer for review/approval. Following review/approval by QA Engineer...attach original and copies in numbered binder."

Contrary to the above, the following PO's contained unsigned CMTR's as noted:

C-1515 - Heat 85313, 84898 - MPQAD copy only

C-1228 - Heat (various) chemical/physical test results -

MPQAD and Zack copy

C-4327 - C of C E6011 3/32" - MPQAD and Zack copy

AFR SER NO:

M01-602-2-03

PHOJ/DEPT AUDITED:

Zack Company - Chicago

7/13/82

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WRBird DATaggart JEBrunner

DECalkins

RAWells ALAB-2

JWCook LEDavis

MADietrich

GSKeeley

HPLeonard

BWMarguglio

DBMiller

JARutgers

MSkates

ESmith

RWSoderholm

RECOMMENDED CORRECTIVE ACTION:

QA review and approve as required.

CORRECTIVE ACTION COMMITMENT:

A response * * this item is requested by 8/6/82.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

CMG, RESE POR G/A:

The Zack Company

PERSON MAKING C/A C'- UTHERT!

Mark Skates

METHOD OF VERIFICATION:

LI A. REPORTABLE PER 50.55(e): YES NO	IF "YES", DATE OF REPORT TO MRC: N/A
IF "YES", TIME OF REPORT TO MAG: N/A	IF "TES", MANG OF MRC OFFICIAL TO WHOM REPORTED:
DF "YES", VHO HADE REPORT: N/A	N/A
APR OBIGINATURES SIGNATURE/OUTE: 7/13/82 Markedeine 1/4/82	SUPERVISOR'S SIGNATURE DATE:
C/A YEAD JONE LOW ALLOW	VERIFICATION DATE:

CAR-014

REVIEW OF CORRECTIVE ACTION IMPLEMENTATION

The CAR-014 report attached to Zack letter 7220-M-151-C/B-552, dated 10/23/81, identified 8 areas where corrective action was to be implemented to preclude the following discrepancies in Midland Project Material Certification Record Packages:

- 1. Incomplete material test reports.
- 2. Incorrect material test reports.
- 3. Improperly modified test reports.
- 4. Possibility of individual(s) within The Zack Company improperly changing test reports.

This audit report identifies those 8 areas, the completed activities as of 10/23/82, what corrective action is planned and the status as of this audit.

- A) "All existing procurement documentation will be revalidated for compliance to contract technical specifications and other design data."
 - 1. Action taken as of 10/23/81:

"A documentation task force, consisting of 6 persons, has been assembled. This group has just completed a review of all known or available purchase orders and documentation for the three projects. A centralized filing system has been established and detailed quality assurance instructions have been developed for records and receipt inspection."

2. Scheduled completion identified as of 10/23/81:

"A follow-up program to obtain the missing certifications or corrected certifications from Suppliers, is scheduled for December 31, 1981."

- 3. Status as of 5/20/82:
 - As a result of the initial review, approximately 30% of the record packages were acceptable in the condition they were filed in when reviewed. Since the initiation of the follow-up program, approximately 50% have been made acceptable. Acut 12% have been worked through the follow-up program, but efforts were not sussessful in obtaining the necessary signatures or back-up data. Record packages in that condition have been identified to fachtel via SDDR's. The SDDR usually describes the material involved, the information that is available, describes what was some and what was not obtained, then requests that Bechtel accept as is. Eight percent (8%) of the packages are still working through the follow-up program and are waiting for information from the respective Supplier. Some of the

8% will fall into the category of not having enough information and not being able to obtain enough information, and will be processed via SDDR's. A portion of the 8% is expected to be found acceptable and will be added to the list of acceptable material. As of May 17, 1982, 115 SDDR's identifying material for which insufficient information was available, were forwarded to Bechtel. Resolution of those SDDR's is still pending.

b) A centralized filing system and quality assurance instructions are addressed in subsequent sections of this attachment.

4. Conclusion:

The documentation task force was formed and began the follow-up program activity. The scheduled completion date, December 31, 1981, was not met. Although the follow-up program has cleared 80% of the packages, 20% are still outstanding. The program will have to remain in effect until these 20% are resolved. No date has been established by which the 20% will either be identified as unacceptable by Zack and Bechtel, or as finally acceptable through Supplier information or Bechtel Engineering acceptance. The revalidation of existing procurement documentation is on-going and has not been completed.

- B) "A document and records management program will be developed and implemented."
 - 1. Action taken as of 10/23/81 none.
 - Scheduled completion identified as of 10/23/81:

"A document and records management program will be completed and implemented by December 31, 1981."

- 3. Status as of 5/20/82:
 - a) No formal document and records management program was completed or implemented by December 31, 1987. No formal document and records management program had been completed as of 5/20/82. Dave Calking has stated that no formal program was developed due to a Zack Management decision to utilize the available manpower to resolve material documentation problems versus setting up a formal program. (No formal documentation was issued regarding this decision.) However, Mr. Calkins considers that issuance of Quality Assurance Instructions (QAI's), existing PQCP's and other related letters and memos placed sufficient controls on document and records management effort.
 - b) The following is a list of the documents referred to by Mr. Calkins:
 - 1. QAI #3, Records Management. Rev. 1, dated 5/11/82.

- QAI #4, Control, Content and Maintenance of Purchase Orders and CMTR Files, Rev. 0, dated 10/26/81, Rev. 1, dated 2/1/82, Rev. 2, dated 5/11/82.
- 3. QAI #5, Quality Records Index, Rev. 0, dated 5/11/82.
- 4. QAI #7, QA Records Storage, Rev. O, dated 5/14/82.
- 5. PQCP-15, Procurement, Rev. 2, dated 5/18/81.
- 6. PQCP-1, Receiving Inspection, Rev. 2, dated 11/24/81.
- Zack letter to all cognizant personnel, from C L Eichstaedt, Jr. dated 11/4/81, regarding purchase requisitions and purchase orders for nuclear projects and commercial operations.
- c) As a result of CAR-014, Document Control was placed under the responsibility of the QA Department. Since then and up until May 1982, the QA Department, under the QA Manager, was responsible for Document Control. At the beginning of May, 1982 the responsibility for the Document Control group was changed from Quality Assurance to Engineering. QAI's, PQCP's and possibly some other documentation will be reviewed for applicability to the Document Control center as a part of the Engineering organization. Zack is considering developing some document control instructions directing the functions of the Document Control under Engineering. QAI's and PQCP's will be revised to recognize Document Control as a quality records stoarge area meeting the requirements of ANSI and 10 CFR50. However, QA will not be the organization that manages Document Control. QA will continue to review purchase orders, material documentation and other quality documents prior to storage. QA will also be responsible for verifying (auditing) that document control is being implemented in accordance with ANSI and 10 CFR50.

-4. Conclusion:

- a) A document and records management program was not completed nor implemented by December 31, 1981.
- b) As a result of a review of the documents listed above, it was concluded that document and records management was sufficiently under control with the QAI #4 document and letter, item number B.3.b)6., PQCP-15 and PQCP-1. Although producing adequate results, this method i.e., company memos, should be amended. Memos, latters and other forms of informal control should be incorporated into the formal Zack procedures.

- C) "A centralized documentation group and center will be established with specific guidelines."
 - 1. Action taken as of 10/23/81:

"A centralized Document Control Center is in the process of being constructed and satellite centers will be established at each of the sites."

2. Scheduled completion identified as of 10/23/81:

"The centralized documentation group will be made up of the Zack Company personnel presently assigned to the documentation task group now in effect. The centralized document center should be completed by November 30, 1981."

3. Status as of 5/20/82:

A centralized document control center was formed on or about the end of November 1981. A separate room was identified for the document control center and is located on the first floor near the main entrance. The task force group which had been formed to address CAR-014 became the Document Control group. The original Document Control group functioned until the end of April 1981. At that time, it was disbanded and reorganized about three days later, under new supervision. Within a week, four new clerks were hired, training of the new personnel was begun, and the Document Control group was removed from the QA organization and placed in the Engineering organization. Consistent with the new organizational arrangement, the document control center is being relocated to the second floor. The new location is expected to provide more storage area, more space for clerical work and more workable access control. Relocation of records and documents is expected to start on or about 5/24/82.

In addition centralized document control center at the Zack-Chicago facility, a callite center was to be established at each of the sites. With regard of the Midland Project, no satellite center related to the Zack-Chicago document control center was established.

4. Conclusions:

- a) A centralized document control center was established by 11/30/81.
- b) A centralized documentation group was organized, formed from the personnel assigned to the documentation task force.
- c) No Zack satellite documentation center was formed at the Midland Site.

- D) "Procurement procedures and receiving inspection procedures will be developed and/or revised to include required quality review functions."
 - 1. Action taken as of 10/23/81:

"All purchase orders and material certifications are now being reviewed by a newly established Quality Engineering Group at The Zack Company Chicago offices."

2. Scheduled completion date set as of 10/23/81:

"No further action required."

- 3. Status as of 5/20/82:
 - a) Procurement procedures are established in PQCP-15 "Procurement" Rev. 2, dated 5/18/81. Additional procurement instructions are provided in a Zack Company letter to all Cognizant Personnel from C L Eichstaedt, Jr., dated 11/4/82.
 - b) Receiving inspection procedures are established in accordance with PQCP-1, "Receiving Inspection" Rev. 2, dated 11/24/81. Additional direction relative to material documentation is also addressed in the Zack Company QAI #4, "Control, Content and Maintenance of QA Purchase Order/Certified Material Test Report files" Rev. 0, dated 11/10/81.
 - c) The procedures and instructions listed in D.3.4) and b) describe the QA Engineer interface between procurement, receipt inspection and document control. The quality review function, relative to the actual review point by point of the information in CMTR's, Certificates of Conformance or Compliance, and other material documentation is not described in these procedures.

4. Corclusion:

- a) The existing PQCP-15 and revised PQCP-1, as well as QAI #4 and the Zack memo to all cognizant personnel, describe the QA function with relation to document control, procurement and receipt inspection. Although producing adequate results, this method i.e., company memos, should be amended. Memos, letters and other forms of informal control should be incorporated into the formal Zack procedures. A description or checklist of items and information which the QA Engineer is required to review should also be included.
- b) The newly established Quality Engineering Group referred to in D.1 above, is a group that was formed in June of 1981 and was functioning by the report date, 10/23/81.

- E) "Unauthorized personnel will be limited from access to records."
 - 1. Action taken as of 10/23/81:

"All document packages revalidated are in locked file."

2. Scheduled completion date set as of 10/23/81:

"Completion of the centralized document center discussed above will put all records under lock and key and will limit access to only authorized personnel. This will be implemented by December 1, 1981."

- 3. Status as of 5/20/82:
 - a) To date, no specific person or persons, by title or name, are restricted access. QAI #4, Rev. 0, approved 11/10/81 gave the responsibility for controlling access to the QA Furchase Order/CMTR fl. is to the Quality Assurance Manager. QAI #4, Rev. 1, dated 2/1/82 delegated that to the Quality Assurance Documentation Supervisor. QAI #4, Rev. 2, approved 5/11/82 continued to recognize that responsibility as belonging to the Document Control Supervisor. A later Zack memo, dated 5/14/82 reiterated that access control remains a responsibility of the Document Control Supervisor.
 - b) With regard to physically handling the documents there were several posted memos as well as the letter dated April 16, 1982. One posted memo was issued 11/11/81, the second posted memo was issued 5/14/82. These memos concerned materials leaving the document control room, where they were reviewed and whether copies are to be made for review outside the documentation control area.
- 4. Con lusions:

The posted memos cover how the documents could and could not be used, inside or outside the document control area. QAI #4 and the letter dated April 16, 1982 assigned specific responsibility to individuals relative to access control. There was no formal list, by title or names, of individuals or groups that had no need-to-know or were excluded from access to the document control area. The informal controls should be incorporated into the formal Zack procedures.

- F) "A company wide training program on documentation and records will be developed and implemented."
 - 1. Action taken as of 10/23/81:

No action taken to date.

2. Scheduled completion dates set as of 10/23/82:

"A company training program on documentation will be completed by February 15, 22 and training will follow within four (4) weeks.

- 3. Status as of 5/20/82:
 - a) The following training sessions were held:
 - Date: 8/31/82 Subject: 10CFP/ANSI Attendees: K Schaefer, QA Engineer; C Richards, QC Manager; G Kollaritsch, Drafter; A Wanniger, Engineer; J O'Connell, QA Engineer; E Bodley, QA Engineer; J Engh, Production; S Drozez, Drafting; N Rosa, Production; B Prim, Production; T Boyle, Production; R Greune, Engineer; C Z DeZutel, President - Zack; J C DeZutel, Executive Vice President; D Malazahn, Corporate Secretary.
 - 2. Date: 9/3/82 Subject: PQCP-15 Attendees: S Drozez, Drafting; D Prim, Production; R Hagen, Purchasing; G Kollaritsch, Drafting; E Bodley, QA Engineer; J Engh, Production; C Richards, QC Manager; N Rosa, Production; J Michalik, QA Inspector; A Wanniger, Engineer.
 - Date: 11/18/81 Subject: QAI #4 and ANSI 45.2.9 Attendees: T Howard, Document Control Supervisor; S Marello, Document Control Clerk;
 - Date: 12/30/81 Subject: PQCP-1, Rev. 2 Attendees: C Richards, Inspector; J Michalik, Inspector; N Rosa, Flant Superintendent.
 - 5. Date: 2/17/82 Subject: QAI #4, Zack QA Manual Attendees: R Perry, QA Engineer Documentation.
 - 6. Date: 4/27/82 Subject: Proper Flow of Documentation Attendees: D Allbritten, QAE; M Cione, Document Control Clerk; T Howard, Document Control Supervisor; C Grant, Document Control Clerk; A Wanniger, Plant Engineer.
 - 7. Date: 4/28/82 Subject: Corrections to Quality Assurance Records and Documentation Attendees: B Prim, General Foreman; D Allbritten, QAE; C Richards, QC Inspector; T Howard, Document Control Supervisor; M Cione, Document Control Clerk; S Marello, Document Control Clerk; C Grant, Document Control Clerk.
 - 8. Date: 4/29/82 Subject: Zack Quality Assurance Stamp on QA
 Documents and Records Attendees: D Allbritten, QAE; T Howard
 Document Control Supervisor; M Cione, Document Control Clerk;
 R Basiaga, QAE; S Marello, Document Control Clerk; C Richards,
 QC Inspector; D Calkins, Project Manager, Midland; C Eichstaedt,
 VP Marketing; D Malazahn, VP Operation.

- 9. As a result of the training records review, it was noted by Mr. Calkins that training records for training accomplished during August, September and October, 1981 were missing. The individual (H McGrane) who provided some training during late 1981 was available during this audit. Mr. McGrane remembered the time, content and attendees of the training sessions and was willing to attest that the training occurred. Mr. McGrane provided an affidavit dated May 18, 1982 attesting that training for the following people was provided: D Hennigan, T Howard, S Marello, E Hillyer, L Mondak, R Perry. The training covered ANSI 45.2.9 ASTM standard content and requirements for certain Zack customer and technical specifications and the requirements of QAI #4. This training was provided subsequent to these people being employed by The Zack Company.
- 10) A reading list for S Marello, dated 2/25/82 was found. It provided documentation that S Marello had read QAI #4 and ANSI Standards.
- b) A formal training schedule was developed on 4/22/82 and is presently being implemented.

4. Conclusions:

- a) No formal training program was initiated by 2/15/82. A formal training program was started 4/22/82. The training should be continued as "on-going."
- b) Several training sessions were held in September and November to discuss procurement, PQCP-15, and Document Control QAI #4. These sessions were attended by personnel representing the Drafting Department, Production, Purchasing, Quality Engineering, Document Control and Project Engineering. Although this is not a "company wide" training program, it does involve the key personnel cognizant for "Q" work.
- G) "The Zack Company management will address improper actions taken by employees to date and establish a definitive company policy on any further improprieties."
 - 1. Action taken as of 10/23/81:

"Those person(s) involved in the modifications to material certifications have been identified and reprimanded by The Zack Company ownership. This reprimand consisted of demotions in position and documented letters to the personnel files. An intensive and individualized training was then given with respect to the requirements and necessity for accurate and controlled documentation."

2. Scheduled completion as of 10/23/81:

"No further actions."

3. Status as of 5/20/82:

Responsible individuals have been identified. Three individuals were involved. G Parker verified by a review of the personnel files on 5/17/82 that the written reprimands were on file. Compared policy was established about that time by a Zack letter to all Company Employees dated 8/18/81, relative to the need to follow procedures. "Procedures" includes procedures controlling the handling of quality documents. This policy, although intended for Zack Midland Plant personnel, is used for the Zack-Chicago location also. With regard to the persons involved in the material certification alteration, those individuals have been demoted, alserified by G Parker (letters to personnel file, dated 8/24/81 and 9/30/b1). The company policy as stated in the 8/18/81 letter, was applied to two of the three persons. They have received their first warning. For the third person, there is no second chance.

Letters on file represent severe verbal reprimands as well as intense and brief individualized instruction regarding procedure violations and documentation alterations. A review of the training records shows an on-going training program for two of the individuals, while the other has been put in a position where the need to deal with Midland QA documents is not a part of that person's job description or function.

4. Conclusions:

- a) Improper actions taken by Zack Company employees has been addressed by Zack Company management.
- b) The Zack Company letter dated 8'18/81 establishes a company policy regarding following procedures. In this case, procedures are what's allowed or not allowed and how to properly accomplish changes to "Q" documents. This is addressed in a training session on 4/28/82.

Training took an inordinately long time to be accomplished.

- H) "Additional Quality Assurance/Quality Control personnel will be added as required to support the program."
 - 1. Action taken as of 10/23/81:

"The Quality Assurance and Control organizations have been expanded by fourteen (14) people since June, 1981 and at least two (2) more quality engineering positions at the Clinton Site are contemplated.

2. Scheduled completion as of 10/23/81:

"No further action."

3. Status as of 5/20/82:

The following is a chart of the original (June 1, 1981) status, growth, attrition and present status of the QA, QC and Document Control groups:

Group	Level June 1, 1981	Level Oct. 23, 1981	Personnel Reductions	Fersonnel Additions	Level 5/20/82
QAE	0	5	4 a	2	3
QCI	1	2	1°	0	1
DOC. CONT.	0	7 d	7	5 e	5 e
QAM	1	1	1 b	1	1

- a) Three of four have made lateral or upward moves within Zack. Two of the three are still associated with the Midland Project. The third is available for temporary assignments. The fourth individual has been terminated due to lack of work at LaSalle County Power Station.
- b) QAM was promoted to Project Manager, Midland Project.
- c) Left the company.
- d) Three (3) persons are permanent Zack personnel; 4 persons are temporary contract personnel.
- e) One (1) is a temporary contract person, the others are permanent Zack personnel.

Relative to the Document Control group, the temporary contract personnel were released when most of the task effort was completed. Several permanent Zack personnel were then hired to continue the remaining task force effort and maintain the Document Control. The entire Document Control staff including the Supervisor, were released on April 30, 1982. On May 5, 1982 a new Supervisor reported for work. On May 17, 4 new Document Control Clerks reported for work.

4. Conclusions:

- a) Although there has been turnover and reduction of staff from a peak level of 15 people, there has been a large improvement in QA and Document Control manpower since June 1, 1981. The Document Control group has shown the largest fluctuations due to the reduced efforts necessary to support material documentation task force and terminations of the Document Control Supervisor and group. The impact of this condition has yet to be assessed.
- b) QA personnel are added as required to support the program.

Consumers power Company 0A50-1

JECTS, ENGINEERING AND CONSTRUCTION -QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AS 19" COMDITION VERSUS "AS REQUIRED" / AS NEEDED" CONDITION WITH REFERENCES PQCP-7. Rev. 5, paragraph 6.2.4 states "When a procedure or procedure revision is approved, it is incorporated into the appropriate "Master Manual" and the "Master Manual Index."

Contrary to this, WPS-7, Rev. 8 and PQCP-17, Rev. 1 were not incorporated in the "Master Manual" or the "Master Manual Index." The previous revisions of both procedures are still in use.

NOTE: During the audit Zack Co. stated that the procedure revisions in question had not been received from BPCo Subcontracts. Upon further investigation, it was discovered that WPS-7, Rev. 8 was transmitted to Zack Co. on 3/3/82 (#26949) and PQCP-17, Rev. 1 was transmitted on 5/20/81 (#22047). BPCo Subcontracts has receipt acknowledgement copies of both transmittals on file signed by The Zack Co. (see attached).

M01-601-2-09 PROJ/DEPT AUDITED: Zack Co./Midland 1 & 2 5/14/82 FILE NUMBER: 18.4.

RCAsh WRBird DATaggart RAWells JEBrunner

DECalkins ALAB-2 JWCook LEDavis

MADietrich BJCole GSKeeley KFHayes HPLconard ESmith

BWMarguglio RWSoderhold RBMc Carley TKSubramanic

DBMiller JARutgers MSkates

RECOMMENDED CORRECTIVE ACTION:

- 1) Update "Master Manual" and "Master Manual Index" with the current revisions of WPS-7 and PQCP-17. Remove the superseded copies from use.
- 2) Train cognizant personnel in the requirements of PQCP-7 and provide documentation of this training to MPQAD.

CORRECTIVE ACTION COMMITMENT:

A response to this finding is requested on or before 6/3/82.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG, RESP FOR C/A:

The Zack Company

PERSON MAKING C/A COMMITMENT:

M Skates

METHOD OF VERIFICATION:

- 1) Zack Co. corrected the "Master Manual Indes" to show the current revision of WPS-7 and PQCP-17. Copies of the Index were received by MPQAD on 7/13/82 (M151-C/B-628).
- 2) Superseded copies of these procedures were removed from use (as attested by RJBasiaga, (continued on back)

TS AP REPORTABLE PER 50.35(e): YES WO X	IP "TESS", DATE OF REPORT TO MRC:		
DF TORS', TIME OF REPORT TO REC:	IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:		
IF "TES", WHO MADE REPORT:			
Susan Banalla 5/14/82	SUPERVISOR'S SIGNATURE DATE: 5/14/82		
Susan Baralla	7/15/82		