

Department of Energy

Nevada Operations Office P. O. Box 98518 Las Vegas, NV 89193-8518

WBS 1.2.9.3

TT: Donnelly

OCT 26 1988

Richard L. Bullock
Technical Project Officer for Yucca Mountain Project
Fenix & Scisson, Inc.
101 Convention Center Drive
Phase II, Suite P-250
M/S 403
Las Vegas, NV 89109

YUCCA MOUNTAIN PROJECT OFFICE (PROJECT OFFICE) EVALUATION OF FENIX & SCISSON, INC. (F&S), RESPONSES TO THE QUALITY ASSURANCE (QA) STANDARD DEFICIENCY REPORTS (SDRs) AND OBSERVATIONS RESULTING FROM AUDIT 88-1 OF F&S

- References: (1) Letter, Cross to Gertz, dtd. 4/29/88
 - (2) Letter, Cross to Gertz, dtd. 5/11/88

The Project Office has evaluated the F&S responses to the thirteen SDRs (104-116) and six observations that were generated as a result of the Project Office QA Audit 88-1 of F&S.

The status of the SDRs, based on the Project Office evaluation of the responses (see referenced letter 1), is as follows:

SDRs 104, 107, 109, 110 and 111 and 116

Responses acceptable, SDRs closed. No further action required. Copies are enclosed.

SDRs 105, 106, 108, 112, 114, and 115

Responses acceptable, requires follow-up verification of completed corrective action.

SDR 113

Response partially acceptable, will require an amended response within 10 days of receipt of this letter. The basis for the partial acceptance is enclosed with SDR-113.

The responses to the six observations (see reference letter 2), are acceptable. No further action is required.

8811020166 881026 PDR WASTE WM-11 PDC 102.7 WM-11 1 MH0311 If you have any questions, please contact Royce E. Monks of my staff at 794-7944 or Henry H. Caldwell of Science Applications International Corporation at 794-7740.

James Blaylock

Project Quality Manager Yucca Mountain Project Office

YMP:REM-384

Enclosures: SDRs No. 104, 107, 109, 110, 111, 116 and 113

cc w/encls:

L. H. Barrett, HQ (RW-3) FORS

R. W. Clark, Weston, Washington, D.C.

J. P. Donnelly, NRC, Washington, D.C.

S. W. Zimmerman, NWPO, Carson City, NV

M. J. Regenda, F&S, Las Vegas, NV

S. H. Klein, SAIC, Las Vegas, NV

H. H. Caldwell, SAIC, Las Vegas, NV

J. A. Ulseth, SAIC, Las Vegas, NV

F. J. Ruth, SAIC, Las Vegas, NV

B. A. Tabaka, SAIC, Las Vegas, NV

J. J. Brogan, SAIC, Las Vegas, NV

R. W. Gray, MED, NV

C. P. Gertz, YMP, NV

M. B. Blanchard, YMP, NV

W. R. Dixon, YMP, NV

L. P. Skousen, YMP, NV

R. E. Monks, YMP, NV

E. L. Wilmot, YMP, NV

10/26/88 N-QA-038 W. PO STANDARD DEFICIEN (REPORT 3/87 2 Severity Level 🗀 1 🖼 2 🗀 3 2/25/88 1 Date Page of 3 Discovered During 3a Identified By 36 Branch Chief 4 SDR No. G. Dymmel Concurrence Date Rev. _n 104 WMPO Audit 88-1 Heaney 6 Person(s) Contacted s Organization 7 Response Due Date is 20 Working Days from Fenix & Scission L. Weyand Date of Transmittal s Requirement (Audit Checklist Reference, if Applicable) F&S Design Control Procedure NNWSI-DC-09 "Interdiscipline Checking," Rev. 4, Para. 6.1.2 states "All work products shall have undergone review in accordance with the DCP NNWSI-DC-04, "Design Verifications before commencement of the interdiscipline review activities." 9 Deficiency Contrary to the above requirement, the interdiscipline reviews for F&S Study No. 11 "ESF Structural Design Study Report" Part I and Part II commenced prior to the verifications being accepted and released for the interdiscipline (cont'd) 10 Recommended Action(s): Remedial I Investigative I Corrective 1) Revise NNWSI-DC-04 to permit a non-sequential design verification and interdiscipline review as may be determined by the ESF Design Manager or his designee. (contid) PAE/Lead Auditor Date 12 Branch Manager 13 Project Quality Mgr. Date Date MAR 1 4 1988 7119188 14 Remedial/Investigative Action(s) 15 Effective Date April 20, 1988 Bock See Attachment No. 1. 2 Organization 16 Cause of the Condition & Corrective Action to Prevent Recurrence 17 Effective Date April 20, 1988 See Attachment No. 1. ۾ Completed 18 Signature/Date PACIFICATION 27 Branch Manager/Date ☐ Amended □Rejeć Response **cconse** QAE/Lead Auditor/Date Branch Manager/Date ☐ Accept Amended Response □ Reject **⊠**Satisfactory udito//Data QAE/Lead Branch Manager/Date 21 Verification ☐Unsatisfactory 1988 See 5R-88-008 and attacked WMPO weillance ٤ continuation page

6171 Branch Manager/Date ENCLOSURE

రో

QA CLOSURE



WI O STANDARD DEFICIENCY EPORT CONTINUATION SHEET

N-QA-038 10/86

SDR No.

104

Page

of

Block 9 Deficiency (cont'd)

The WMPO recognizes that this same deficiency was previously reported by F&S on Audit Deficiency Report No. QA(N)-87-01-4. However, this SDR is being written because no actions were taken or committed in the referred ADR to prevent recurrence of this deficiency. As a minimum, personnel involved with the activity should be reinstructed to procedural requirements and a review should be made to assess any adverse impacts on the final work product.

Block 10 Recommended Action(s) (cont'd)

Rev. 0

- 2. Reinstruct appropriate personnel to procedural requirements. Provide objective evidence with response to the SDR.
- 3. Perform a review to assess any adverse impacts on the final work product caused by the identified deficiency.
- 4. Annotate the file for Study No. 11 and other files with similar deficiencies to indicate that the deficiency described in Block 9 has been identified in WMPO SDR-104 (Audit 88-01).

Block 22 Remarks (Continued)

The following corrective actions were verified to be satisfactorily complete:

- 1) F&S has performed a review and annotated the files for design study nos. 3, 11 Part I, and 11 Part II to indicate the deficiency identified by this SDR. The review determined that the identified deficiency had no adverse inpact on the final work products.
- 2) Project personnel have been reinstructed to requirements for the proper sequence in performing design reviews.
- 3) F&S has chosen not to revise present requirements in procedure NNVSI-DC-04 for the sequence of design verifications and interdiscipline reviews.

14. Remedial/Investigative Action(s)

F&S has reviewed interdiscipline checks and design verifications to determine whether the proper sequence was followed. The reviews were performed out of sequence only in the three cases which were identified by F&S Audit Deficiency Report No. QA(N)-87-01-4: Study Nos. 3, 11 Part I and 11 Part II.

A review of these studies has determined that the deficiency has no adverse impact on the final work products.

The files for Study Nos. 3, 11 Part I and 11 Part II have been annotated to indicate that the deficiency was identified in WMPO SDR-104 (Audit 88-01).

Since F&S will comply with Design Control Procedure NNWSI-DC-04, the recommendation to revise NNWSI-DC-04 to permit non-sequential design verifications and interdiscipline reviews is not applicable.

- 15. Effective Date April 20, 1988
- 16. Cause of the Condition and Corrective Action to Prevent Recurrence

The cause of this deficiency was a failure to follow the procedure. Memo IC #432, dated April 20, 1988, (attached) advised project personnel of the proper order for performing reviews.

17. Effective Date April 20, 1988

1401 BOUTH BOULDER TULBA, OKLAHOMA 74119

MEW ADDRESS \$450 BOUTH LEWIS AVENUE BAIDGEPORT III, BUITE &

ATTACHMENT TO SOR . 104 REV.0

INTER-OFFICE MEMO

10 #432

PROJECT STAFF

DCIBSON, INC.

APRIL 20, 1988

LOREN WEYAN

INTERUISCIPLINE CHECKING

(REFERENCE WMPO SDR #164, AUDIT 88-01)

The procedures require that interdiscipline review must occur after design verification. Please be informed that it is essential that we follow this procedural requirement.

When you receive an assignment to perform an interdiscipline review, it will be accompanied by form 508-TUL-14 "Document Review Notice". This form must indicate it is for an interdiscipline review and that the verification is complete. Boxes will be checked to indicate this (see attached).

Sn

attachment

By initialling below, I acknowledge receipt of this memo.

L. WEYAND

H. FORSHAN

P. HALE PE

F. HOLBROOK QFA

1. LANGE JAZ

N. TAMONDONG

J. GRENIA

R. GAST A

L. BARTO LUB

D. COPPAGE

B. STANLEY

B. SMITH O

H. GLESER -

J. MCKENZIE

T. GREINER

J. HILL (

S. CROWDER

Di	DC RN NO	CUMENT REVIEW			71	DISCIPL		IEW [0
D	OCUMENT	NO(8)	RI	EVISI	0N _	ORIGINA	TOR		
W	/BS NO			188	UE D	ATE			
		RATE SHEET IF NECES				-			
REVIE	EW OF:	DRAWINGS BPECIFICATIONS					•	PORT	
シ	VERIFIC	CATION COMPLETE		·			D NO		
DUE DATE	REVIEWERS	REVIEW				BACKCHE		COMM	_
		SIGNATURE	DATE	YES	NO	BIGNATURE	DATE	1 1	100
									
				 				 -	-
				 					-
				 	 			 	
			 	 	-			┼──	+
	-		+	†	-			1	
	 		 	 	┿			╂	
	-		+	+	+-			+-	
	-		1	1	<u> </u>				
					<u></u>				
			+	-	┼			+-	-
	PROVALS:	DATE	<u>.</u>		-L		DATE		

Speed Letter.

ATTACHMENT TO 5DR - 104 REV. O

From PAUL HALE		
		_19 <i>88</i>
ICATES THAT A	DESIGN	
	•	
S INDICATED IN OAL	N)87-01-	04)
HANCE WITH OUR	DCP'S.	
	 	
		
	· · · · · · · · · · · · · · · · · · ·	
Signed Taul BA	(all)	
	2/21	
	4/46	19 <u>00</u>
		······································
	· · · · · · · · · · · · · · · · · · ·	
		<u> </u>
		
	1	
Signed A. Til	100	
	SIGNED THAT A DETERMINENTS CLERK SINDICATED IN OAK SIGNED FAIL BA Date Date	Date 4/26

RECIPIENT - RETAIN WHITE COPY, RETURN PINE COPY.

FENIX & DCISSON, INC.

1401 SOUTH BOULDER TULSA, OKLAHOMA 74119

NEW ADDRESS 6450 SOUTH LEWIS AVENUE BRIDGEPORT III, BUITE 300 M. OKLAHOMA 74138-1007 018-748-6000

INTER-OFFICE MEMO

ATTI	*CHM	ient	70
c 00	1011	DCV.	n

•	IC #437				5 DR - 104	REV. O
To	FILE		DATE	APRIL 25,		
FROM	LOREN	WEYAND	···			
SUBJECT	_	DR NO. 104, WMPO		ICATION OF ST		

Jim McKenzie and Loren Weyand have reviewed the impact of performing interdiscipline review and the verification of Study No. 3 out of the procedurally required sequence.

It is mutually agreed that completing the interdiscipline review prior to final verification of Study No. 3 did not affect the technical results or conclusions of the study.

425-88

Date

FENIX & SCISSON, INC.

1401 SOUTH BOULDER TULSA, OKLAHOMA 74119

NEW ADDRESS 6450 BOUTH LEWIS AVENUE BRIDGEPORT III, BUITE 800 TULBA, OKLAHOMA 74138-1007 818-748-8000

ATTACHMENT TO 5DR-104 REV.O

INTER-OFFICE MEMO

IC #434

To	FILE -	<u>(</u>	DATE	APRIL 21, 1988
FROM	LOREN WEYAND	Mr)	
		1		

SDR NO. 104. WMPO AUDIT 88-01 SUBJECT_

INTERDISCIPLINE REVIEW AND VERIFICATION OF STUDY #11

Jim McKenzie and Loren Weyand have reviewed the impact of performing interdiscipline review and the verification of Study No. 11 out of the procedurally required sequence.

It is mutually agreed that completing the interdiscipline review prior to final verification for Study No. 11 did not affect the technical results or conclusions of the study.

ATTACHMENT TO 5DR-104 REV.O

DOCUMENT REVIEW NOTICE DISCIPLINE CHECK INTERDISCIPLINE REVIEW OTHER TITLE STUDY NO. 3 - EXCAVATION STUDY DATE 1/30/87 ** DOCUMENT NO(S) REVISION ORIGINATOR McKenzie WBS NO. 2.6.6.0.9.5 ISSUE DATE 1/30/87						EW ;	4		
						SEPARATE SHEET USED	0		
REVIEW OF: DRAWINGS D SPECIFICATIONS			☐ ENGINEERING STUDIES ☐ DESIGN REPORTS ☐ CALCULATIONS ☐ OTHER					\$	
INTR	ADISCIPLI	NE REVIEW COMPLET				TO YES			<u> </u>
DUE	REVIEWERS	REVIEW				BACKCHECK			ENTS
		SIGNATURE			NO		DATE	YES	NO
	E. Fisher	(d) - (C) - 1	1-30-87			1	1-31-87		
	R. Hudd	10000	1-30-67			7. Sulan	1-31-87		-
•	A.F. Holbre		1/3/10	1 1		JA Holbrook	1-31.87		V
						we come to the			
									1
ļ									
			 						<u>. </u>
									·
		 							
									:
								. <u>-</u>	•
									1
				ļ	-				
	*	Efical: TW	11/2	2-3-	8Z				1
			 	-					<u> </u>
<u> </u>						with TA(11) 27-01-3 r			
<u> </u>	rev	iew out of sequence.	no advi	rse i	mpac DR #	s exist from perform 04, Audit 88-01 and	ing th	is	-
 	dat	e c 4/25/88.	+			Try trace of or and			
			1	 	 				

ATTACHMENT TO SDR-104 REV.O

T D	ORN NO TILE Stud OCUMENT WBS NO	2.6.4.1.3	Designs RI	Stud EVISI ISS	ON_	DESIGN REVIEW DISCIPLINE CHI INTERDISCIPLIN OTHER OTHER ORIGINATOR OATE SEPARATE SHEET USED	PECK NE REVIE 2/27/87 R. Mudd	w XE	K
REVI		☐ DRAWINGS	¥	ENGIN	NEERII	NG STUDIES DES	IGN REPO	ORTS	
	VERIF	ICATION COMPLETE					□ NO		•
DUE	REVIEWERS	REVIEW	T	 		BACKCHECK		OMME	
1		SIGNATURE	DATE	-	NO	 - 	DATE Y	ES I	NO
3.4.67	McKosye	Vaul 8 Hate	3.4.87		-	12.10	3-16-87		
<u> </u>	QA	y aux O Hale	3/13/87			ran & Hale	3-16-87		_
								_	
			 						
			<u> </u>	<u> </u>	 				
	 		-						
	 		+		-				
 	 		 	 	 			-	
		1)0	1		2	1			
	1 ///	phrovel: () SM	ver	tend	13/	11/87			
	* M	1	-	 	-				
-			-	 	-				
<u> </u>	+ +	In cianad and diskid	in acco	, h.d		th QA(N) 87-01-3 resp)nce	+	
-	** A revie	w has determined no	advers	imna	acts.	exist from performing	this		
	review dated 4	out of sequence. Re	er to	SUR #	104,	Audit 88-01 and F&S	1C ±434		
	 		+		 				

ATTACHMENT TO SDR- 104 REV.O

• .	C	OCUMENT REVIEW	N NO.	TICE		DEBIGN REVIE DISCIPLINE CH INTERDISCIPLI	ECK		
	ORN NO	14				OTHER			0
1	TITLE ST	RUCTURAL DESIGN STUDY	, PART	11		DATE	4/7/87	**	
			R	EVISI	ON_	ORIGINATOR	R. MUDI	<u> </u>	
1	WBS NO	2.6.4.1.3	<u></u>	ISS	UE D	ATE			
	* USE SEI	PARATE SHEET IF NECES	SSARY			SEPARATE SHEET USED	0		
REVI	EW OF:					NG STUDIES DES		PORTS	5
	VERIF	ICATION COMPLETE		· · · · · · · · · · · · · · · · · · ·		(X) YES			•
DUE	REVIEWERS	REVIEW	1	сомм	ENTS	BACKCHECK		СОММ	
4/21	7	SIGNATURE Em M. Kenzin	DATE	YES	NO (SIGNATURE			
413/8	J.McKenzi	Jan B. Hale	4/7/87			Paul BHall	4/10/8		4-
							/3/		
	 		 	ļ	ļ				
	+			-					-
	1			-					-
			 		 				
			<u> </u>	<u> </u>	<u> </u>				
	1/11	1. 4/91/2	0	4	141	62			
*	Myson	red: TWWey	1	-//	77/	6 /			-
	+	<u> </u>		 					
*	This DRN si	inned and dated in ac	cordan	ce wi	h QA	(N) 87-01-3 response.			
** /	review ha	determined no adver	nse imp	acts	exis	from performing thi	\$ 44.34		-
	dated 4/21/		1 30%	107,	1				
		1	-	 -	 -				-
	 		-	 	 				
			 	 	 		 		1

SK PO	W P	O STANDA	RD DEFICIENC ? RE	PORT N-QA-038 3/87					
	1 Date 2/25/88	2 Seve	rity Level 🗀 1 🖸 2	3 Page 1 of 2					
Organization	3 Discovered During 3 NMPO Audit 88-01 R.	dentified By F. Cote	36 Branch Chief Concurrence Date N/A	4 SDR No. 107 Rev. 0					
		6 Person(s) Co Harry Fo	ontacted rshaw, Paul Hale	7 Response Due Date is 20 Working Days from Date of Transmittal					
Originating OA	s Requirement (Audit Che checklist element (2). Assurance Program", Par Procedures"	Requirement (Audit Checklist Reference , if Applicable) Checklist reference 1-5, NRC checklist element (2). Requirement No. 1 - F&S QAPP-002, Rev. 2, Sec. 2.0 "Quality Assurance Program", Para. 2.4 "Personnel Selection, Indoctrination and Training Procedures" (cont'd)							
ģ	those activities which would be considered complex in nature, where training as								
Completed	10 Recommended Action(s Evaluate and identify a proficiency must be den	ctivities which	ch would be considered	complex and where initial ign and blast engineers. (cont'd)					
Aprvl.	MAR 14 19	12 Branch	1 2/4/25	Project Quality Mgr. Date					
Block	14 Remedial/Investigative Action(s) 15 Effective Date April 21, 1988 See Attachment No. 1.								
rganization in									
0	See Attachment No. 1.	& Corrective Ad		ctive Date April 21, 1988					
Completed by				·					
Som	18 Signature/Date	asande	Director of a	04 4/69/55					
6	Response Reject /		Color	Branch Manager/Date					
o v	20 Amended Accept Response Reject		/Lead Auditòr/Date	Branch Manager/Date					
ᆳ	21 Verifi- Satisfactor Cation Unsatisfact		Charlette 1988	Branch Manager/Date					
2. by Or	22 Remarks FOR UERIF	CATION, SEE	E ATTACHED ICA	35 DATED 4-21-83					
ث 	QA CLOSURI CAELOAD A	uditor/Date Br	ranch Manager/Date P	OM/Dete 08/15/88					

ENCLOSURE

DUE XX

W 'O STANDARD DEFICIENCY REPORT CONTINUATION SHEET

N-QA-038 10/86

SDR No. 107

Rev.

Ð

Page

of 2

Block 8 Requirement (cont'd)

Sub Para. 2.4.1 states in part: Establishment of requirements-F&S has established requirements for the selection, indoctrination, and training of personnel performing or verifying activities that affect quality. The requirements establish position descriptions that set forth minimum personnel qualifications and provide for appropriate indoctrination or training or both, prior to initiation of activities that effect quality.

Requirement No. 2-F&S QAPP-002, Rev. 2, Sec. 2.0 "Quality Assurance Program", Far. 2.4 "Personnel Selection, Indoctrination, and Training Procedures", Sub. Para. 2.4.1.4 states in part: Training. Prior to assigning personnel to perform quality affecting activities that are complex in nature (i.e., assignments where it is deemed necessary to demonstrate initial proficiency), training will be conducted to gain the required proficiency. The training (in-depth instruction) will include the principles, techniques, and requirements of the activity. Such in depth instructions may be internal or external classroom sessions supplemented by hands on workshops, on-the-job training, other instructional methods, or combinations thereof.

Block 10 Recommended Action(s) (cont'd)

Develop training procedures and train (in-depth instruction) as deemed necessary the subject personnel in the unique requirements associated with identified complex activities prior to the performing the subject task.

FORM NO. 1024

FENIX & SCISSON, INC

1401 SC . TH BOULDER

TULSA, OKLAHOMA 74119

INTER-OFFICE MEMO

SUR 107, REVIO NEW ADDRESS ATTACHHEUT NO.

6450 SOUTH LEWIS AVENUE BRIDGEPORT - SUITE COL TULSA, OKLAR DVA 74136-1007

918-74 5000 STATE OF THE STATE

IC #435 FILE APRIL 21. 1988 LOREN WEYAND FROM. SDR NO. 07. WMPO AUDIT 88-01 SUBJECT_ TRAINING FOR ACTIVITIES OF A COMPLEX NATURE

> The Project Design Manager, the Lead Design Engineer, and the Lead Mining Engineer have reviewed the scope of engineering and design functions that are to be performed by the F&S design organization.

It is their opinion that, none of the required ESF engineering and design functions to be performed by the F&S design organization are of such a "complex nature" that special training to supplement initial proficiency is required. While some of the engineering procedures may appear complex to laymen, the design procedures for the mining type ESF project are basic and routine for properly educated and experienced engineers in the various required disciplines.

Lead Mining Engineer

	W	PO STANDA	RD DEFICIEN. / R	EPORT N-QA-038 3/87			
٠, د	1 Date 3/1/88	2 Seve	rity Level 🔲 1 🔲 2	🖾 3 Page 1 of			
nyaéti.	3 Discovered During WMPO Audit 88-01	3. Identified By D. Klimas	36 Branch Chief Concurrence Date N/A	4 SDR No. 109 Rev. 0			
	3 Discovered During 3a Identified By WMPO Audit 88-01 D. Klimas Concurrence Date 109 R 5 Organization 6 Person(s) Contacted 7 Response Date 20 Working Date of Tra						
Originating O	i a Requirement (Augit	a designated team fy implementation	n auditor shall perfor	(n), Rev. 2, Para. 3-13. m a follow-up audit or as stated in the Audit the action (cont'd)			
۵	November 30, 1987 indicating acceptance and closeout prior to completion of corrective action. The corrective action was to revise F&S procedure DC-12 to comply						
Completed	10 Recommended Action Reinstruct audit per Deficiency Reports.	- ·	☑ Investigative ☑ Concedure requirements re	rective garding closeout of Audit			
Aprvl.	11 QAE/Lead Auditor D	1100	Manager Date 1 axor 3/16/88	a Project Quality Mgr. Date			
ganization in Block 5	See Attachment No.	`	15 Eff	ective Date April 22, 1988			
by Or	See Attachment No.		ction to Prevent Recurre	April 22, 1988			
Completed		Degen	la Directa				
	19 ☐Accept Response ☐Reject	Response / Au	Luna 7/7/88	Branch Manager/Date			
0				Branch Manager/Date			
Orig OA		factory (Med Auditor/Date	Branch Manager/Date ANCWALL 2004 DE 2 15. Effective date for			
Comp. by O	procedure approu	al has no in	tor, approval date apact on this Cleft 21 is not applic	ciency, theretore			
Ö	QA CLOSURE / ///	Auditor/Date B	ranch Manager/Date	POH)/Date N 8 34 88			



W' 'O STANDARD DEFICIENCY .EPORT CONTINUATION SHEET

N-QA-038 10/86

SDR No.

109

Rev. 0

Page

2

of

Block 8 Requirement (cont'd)

or documentation viewed as evidence of corrective action implementation. The Lead Auditor shall then sign the ADR indicating acceptance and closeout.

14. Remedial/Investigative Action(s)

Block 9 of SDR-109 is in error in stating that the approval date of Procedure NNWSI-DC-12, Revision 2 was December 11, 1987. Procedure NNWSI-DC-08, "Preparation of Procedures", Paragraph 6.1.1 c. indicates that the entry in the DATE Block in the upper-right hand corner of the cover page denotes the effective date. The actual approval date, as shown on the attached Review and Approval sheet, is November 20, 1987. The date December 11, 1987, is the date the procedure is effective.

In addressing what actions are required to demonstrate participant completion of corrective action taken for a Standard Deficiency Report when a procedure must be revised, WMPO Letter WMPO:JB-1691, dated April 12, 1988, states:

"When a commitment is made to review and revise a procedure, the revision must have final approval by the date provided in Block 15 or 17 of the SDR."

It is agreed that finding QA(N)-87-01-6 was closed prior to the <u>effective</u> date of procedure NNWSI-DC-12, Rev. 2; however, if the above logic from Letter WMPO:JB-1691 is applied in closing F&S findings, then SDR-109 would not be valid because QA(N)-87-01-6 was closed after the <u>final approval</u> date. Regardless, the F&S response is based on the auditors' interpretation of corrective action completion, i.e., requiring the procedure to be in effect prior to closing the finding. The closure date for ADR QA(N)-87-01-6 and the audit will be modified to a date after 12-11-87.

15 .	Ff1	fective	Date /	Anril	22.	1988
				10111		1300

16. Cause of the Condition and Corrective Action to Prevent Recurrence

The finding was caused by miscommunication between the F&S Audit Team Leader and the individual who verified the corrective action. The Audit Team Leader has been advised of the requirements for closing deficiencies.

17. Effective Date April 22, 1988



FENIX & SCIUSON, INC. TULSA OFFICE

ATTACHMENT TO SOR NO. 109 REU.O

REVIE AND APPROVAL OF COMPUTER PROGRAM VERIFICATION PROCEDURE

ORIGINATOR:

DATE:

H. Forshaw

11/12/87

Tſ	TITLE: NNWSI-DC-12 "Computer Program Verification"								
CI	HEÇK	APPROVAL COMMENT							
				REVIEWER					
<u> </u>	<u> </u>	REVIEW BY:	NAME	DATE					
X		L. WEYAND	Surleyand	11-12-87					
X		F. HOLBROOK	at Halbrook	11-12-87					
×		H. FORSHAW	Jarget or ken	9-12-87					
1		M. REGENDA	alama	11/17/87					
1		D. BULLOCK	1 & Buffah	11/19/87					
X		J. CROSS	All Cran	11-20-87					
			·						
		PROJECT MANAGER/DESIGNEE		Į.					
-	MMEN	TS:							
-									
	COMPLETED ORIGINAL TO PROJECT FILES								



A. TACHMENT TO SDR NO. 109 REV.O

FENIX & SCISSON, INC.

ENGINEERS - CONTRACTORS

LETTER NO:

FS-NNWS1-1113

TO:

L. W. Weyand

FROM:

M. J. Regenda

SUBJECT:

AUDIT DEFICIENCY REPORT QA(N)-87-01

REFERENCE:

Letter FS-NNWSI-1072, dated December 2, 1987

DATE:

April 22, 1988

WMPO Standard Deficiency Report SDR No. 109 indicates that F&S Audit Deficiency Report QA(N)-87-01-6 was closed prior to completing the required corrective action, i.e., approving Procedure NNWSI-DC-12 "Computer Program Verification."

Strictly speaking, the Standard Deficiency Report was in error since the procedure was approved on November 20, 1987, and the F&S Finding was not closed until November 30, 1987. However, the procedure did not become effective until December 11, 1987. This may be construed as a finding by an auditor in the future. To prevent future questioning, the close date of this finding and the audit is hereby modified to the date of this letter.

If you have any questions, please contact D. J. Tunney at 295-7799.

MJR:DJT:sjs

Enclosure: Audit Finding QA(N)-87-01-6

cc: D. L. Lockwood

J. A. Cross

P. K. Ortego

R. L. Bullock

A. F. Holbrook

J. M. Johnson

T. L. McCracken

D. J. Tunney

Audit File QA(N)-87-01

Audit File WMPO 88-01

F&S NNWSI QA Files

F&S NNWSI Central Files, WBS 1.2.9

LAS VEGAS RANCH		ENCY REPORT TO SORNO, 109 Reva
1 ACTIVITY	8 REPORT NO	9 DATE
Computer Program Verification	QA(N)-87-01-6	June 10, 1987
4 AUDITOR	S AUDIT CONTACT	.•
D. J. Tunney 6 AUDITED MANAGER	D. Coppage 7 LOCATION	
L. W. Weyand	F&S - Tulsa	
 REQUIREMENT NNWS1-DC-12, Rev. 1, Para. 6.1 Quality Assurance 1 and II, design analys 	<pre>1.1 states, "All comput sis applications on the</pre>	ter programs used for ESF project, shall
be qualified in accordance with NNWSI-SOI • FINDING NUREG-0856."	P-03-02 which uses the	guidance of
Study Report No. 6 of 11 "ESF Ventilation computer program was used to verify calcu	n" indicates on Page 6- ulations.	-B-3 that a
See attachment.		
REPLY REQUESTED BY: July 8, 1987	-	
10 REPLY		
CAUSE Failed to follow procedures.		
	e taken since the refer d because of programmat gn.	
accordance	e computer programs will e with NNWSI-SOP-03-02. o comply with NNWSI-SOP	NNWSI-DC-12 will be
DATE FOR FULL COMPLIANCE * See below	DIVISION MANAGER	7- <i>B</i> 87
See Surveylance Report SF 11 VERIFICATION Volventer 30, 1987	((~1)-87-06, letter FS-N11W	151-101.1 Acted
REPLY BY ADDRESSEE IS SATISFACTORY Close state mostified per LUMPO SDR No. 109 of and to 88-01 - String - 4-22-83	Did Thums	July 21,1987 April 22,1988
ACTION TAKEN IS SATISFACTORY	ADDITOR	DATE

Procedure will be revised after consultation with WMPO, in which it is hoped a practical accommodation to SOP-03-02 for the validation of commercial or proprietal conference use for NA Level II and III can be obtained.

Sano	V	PO STANDA	RD DEFICIENCY R	EPORT	N-QA-038 3/87
,	1 Date 3/1/88	2 Sevi	erity Level 🗀 1 🖸 2	□ 3 Page	1 of
Organization	3 Discovered During WMPO Audit 88-01	3. Identified By D. Klimas	36 Branch Chief Concurrence Date N/A	4 SDR No. 110	Rev0
	s Organization Fenix & Scisson	6 Person(s) C	ontacted unney	20 Worki	Due Date is ng Days from ransmittal
iginating QA	Conditions for Initially reasonable means more of the following	Checklist Reference ating a CAR - CAR of obtaining conditions still	e, if Applicable) F&S QAP is shall be initiated to rrective action have to a contract (contract).	16-1, Para. 4.1 by Quality Assur been exhausted a bnt'd)	ance after and one or
pleted by Or	9 Deficiency Contra not having an approve Corrective Action Re	ary to the above r yed procedure to a equest (CAR) shoul	equirements F&S AFR 87 ccomplish surveillance d have been issued.	7-02-04 was inite activities whe	iated for
통	io Recommended Act Initiate a CAR proced have approved proced in OAP 16.1(N). Rev.	edure requirement. Jures in place. . O	Investigate to deter Reinstruct personnel t	rmine if all act	ivities uirements
Apryl.	AMAGE MAR 1		Manager Date	3 Project Quality	Mgr. Date
anization in Block 5	14 Remedial/Investigation See Attachment No.	<u> </u>	15 Eff	ective Date Apr	il 25, 1988
o à	16 Cause of the Condi		action to Prevent Recurre	once ective Date <u>Jun</u>	e 30, 1988
Completed	18 Signature/Date	Degen	la Direct	n of GA	4/29/58
	19 Paccer Response Respect	Amended Quality (1)	E/Lead Auditor/Date 1.78	Branch Manage	TOETO
8	20 Amended Accep Response Reject		E/Lead Auditor/Date	Branch Manage	r/Date
Ö Ö	21 Verifi⊢ ⊡Satisfi cation ⊡Unsati	actory QA isfactory	E/Lead Auditor/Date Kluvias 7-7-8	Branch Manage	1/Date 30 Kar Bo
Comp. by Or	AMERICANO 19.3 K	Paud.	land subsequent training that t	J	
	QA CLOSURE //	ad Auditor Date	Stanch Managor/Date	POM/Date	78131181

W**70 STANDARD DEFICIENC: EPORT N-QA-038 10/86

SDR No. 110 Rev. 0 Page 2 of 2

Block 8 Requirement (cont'd)

1. An organization is not following or does not have approved procedures to accomplish it's assigned tasks; as in the case of the subject surveillance.

14. Remedial/Investigative Action(s)

In F&S's opinion, this deficiency is not valid. A Corrective Action Request should not have been issued in lieu of an Audit Finding Report. Please note the requirement quoted states, "...after all reasonable means for obtaining corrective action have been exhausted and one or more of the following conditions still exist..." At the time that audit deficiency QA(N)-87-02-4 was issued, all reasonable means for obtaining corrective action had not been exhausted. "Reasonable means" includes issuance of an audit finding report. Our procedure describes CARs as escalated actions where usual means have been unsuccessful in correcting/ preventing recurrence of deficiencies.

It is not necessary for F&S to make an additional special investigation to determine whether all activities have approved procedures in place since these investigations are a routine part of audits, surveillances and management assessments. Based on open items identified by these reviews, it has been determined that ongoing QA Level I or II activities are conducted in accordance with approved procedures.

It is not necessary to issue a Corrective Action Request for the failure of F&S to have a surveillance procedure, since this deficiency has already been escalated beyond internal corrective action in the form of SDR-111, which is in essence a reiteration of F&S ADR QA(N)-87-02-4. Moreover, Procedure QAP-18.3(N), Rev. 0, "Surveillance" (attached) has been approved, has been distributed and has an effective date of April 25, 1988.

15. Effective Date April 25, 19	188
---------------------------------	-----

16. Cause of the Condition and Corrective Action to Prevent Recurrence

The SAIC auditor interpreted Procedure QAP-16.1(N) differently from F&S Quality Assurance. Procedure QAP-16.1(N) will be revised to clarify the conditions which require issuance of a Corrective Action Request.

17.	Effective	Nate	June 30.	1988	

0



FENIX & SCISSON, INC. LAS VEGAS BRANCH

OUALITY ASSURANCE PROCEDURE

SUBJECT:

C

SURVEILLANCE

PREPARED BY: 04-25-88 NUMBER: QAP-18.3(N)

SUPERSEDES:

REVISION:

1.0 PURPOSE

The purpose of this procedure is to establish the method for conducting Quality Assurance (QA) Surveillances of Fenix & Scisson, Inc., (F&S), Nevada Nuclear Waste Storage Investigations (NNWSI) Project Activities. This includes activities performed by F&S Subcontractors. This procedure is based on the requirements of NVO-196-17 and the Quality Assurance Program Plan (QAPP).

2.0 APPLICABILITY

This procedure applies to Quality Assurance personnel performing surveillances and to F&S Division Managers required to respond to surveillances.

3.0 REFERENCES

- 3.1 NVO-196-17, Nevada Nuclear Waste Storage Investigations Quality Assurance Plan.
- 3.2 QAPP-002, Fenix & Scisson, Inc., Quality Assurance Program Plan.
- 3.3 PP-50-01, NNWSI Records Management.

4.0 DEFINITIONS

<u>Deficiency</u> - A noncompliance to a procedural or programmatic requirement.

5.0 RESPONSIBILITIES

- 5.1 <u>Director of Quality Assurance</u> has the overall responsibility for Quality Assurance Surveillances.
- 5.2 <u>Quality Assurance Engineers and Specialists</u> are responsible to conduct surveillances of NNWSI Project Activities.
- 5.3 <u>F&S Division Managers</u> when required, are responsible to respond to surveillance reports and to correct any deficiencies or nonconformances assigned to them, including those assigned to subcontractors under their cognizance.

	Director of Quality Assurance	Vice President & General Mgr.
APPROVED	APPROVED 3/25/88	APPROVED 3-31-88

3

6.0 PROCEDURE

6.1 Schedule

The Director of QA has the responsibility for the preparation of a surveillance schedule for the succeeding year. The schedule shall be based on work schedules, results of previous surveillances or audits, the QA Levels of the Operation, Corrective Action Reports, or other pertinent information. The Director of QA and QA Engineers and QA Specialists will perform scheduled and unscheduled surveillances. The schedule will be reviewed semi-annually by the Director of QA, and if necessary, it will be updated.

6.2 Planning

Checklists (See Attachment 1 for the format) will be developed for each surveillance to be performed. This provides for identification of characteristics, methods and acceptance criteria and provides for recording evidence of results and identification of personnel. When personnel performing an activity under surveillance are required to be qualified, the checklist will include provisions for verification of qualifications. When precision equipment is used to perform a surveillance, the identification, accuracy and calibration of the equipment will be on the checklist. Additional comments or investigations required to complete the scope of the surveillance may be added to the checklist during the surveillance.

6.3 Performance

During the surveillance, the QA Representative shall examine objective evidence of compliance to programs, procedures or other documents. Examples of objective evidence reviewed shall be recorded on the checklists. The surveillance shall be performed to the depth necessary to determine whether or not the elements affecting the Quality Assurance Program are implemented. Nonconformances noted shall be reported and tracked in accordance with QAP-15.2(N), Control of Nonconforming Items. Deficiencies in the Quality Assurance Program and observations will be reported and tracked in accordance with QAP-16.2(N), Deficiency Reporting.

If the deficiency is not a hardware nonconformance and is a minor deficiency which can be corrected on-the-spot (i.e., missing signatures, missing dates, incorrect log entries, etc.) and the correction is verified, the issuance of a Deficiency Report is not necessary. The deficiency and remedial action taken will be documented on the surveillance checklist.

6.4 Reporting

QA shall issue to the cognizant F&S Manager a report (memo) which includes:

- a. Completed Surveillance Checklists (Form LV-230, Attachment 1).
- b. Nonconformances, Deficiency Reports, or Observations (if applicable).
- c. The report shall be approved by the Director of QA unless the surveillance is of activities performed by QA. In this case the report shall be signed by the individual who performed the surveillance.

6.5 Follow-up

The surveillance shall remain open until the surveillance report is issued. The close-out of nonconformances is described in QAP-15.2(N); the close-out of deficiencies and observations is described in QAP-16.2(N).

6.6 <u>Loq</u>

Quality Assurance shall maintain a log which identifies the Surveillance Number (see Attachment 2), the date(s) of the surveillance, the individual who performed the surveillance, and the status of the surveillance.

7.0 QUALITY ASSURANCE RECORDS

The following documents generated during the implementation of this procedure are QA Records:

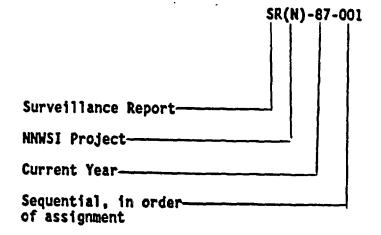
- a. Surveillance Reports
- b. Responses to Surveillance Reports

These are handled in accordance with Procedure PP-50-01, NNWSI Records Management.

E C					,	
FENIX & SCISSON, INC.	ON, INC.	SURV	SURVEILLANCE CHECKLIST	LIST	PAGEof	
REPORT NO:	SURVEILLANCE DATE(8):	:(8):	ондангатон:		VERIFIED BY:	
ACTIVITY(FES):			PERSONNEL CONTACTED:			
	□ NHWS1	□ NTBO				
REQUIREMENT SOURCE: DOC. NO., REV., PARAGRAPH	NAME OR S	QUESTION / REQUIREMENT / CHARACTERISTIC	CHARACTERISTIC	СОИИ	COMMENT / CONCLUSION	
						QAP-18.3(N), Rev. O Attachment 1 Page 1 of 1

NUMBER QAP-18.3(N), RE .0 PAGE 1 OF 1

F&S NNWSI SURVEILLANCE REPORT NUMBERING SYSTEM



X	<u> </u>	•	V.	PO	STANDA	RD DEFICIE	N. / REF	PORT	N-QA-038 3/87
۲,		Drte 3/1/8	38		2 Seve	erity Level 🗀 1	□ 2 □	3 Page	1 of 1
Organization	3	MMPO Audit	٠,	3º ider	ntified By D. Klimas	36 Branch Chie Concurrence N/A		4 SDR No.	Rev. 0
Š		Organization	· · · · · · · · · · · · · · · · · · ·	6	Person(s) C	ontacted	 	7 Respons	e Due Date is
OA		Fenix & Scis	son		Dan T	unney			cing Days from Transmittal
Originating O		Para. 18.10,	, 2nd Pa ons will	ara. st	tates in pa	e, if Applicable) irt: "Measures and executed ir	for the s	urveillance	of site
۵	1	Deficiency (surveillance surveillance	activ ³	ities v	without an	quirements, F&S approved survei	personne Illance pr	el are perfor rocedure. Re	rming eference F&S
10 Recommended Action(s): Remedial Investigative Corrective Initiate, approve and publish a surveillance procedure for the conduct of surveillance activities. Provide training to personnel performing surveilla activities.							of veillance		
Aprvl.	3		MAR 1	1988	عتبناك برحسينها	_	ate 13	Project Qualit	y Mgr. Date
n Block 5	See Attachment No. 1. April 25, 1988 See Attachment No. 1.								
rganization in	16				Corrective A	action to Prevent	Recurrenc 17 Effect	i. n	ril 25, 1988
Completed by O	See Attachment No. 1.								
Com	18	Signature/Dat		2/	Paculo	-, Dire	etor of	POA	4/29/88
	19	Response [Accept Reject		sponse	E/Lead Auditor/D	ater 1.88	Branch Manag	er/Date
00	20	Amended Response	Accept Reject		QA	E/Lead Auditor/D		Branch Manag	per/Date
8	21	Verifi- cation	Satisfa Unsatis			E/Lead Auditor/D	ate /	Branch Manag	por/Dati.
1. 1. 7. Orig	22	Remarks See	e attac	hed -	training t	o Surveillanc	e Procedi	ore GAP 18	
	23 C/A	O DSURE	QAE/Les	Aus	tor/Date E	Branch Manager/D	ate PO	•	15/68 usel For

}

14. Remedial/Investigative Action(s)

Procedure QAP-18.3(N), Rev. 0 "Surveillance" has been approved and issued and has an effective date of April 15, 1988. Training has been provided on this procedure to personnel performing surveillance activities. (See attachment.)

- 15. Effective Date __April_25, 1988_____
- 16. Cause of the Condition and Corrective Action to Prevent Recurrence

This condition was caused by an oversight by F&S Quality Assurance. Future surveillances of NNWSI activities will be performed in accordance with Procedure QAP-18.3(N), "Surveillance."

17. Effective Date April 25, 1988



FOR- 1V-2 7 (5/87)

TRAINING ON NNWSI PROCEDURES ATTACHMENT No. 2

Training Instructor Daniel J. Tu	lnney'	Telephone (702) 295-7799
Procedure Title(s) 1. Deficiency Percedure Title(s) 2. Audits	porting 3. Surveillance	Number(s) 1 04P 16 17 1800 Number(s) 1 04P 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Method of Instruction Ussspam In	struction	
Material Read by Trainees Vot Ca		
Other Instructional Material Used	raining outline provided to a	, Hendees
Location of Training Veveda Test	Site - Dorm B	Date of Training April 7 1988
Department(s) Quality Assu		
Remarks These Procedures		of 4-25-88
Duration of Session		
24(2)(0)(0)(2)(3)(0)	2 10213	
Damana	I Amendene (Amendendalistanda al-	***************************************
	Attendance (Attach additional sheet	•
Name Janet Johnson	Title	Signature
Thomas L Mc Cracken	Sr. OH Engineer GA Engineer	Thomas I Me Galen
	OH Engineer	Thomas I / Ille Clarken
John R McKAY	St. QA Specialist	g. R. Mikay
•		
	•	
	 	
Instructor's Signature	1. Wg	Date A:17,1,38

OUR XX	W.	PO STANDA	RD DEFICIENC, REF	PORT N-QA-038 3/87				
c	1 Date 3/8/88	2 Seve	rity Level 🗆 1 🗵 2 🗔	3 Page 1 of 2				
Organization	3 Discovered During WMPO Audit 88-01	3. Identified By G. Heaney	36 Branch Chief Concurrence Date N/A	4 SDR No0				
A Orga	5 Organization F&S	6 Person(s) Co M. Regenda	ontacted , T. McCracken	7 Response Due Date is 20 Working Days from Date of Transmittal				
Originating QA	* Requirement (Audit "Quality Assurance administration of Fithe identification,	Records," Rev. 3, &S QA records gen	, if Applicable) F&S proced establishes requirement erated by the Tulsa Des on, and transmittal of	ts for the ign Office including				
Δ	the stated requirements in NNWSI-DC-17. "Review and Comment Records" (form 508-TUL-29) could not be located in the F&S Nevada Test Site (NTS) Records Center							
Completed	10 Recommended Action 1. Transmit F&S Tu Center in accordance	lsa Design Office e with procedural	completed QA records to requirements. (cont'd	o the NTS Records				
Aprvl.	11 QAE/Lead Additor Da		Manager Date 13/8 asn3/11/85	Project Quality Mgr. Date				
in Block 5	See Attachment No.		15 Effect	dive Date June 30, 1988				
d by Organization in	16 Cause of the Condition See Attachment No.		ction to Prevent Recurrence 17 Effect	lline 30 1988 F				
Completed	18 Signature/Date	Kepula	Directrof	DA 4/29/55				
2	Response Reject Amended Accept	Response QA	MAI 26 1980	Branch Managér/Date The Control of the Control o				
Q AQ	Response ☐Reject 21 Verifi- ☑Satisfa	ctory QAI	E/Lead Auditor/Data	Branch Manager/Date				
8		_	leaner 8-15-88 riewled document to	anamittal forme				
Comp. by	por review/con	mment sheets liles. The re	A	was trained				
8	23 QAE/LOS URE & Sec	ad Auditor/Date B	ranch Manager/Date PC	MOate 08/15/08				



W 'O STANDARD DEFICIENC\ (EPORT CONTINUATION SHEET

N-QA-038 10/86

SDR No.

116

Rev. 0

Page

2

of 2

Block 8 Requirement (cont'd)

records to permanent storage.

Paragraph 6.2.2 of the procedure requires that F&S QA records generated in Tulsa be transmitted to Las Vegas within 30 days after the record becomes complete.

Block 9 Deficiency (cont'd)

Discussion:

During follow-up of corrective actions committed to previously generated SDR No. 066, Rev. 0, which stated that no QA records had been generated by the F&S Tulsa Design Office, it was observed during the audit that QA records had been previously generated by the Tulsa Design Office and were transmitted to the NTS Records Center for further processing prior to the date of the F&S response (9/16/87) to SDR-066.

Examples:

F&S Transmittals FS-NNWSI-0250 dated 7/6/87

FS-NNWSI-0235 dated 6/22/87 FS-NNWSI-0127 dated 4/3/87 FS-NNWSI-0192 dated 5/12/87 FS-NNWSI-0191 dated 5/12/87

Block 10 Recommended Action(s) (cont'd)

- 2) Revise the time frame established in NNWSI-DC-17 if 30 days is not a realistic time frame to transmit completed QA records to the NTS Records Center.
- 3) Reinstruct appropriate personnel to procedural requirements. Provide objective evidence.

14. Remedial/Investigative Action(s)

Completed QA Records in Tulsa, including Review and Comment Records, will be transmitted to the Records Center in accordance with F&S Project Procedure PP-50-01, "NNWSI Records Management." Block 10, Item 2 of SDR No. 116 recommends that the time frame established in NNWSI-DC-17 be revised if 30 days is not a realistic time to transmit these to the Records Center. We agree that this is not a realistic time frame; however, since this requirement is imposed by NNWSI-SOP-17-01, Section 5.4.4, F&S must comply with the 30-day restriction unless it is waived by WMPO.

The F&S response to SDR-066 was incorrect in stating that no QA Records have been generated in the Tulsa Office.

15. Effective Date June 30, 1988

16. Cause of the Condition and Corrective Action to Prevent Recurrence

The original F&S Records Management Procedure, TESOP-004-03, Revision 0, did not specify the 30-day transmittal requirement. This procedure was submitted to WMPO for review and approval. WMPO comment 5A in Letter WMPO:JB-1431, dated April 17, 1987, indicated that the procedure did not address the 30-day requirement. Realizing that this time requirement was not practical, F&S tried to obtain a relaxation of requirements but was unsuccessful. Currently, F&S is moving the ESF Design Office from Tulsa to Las Vegas. This will eliminate the problem of transmitting records from a distant location.

However, it is probable that there will be future problems in meeting the transmittal requirements proposed in Section 5.2.7 of DRAFT NNWSI Administrative Procedure AP-1.7Q, Revision 0, "NNWSI Project Records Management." This section requires participants to process records through their local records center and forward these to the central records facility no later than 14 days after the completion date shown on the record. Additional training will be given on records procedures.

17. Effective Date <u>June 30, 1988</u>

Page 1 of 2 NO.Z ATTACHMENTATO SDR 116 REV.O

FENIX & SCISSON, INC.

LAS YEGAS BRANCH

DOCUMENT TRANSMITTAL

TYPO: SHOULD BE 88

то:	Central Files	DATE: 08/11/87
STREET:	Mail Stop 940	P.O. BOX
CITY:	Mercury, Nevada	ZIP:
distribut	knowledge receipt of the transm ion form and returning it to Fe s Vegas, Nevada 89193-3265.	ittal listed below by signing this nix & Scisson, Inc., P.O. Box
DESC	RIPTION	DATE
Review a	nd Approval Sheets and marked u	p procedures on: NNWSI-DC-06,
NNWSI-DC	-13 (03/11/87), NNWSI-DC-18 (07	//10/87), NNWSI-DC-01, 02, 03, 04,
05, 06,	07, 08, 09, 11, 12, 14, 15, 16,	19, 20 and 23 (10/12/87), NNWSI-
DC-13, N (12/18/8	NWSI-DC-14, and Project Managem 7), NNWSI-DC-22 (10/28/87), NNW	ment Plan (11/10/87), NNWSI-DC-17 /SI-DC-22 (12/18/87)
Received	By:	Respectfully yours,
Signature	·	R. L. Bullock Project Manager, NNWSI Fenix & Scisson, Inc.
Date		

Page 2 of 2 NO. 2 ATTACHMENT/TO

FENIX & SCISSON, INC.

LAS VEGAS BRANCH

DOCUMENT TRANSMITTAL

5DR 116 REV.0

		TYPO: SHOULD BE
то:	Central Files	DATE: 08/11/87
STREET:_	Mail Stop 940	P.O. BOX
CITY:	Mercury, Nevada	ZIP:
distribut		nittal listed below by signing this enix & Scisson, Inc., P.O. Box
DESC	RIPTION	DATE
NNWSI-DO	C-13 (02/05/88), NNWSI-DC-01, 0	2, 03, 04 (05/18/88), NNWSI-DC-05
(05/16/8	88), NNWSI-DC-06, 07, 08, 09, 1	1 (06/03/88), NNWSI-DC-12, 13, 14,
15 (05/1	19/88), NNYSI-DC-18 (05/20/88),	NNWSI-DC-20 (05/26/88)
Received	By:	Respectfully yours,
Signature		R. L. Bullock Project Manager, NNWSI Fenix & Scisson, Inc.

Date

FENIX & SCISSON, INC. TRAINING ON DESIGN CONTROL PROCEDURES

Training Instructor HARRY	FORSHAW	Telephone
Procedure Title(s)SEE	ATTACHED LISTING	Number(s)
Method of Instruction	VERBAL	
Material Read by Trainees _	PROJECT CONTROL MANUAL	
Other Instructional Materia	1 Used	
Location of Training 101 C	ONVENTION CENTER- P-250 - I	Date of Training05-18-1988
Remarks		
` `		
Personnel Attendance (Attac	h additional pages if neces	ssary)
Name	Title	Signature
SEOTT A. NORDICK	_	
THOMAS H. FRANK	LEAD STRUCTURAL ENGIN	Shows H Fach
	ENG. DESIGN RETORDS ADM	Swark J. lungar
		•
	<u></u>	
		·
		Date 5/18/88

Form LV-320 (3-88)

PART II DESIGN CONTROL PROCEDURES TABLE OF CONTENTS

PROCEDURE NUMBER	TITLE	REV	EFFECTIVE DATE	
NNWSI-DC-01	Design Inputs & Informational Data to Outside Organizations	4	11/2/87	
NNWSI-DC-02	Design Methodology	4	11/2/87	
NNWSI-DC-03	Design Analysis	4	11/2/87	
NNWSI-DC-04	Design Verification	4	11/2/87	
NNWSI-DC-05	External Interface Control	3	11/2/87	
NNWSI-DC-06	Change Control	2	11/2/87	
NNWSI-DC-07	Development of Technical Specification	3	11/2/87	
NNWSI-DC-08	Preparation of Procedures	3	11/2/87	
NNWSI-DC-09	Interdiscipline Checking	4	11/2/87	
NNWSI-DC-11	External Comment Control	3	11/2/87	
NNWSI-DC-12	Computer Program Verification	2	12/11/87	
NNWSI-DC-13	Drafting Procedures and Standards	3	2/24/88	
NNWSI-DC-14	Technical Studies	3	12/11/87	
NNWSI-DC-15	Basis for Design Control	3	11/2/87	
NNWSI-DC-16	Document Control	3	11/2/87	
NNWSI-DC-17	Quality Assurance Records	3	1/22/88	
NNWSI-DC-18	Training on Tulsa Design Control Procedures	0	7/24/87	
NNWSI-DC-19	Cost & Scheduling	2	11/2/87	
NNWSI-DC-20	Project File System	3	11/2/87	
NNWSI-DC-21	Development of Project Management Plan	0	12/11/87	
NNWSI-DC-22	Purchasing Procedure	0	1/22/88	
NNWSI-DC-23	Authorized Signature	2	11/2/87	

OUE 52		•	Wka	O STAN	DAR	D DEFI	CIEN	CY R	EP(ORT		N-QA-03 3/87	8
7	1 Date 3/1/88		2	2 Severity Level 🗀 1 🗓 2		₩ 2	□ 3	□ 3 Page 1					
A Organization	3 Discovered During 30 Identification Audit 88-01 R. F.		dentified B	Concurrence Date		Date		4 SDR 1		Rev. <u>0</u>	_		
				Person(s) Contacted D. Tunney, T. McCracken				20 Worl			Due Date ing Days from ransmittal	is om	
Originating QA	a Requirement (Audit Checklist Reference, if Applicable)												
ρ	not provide objective evidence of the standard training the subject individual is required to receive. (cont'd)												
Completed	10 Recommended Action(s): Remedial Investigative Investiga												
Aprvi.	12	PAER PAR AUD	itor Date IR 1 1 19		ngt M	lanager Ingon3/	11 /8		13/Pr) 0 4	oject Q	Aprilar	٦ . ا .	
ganization in Block 5		Remedial/Inves	•	ction(s)				15 Eff	fectiv	ve Date	Augu	st 1, 1988	<u>8</u>
Completed by Organiz	See Attachment No. 1.							3_					
Comp	Milan equisa Milanay 41. 1/4/100												
	19	JAU 9-19-86□/ Response □	Accept &	Arhended Response	SAF.	All SI	itor/Di 3000g	BB 912	JA B	minch M	anage	er/Date	56
Org	20		Accept Reject		QAE	/Lead Aud			В	ranch M			
g QA	21		Satisfacto Unsatisfac		QAE	/Lead Aud	ditor/Da	ate	В	ranch M	anage	or/Date	
Comp. by Orig	as having met a fore mentioned training requirements but no objective evidence of $\tilde{\mathcal{G}}^{0.3}$							1-85					
O	23 QAE/Lead Auditor/Date Branch Manager/Date PQM/Date QA CLOSURE												

) STANDARD DEFICIENCY I. PORT WM CONTINUATION SHEET

N-QA-038 10/86

SDR No. 113 Rev.

Page

of 2

Block 8 Requirement (cont'd)

personnel to develop and demonstrate initial proficiency in the application of selected requirements, methods, and procedures, and to adapt to changes in technology, methods, or job responsibilities (NVO-196-17)."

- 2. PP-10-02, Rev. 0, "Training on NNWSI Procedures," Para. 5.2, states "Each Department Manager is responsible for training his subordinates or in the case of the staff who report to the Project Manager, the PM shall be responsible for training those personnel."
- 3. PP-10-02, Rev. O, "Training on NNWSI Procedures," Para. 6.1.1, Standard Training, states "A standard course of training shall be given on all the NNWSI procedures that are applicable to individual disciplines within each department, that are at the time enforced in the NNWSI Project Procedures Manual."

Block 9 Deficiency (cont'd)

Contrary to the above requirement a review of the Senior Hining Engineer's training file does not indicate by objective evidence that the subject individual was trained in NNWSI procedures applicable to the individual's discipline as stated in requirement No. 3, nor is there a method in place throughout the F&S organization (e.g., Tulsa, LV, and the NTS) which identifies the required standard training applicable to the individual disciplines.

It should be noted that the subject individual was certified by the F&S NNWSI Project Manager on 11/2/87 as having met the aforementioned training requirements.

Block 10 Recommended Action(s) (cont'd)

Evaluate and determine the extent of this condition.

Evaluate and determine what standard training courses are appropriate to individual disciplines within each department as stated in Requirement No. 3. Identify to the WMPO, by F&S department, the applicable training course requirements and content.

Identify to WMPO how F&S will correct this condition, and prevent its recurrance.

After the individual has completed the required training, re-certify the individual by the appropriate manager or supervisor.

14. Remedial/Investigative Action(s)

The Senior Mining Engineer had not received training because he had not performed any quality-affecting activities. His specific assignment is related to estimating and scheduling. Section 2.0 of Procedure PP-10-02, Rev. O "Training on NNWSI Procedure" requires training only for personnel performing activities related to project procedures that affect quality on this project. Prior to his performance of any quality-affecting activities, he will be appropriately trained and this training will be documented.

Quality Assurance personnel who perform quality-affecting work had received training as required by the following procedures:

QAP-2.2(N), Training and Indoctrination of QA Personnel QAP-2.3(N), Qualification of Auditors

Project personnel who perform quality-affecting work had received the training required by Procedure PP-10-02, "Training on NNWSI Procedures."

ESF Design personnel who perform quality-affecting work had received the training required by Procedure NNWSI-DC-18, "Training on Tulsa Design Control Procedures."

- 15. Effective Date August 1, 1988
- 16. Cause of the Condition and Corrective Action to Prevent Recurrence

This deficiency was caused by Procedure PP-10-02, Paragraph 6.1.1 not taking in account that individuals of a specific position may not be performing quality-affecting activities. Procedure PP-10-02, Paragraph 6.1.1 will be revised to indicate that training is only required for those quality-affecting activities which the individual is performing.

17. Effective Date <u>August 1, 1988</u>

22. Remarks

The response from F&S does not adequately address the identified deficiency, which is a lack of objective evidence (training records) supporting the certification of the subject Senior Mining Engineer. The documented certification by the F&S Project Manager apparently has no basis, nor was the certification necessary, per the initial response from F&S. The amended response should address how the false certification occurred and indicate remedial/investigative actions undertaken to identify and correct the problem. In addition, the effective date should reflect the date when all actions were complete or the scheduled completion date.

PF 2 ==> PRINT LISTING OF SUBJECT CODES

PF 3 ==> PRINT LISTING OF REVIEW LEVEL CODES

PF 4 ==> PRINT LISTING OF REVIEW SCOPE CODES PF 5 ==> PRINT LISTING OF VALID KEY WORDS

PF 6 ==> PRINT LISTING OF DOCUMENTS BY SUBJECT CODE

PF 8 ==> PRINT LISTING OF ADDED DOCUMENTS

PF 9 ==> RESET LABELS AFTER PRINTING

PF11 ==> SELECT ROUTING OF PRINTED OUTPUT