Received with letter 4/15/88

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

APR 15 1988

John J. Linehan
Division of High-Level Waste Management
U.S. Nuclear Regulatory Commission
M/S 4-H-3
Washington, DC 20555

TRANSMITTAL OF ADDITIONAL REFERENCES CITED IN THE JANUARY 1988 SITE CHARACTERIZATION PLAN CONSULTATION DRAFT (SCP/CD) FOR THE NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI) PROJECT

The NNWSI Project is shipping to you under separate cover one copy of the reference listed in the enclosure to this letter. This reference represents a document that was not included with the original shipment of references accompanying the SCP/CD. The reference has been shipped to your attention at the following address:

John J. Linehan
Division of High-Level Waste Management
U.S. Nuclear Regulatory Commission
M/S 4-H-3
Washington, DC 20555

The shipping date was April 11, 1988.

Should you have any questions concerning this matter or require additional information, please contact Uel S. Clanton (702-295-8943).

for Carl P. Gertz, Project Manager
Waste Management Project Office

WMPO:USC-1824

Enclosure:
Reference for SCP/CD

cc w/encl:
C. L. Stewart, SAIC, Las Vegas, NV
E. L. Ziegler, SAIC, Las Vegas, NV

cc w/o encl:
V. J. Cassella, HQ (RW-222) FORS
J. L. Younker, SAIC, Las Vegas, NV
U. S. Clanton, WMPO, NV
M. P. Kunich, WMPO, NV

8804200232 880415
PDR WASTE
WM-11 DCD

102.8
WM-11
NH#3
1/1

ENCLOSURE 1
PACKING LIST - March 31, 1988

Bohannon, R. G., 1984, Nonmarine Sedimentary Rocks of Tertiary Age in the Lake Mead Region, Southeastern Nevada and Northwestern Arizona, U.S. Geological Survey Professional Paper 1259, U.S. Government Printing Office.

Hillel, D., 1980, Fundamentals of Soil Physics, Academic Press, Inc., New York.

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

APR 14 1988

Richard L. Bullock
Technical Project Officer
for NNWSI
Fenix & Scisson, Inc.
P.O. Box 93838
Las Vegas, NV 89193-3838

WASTE MANAGEMENT PROJECT OFFICE (WMPO) QUALITY ASSURANCE (QA) AUDIT 88-01 OF FENIX & SCISSON, INC. (F&S) SUPPORT OF THE NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI) PROJECT (WMPO ACTION ITEM #88- 1511)

Enclosed is the report of QA Audit 88-01 which was conducted by WMPO at F&S locations in Tulsa, Oklahoma, Las Vegas, Nevada and Mercury, Nevada on February 23 through March 2, 1988.

During the course of the audit, the audit team generated 13 Standard Deficiency Reports (SDRs) Nos. 104-116, six observations, and two recommendations. A copy of the SDRs are enclosed with this audit report for your information.

Written responses to the six observations contained within this report are required. These responses are due within 20 working days of the transmittal date of this report. Please address your responses to me and concurrently send a copy of each observation response to Nita Brogan, Science Applications International Corporation (SAIC), Las Vegas, Nevada.

The recommendations contained in this audit report are submitted for your staff's consideration during the implementation of your Quality Assurance Program Plan (QAPP) and technical activities in support of the NNWSI Project.

The audit reviewed sufficient objective evidence related to the F&S QAPP to confirm that the F&S Program is not in compliance with the NNWSI Project Quality Assurance Plan NVO-196-17, Revision 5. Deficiencies described in Section 6.0 of this report served as the basis for WMPO requiring that immediate management attention be given to Exploratory Shaft Facility (ESF) design activities. Since F&S has initiated timely and positive corrective actions for the deficiencies outlined, WMPO feels that a "Stop Work Order" would not be necessary at this time. The primary corrective actions implemented include:

- Immediate development of new position descriptions for ESF personnel and a review of qualifications of design personnel to those descriptions
- The relocation of the F&S ESF design activity to Las Vegas, Nevada (effective 4/25/88)
- The aggressive recruitment of additional qualified design personnel

APR 14 1988

In order to confirm the extent of the corrective actions taken by F&S, WMPO will conduct a QA surveillance of ongoing ESF activities during the week of April 25, 1988. This will encompass the Las Vegas QA program and design functions.

If you have any questions, please contact Henry H. Caldwell of SAIC at 295-8740.

James Blaylock
Project Quality Manager
Waste Management Project Office

WMPO:JB-1814

Enclosures:
1. Audit Report 88-01
2. SDR Nos. 104-116

cc w/encls:
V. J. Cassella, HQ (RW-222) FORS
Ralph Stein, HQ (RW-23) FORS
R. W. Clark, Weston, Washington, D.C.
M. J. Regenda, F&S, Mercury, NV
S. H. Klein, SAIC, Las Vegas, NV
H. H. Caldwell, SAIC, Las Vegas, NV
W. R. Kazor, SAIC, Las Vegas, NV
J. W. Estella, SAIC, Las Vegas, NV
O. D. Smith, SAIC, Las Vegas, NV
F. J. Ruth, SAIC, Las Vegas, NV
B. A. Wozniak, SAIC, Las Vegas, NV
J. J. Brogan, SAIC, Las Vegas, NV
S. W. Zimmerman, State of NV, Carson City, NV
J. P. Donnelly, NRC, Washington, D.C.
J. R. Rinaldi, QAD, NV
C. P. Gertz, WMPO, NV
M. B. Blanchard, WMPO, NV
W. R. Dixon, WMPO, NV
L. P. Skousen, WMPO, NV
M. P. Kunich, WMPO, NV
R. E. Monks, WMPO, NV

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date	2 Severity Level	Page
2/25/88	☐ 1 ☒ 2 ☐ 3	1 of 2

3 Discovered During	3a Identified By	3b Branch Chief Concurrence Date	4 SDR No.
WMPO Audit 88-1	G. Dymmel G. Heaney	N/A	124 Rev. 0

5 Organization	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal
Fenix & Scission	L. Neyand	

8 Requirement (Audit Checklist Reference, if Applicable) F&S Design Control Procedure NNWSI-DC-09 "Interdiscipline Checking," Rev. 4, Para. 3.1.C 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 review. (cont'd)

10 Recommended Action(s): ☒ Remedial ☐ Investigative ☐ 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. (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE 2

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)

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).

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 2/25/88 | 2 Severity Level ☐ 1 ☑ 2 ☐ 3 | Page 1 of 3

3 Discovered During	3a Identified By	3b Branch Chief Concurrence Date	4 SDR No.
WMPO Audit 88-01	R. F. Cote	N/A	105 Rev. 0

5 Organization	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal
F&S	Harry Forshaw	

8 Requirement (Audit Checklist Reference, if Applicable) (no audit checklist reference)
Requirement No. I: NVO-196-17, Rev. 5, Sec. II, "Quality Assurance Program, Para. 1.0 "Extent of Quality Assurance Program" states in part: Each NNWSI Project Participant shall develop a Quality Assurance Program Plan (cont'd)

9 Deficiency Contrary to the above requirements, F&S Tulsa, OK initiated three (3) Quality Assurance Level II purchase orders to the following services:
(cont'd)

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective
Suspend all current Level II contracted services, submit to WMPO for review, approval and prior to implementation, a revision of the F&S QAPP which addresses a commitment to implement the requirements of NVO-196-17, Rev. 5 (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 16 1988	3/16/88	3/13/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

Block 8 Requirements (cont'd)

(Synonymous with the NRC definition of QA administrative procedures) which shall provide the description of the organization's QA program and indicate the commitment to the applicable NNWSI Project QA requirements given herein.

Requirement No. II: NVO-196-17, Rev. 5, Sec. II, Para. 1.2 Contents of the QAPP states in part: The QAPP shall be submitted to the WMPO for review and approval prior to implementation and shall include a checklist based on this NNWSI QAPP which identifies how and where each requirement of this document is addressed. The QAPP of each Project participant and NTS Support Contractor shall be reviewed, comments resolved, and the document approved by the WMPO prior to implementation.

Requirement No. III: F&S QAPP-002, Rev. 2, Sec. II, Para. 2.1.1 states in part: The QA criteria and specific requirements associated with these criteria have been adapted to the NNWSI Project activities through NVO-196-17 and are addressed in QAPP-002. When a specific criteria is not applicable to F&S activities it will be noted in the QAPP and recorded on the checklist.

Requirement No. IV: F&S QAPP-002, Rev. 2, Sec. 4.0 "Procurement Document Control" Para. 4.1.1 states in part: Exception. This section is not applicable to F&S as the AE for the design of the ESF. When and if F&S is assigned procurement responsibility, the QA requirements will be in accordance with NVO-196-17.

Requirement No. V: F&S QAPP-002, Rev. 2, Sec. 7.0 "Control of Purchased Items and Services," Para. 7.1 states in part: Exception. This section, same as 4.0 is not applicable to F&S as the AE for design of the ESF. When and if F&S is assigned procurement responsibility, the QA requirements will be in accordance with NVO-196-17.

Block 9 Deficiency (cont'd)

- Dr. E. J. Cording, Geotechnical Consultant, Contract No. 508-SC-02, initiated 6/20/86 and amended 1/27/88.
- Floyd C. Bossard & Associates, Ventilation Consultant, Contract No. 508-SC-04, initiated 6/20/86 and amended 1/26/88.
- David W. Kneebone, OCCU Safety Specialist, Contract No. 508-SC-05, initiated 7/30/86 and amended 1/26/88.

The subject purchased services were amended prior to submitting to the WMPO for approval and prior to implementation, a revision to the F&S QAPP-002 which would address a commitment to the requirements of NVO-196-17, Rev. 5, Sec. 4.0 "Procurement Document Control" and Sec. 7.0 "Control of Purchased Items and Services."

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

Section 4.0 "Procurement Document Control" and Section 7.0 "Control of Purchased Items and Services."

Develop procedures which implement the aforementioned requirements prior to resumption of procurement of items and services.

Evaluate work performed by the referenced subcontractors since 1/12/88 for impact on quality of services performed.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date: 1/25/88	2 Severity Level: ☐ 1 ☒ 2 ☐ 3	Page 1 of 2	
3 Discovered During: WMPO Audit 88-01	3a Identified By: R. F. Cote	3b Branch Chief Concurrence Date: N/A	4 SDR No. 106 Rev. 0
5 Organization: F&S Tulsa	6 Person(s) Contacted: M. Regenda, H. Forshaw	7 Response Due Date is 20 Working Days from Date of Transmittal	

8 Requirement (Audit Checklist Reference, if Applicable) Checklist Element 1-4
Requirement No. I-F&S QAPP-002, Rev. 2, Sec. 2.0 "Quality Assurance Program" Para. 2.4 Personnel Selection, Indoctrination, and Training Procedures, sub Para. 2.4.1.1 states: (cont'd)

9 Deficiency Contrary to the above requirements, a review of personnel qualification/verification and training files did not indicate that F&S Tulsa, OK

(cont'd)

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective
Establish minimum education requirements applicable to the individual's responsibilities and activities pertaining to the NNWSI Project, e.g., B.S. Mining, engineering experience,5 years drill and blast shaft design. (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 16 1988	3-16-88	

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

CLOSURE

Block 8 Requirement (cont'd)

2.4.1.1 Position Description minimum education and experience requirements are established and documented on position descriptions for each position involved in the performance of activities that effect quality.

Requirement No. 2-PP-60.01, Rev. 0 "Personnel Selection and Indoctrination", Para. 6.1, "Position Descriptions" states: Each manager and supervisor shall establish, document and maintain on file, position for their direct subordinates.

Block 9 Deficiency (cont'd)

has established personnel minimum position description requirements for personnel performing activities affecting quality.

This condition resulted in the inability to determine the validity of the qualification of ESF personnel performing activities which effect quality.

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

Each manager/supervisor must indicate, e.g., sign and date, that they have established these "position descriptions"or establish a management endorsement of the above "position descriptions."

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 2/25/88	2 Severity Level ☐ 1 ☒ 2 ☐ 3		Page 1 of 2
3 Discovered During WMPO Audit 88-01	3a Identified By R.F. Cote	3b Branch Chief Concurrence Date N/A	4 SDR No. 107 Rev. 0
5 Organization F&S Tulsa, OK	6 Person(s) Contacted Harry Forshaw, Paul Hale		7 Response Due Date is 20 Working Days from Date of Transmittal

8 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)

9 Deficiency Contrary to the above requirements, F&S Tulsa has not identified those activities which would be considered complex in nature, where training as described in Requirement No. 1 would be deemed necessary.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

Evaluate and identify activities which would be considered complex and where initial proficiency must be demonstrated, e.g., shaft drilling design and blast engineers. (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	7/13/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

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", Par. 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.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 2/23/88	2 Severity Level ☐ 1 ☒ 2 ☐ 3	Page 1 of 2
3 Discovered During Audit 88-01	3a Identified By R. F. Cote	3b Branch Chief Concurrence Date N/A
4 SDR No. 106 Rev. 0		
5 Organization F&S All Locations	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable) Check List element 1-9 PP-30.01, Rev. 0, Personnel Selection and Indoctrination, para. 6.2 "Personnel Qualification Evaluation" states in part: Each Manager and Supervisor shall compare the education, experience, and training against those (cont'd)

9 Deficiency Contrary to the above requirement, managers and supervisors have certified personnel as having met the requirements specified in the subject position description. Since no position descriptions have been established (re: SDR 106)for the below listed personnel, these management certifications (cont'd)

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective
Train the applicable management and supervisory personnel in the subject procedural requirements pertaining to the written certification of their subordinates, which is required to be based on the pre-established position (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	Branch Manager Date	13 Project Quality Mgr. Date
MAR 11 1988	3/11/88	3/11/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

Block 8 Requirement (cont'd)

specified in the position description and NNWSI Procedures. Only employees who meet the standard will be utilized to perform activities that affect quality. The Managers and Supervisors will certify that requirements have been met in the format specified in Attachment 1.

A copy of this shall be sent to Central Files.

Block 9 Deficiency (cont'd)

would be considered invalid.

Project Design Manager
Lead Project Design Engineer
Design Support Services Manager
Project QA Representative
Lead Mining Design Engineer
Senior Mining Engineer
Structural Engineer
Lead Mechanical Design Engineer
Lead Electrical/Instrumentation Engineer
Quality Assurance Coordinator - LV Office

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

description.

Perform and document initial proficiency in accordance with pre-established position description.

Evaluate work performed by currently assigned individuals and determine if they were qualified to perform their assigned tasks by comparison to established position descriptions.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 3/1/88	2 Severity Level ☐ 1 ☐ 2 ☒ 3		Page 1 of
3 Discovered During WMPO Audit 88-01	3a Identified By D. Klimas	3b Branch Chief Concurrence Date N/A	4 SDR No. 109 Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted Dan Tunney		7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable) QAP-18.1 (n), Rev. 2, Para. 3-13. The Lead Auditor or a designated team auditor shall perform a follow-up audit or surveillance to verify implementation of corrective action as stated in the Audit Deficiency Report. The auditor shall document on the ADR the action (cont'd)

9 Deficiency Contrary to the above requirements F&S ADR 87-06 was signed on 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 with NNWSI-SOP-03-02. DC-12 was approved on December 11, 1987.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

Reinstruct audit personnel as to procedure requirements regarding closeout of Audit Deficiency Reports.

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	7/19/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

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.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date: 3/1/88	2 Severity Level: ☐ 1 ☒ 2 ☐ 3		Page 1 of 2
3 Discovered During: WMPO Audit 88-01	3a Identified By: D. Klimas	3b Branch Chief Concurrence Date: N/A	4 SDR No. 110 Rev. 0
5 Organization: Fenix & Scisson	6 Person(s) Contacted: Dan Tunney		7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable) F&S QAP 16-1, Para. 4.1, Conditions for Initiating a CAR - CARs shall be initiated by Quality Assurance after all reasonable means for obtaining corrective action have been exhausted and one or more of the following conditions still exists: (cont'd)

9 Deficiency Contrary to the above requirements F&S AFR 87-02-04 was initiated for not having an approved procedure to accomplish surveillance activities when a Corrective Action Request (CAR) should have been issued.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

Initiate a CAR procedure requirement. Investigate to determine if all activities have approved procedures in place. Reinstruct personnel to procedure requirements in QAP 16.1(N), Rev. 0

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	3/19/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

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.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 3/1/88	2 Severity Level ☐ 1 ☒ 2 ☐ 3		Page 1 of 1
3 Discovered During WMPO Audit 88-01	3a Identified By D. Klimas	3b Branch Chief Concurrence Date N/A	4 SDR No. 111 Rev. 0
5 Organization Fenix & Scisson	6 Person(s) Contacted Dan Tunney	7 Response Due Date is 20 Working Days from Date of Transmittal	

8 Requirement (Audit Checklist Reference, if Applicable) F&S QAPP-002, Rev. 2, Sec. 18, Para. 18.10, 2nd Para. states in part: "Measures for the surveillance of site investigations will be established and executed in accordance with procedures prepared by F&S.

9 Deficiency Contrary to the above requirements, F&S personnel are performing surveillance activities without an approved surveillance procedure. Reference F&S surveillances SR-88-001, SR-87-06.

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 surveillance activities.

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	3/16/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date	2 Severity Level	Page
3/1/88	☐ 1 ☒ 2 ☐ 3	1 of 2

3 Discovered During	3a Identified By	3b Branch Chief Concurrence Date	4 SDR No.
WMPO Audit 88-01	R. F. Cote	N/A	112 Rev.

5 Organization	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal
F&S	D. J. Tunney	

8 Requirement (Audit Checklist Reference, if Applicable) Requirement No. 1 PP-60-01, Rev. 0 Personnel Selection & Indoctrination: Paragraph states: 6.1 Position Descriptions Each Manager and Supervisor shall establish, document and maintain on file, position descriptions for their direct subordinates. (cont'd)

9 Deficiency Contrary to the above requirements, position description for an F&S NTS NNWSI Senior QA Engineer, requires Educational qualifications to include "A Senior QA Engineer shall possess a bachelors or higher degree in an Engineering or Scientific Discipline, and specialized training in the QA Field." (cont'd)

10 Recommended Action(s): ☐ Remedial ☒ Investigative ☐ Corrective

Review all (e.g., Tulsa, LV, NTS) F&S QA and technical personnel and verify that the subject individuals actually possess the required degree credentials specified in their appropriate position descriptions where such position descriptions exist. Cont

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/16/88	

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

		QAE/Lead Auditor/Date	Branch Manager/Date
19 Response	☐ Accept ☐ Reject ☐ Amended Response		
20 Amended Response	☐ Accept ☐ Reject		
21 Verification	☐ Satisfactory ☐ Unsatisfactory		

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

Block 8 Requirement (cont'd)

Requirement No. 2 PP-60-01- Rev. 0, "Personnel Selection & Indoctrination" Para. 6.1 states in part: Each Manager and Supervisor shall compare the education, experience, and training against those specified in the position description and NNWSI Procedures. Only employees who meet the standard will be utilized to perform activities that affect quality. The Managers and Supervisors will certify that requirements have been met in the format specified in Attachment 1. A copy of this shall be sent to Central Files.

Block 9 Deficiency (cont'd)

The subject individual was certified as having met the educational requirements by the Director of QA on 9/16/87. A review of the SR. QA Engineer education requirement indicates that the individual possess a "Masters of Arts (MA) and Bachelor of Arts B.A." which does not comply with the position description or certification of verification of education as detailed by the Director of QA.

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

Evaluate the impact on quality for those personnel who have not met the educational portion of the position description and determine if the lack of degree requirement has affected the quality of activities to which they have and are performing. Submit to this office a list, by title, of those personnel who have not met the degree requirements specified in the position description the tasks performed and identified what action has or will be taken including (date to correct and to prevent this condition from recurring.)

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date: 3/1/88	2 Severity Level: ☐ 1 ☒ 2 ☐ 3		Page 1 of 2
3 Discovered During: Audit 88-01	3a Identified By: R. F. Cote	3b Branch Chief Concurrence Date: N/A	4 SDR No. 113 Rev. 0
5 Organization: F&S	6 Person(s) Contacted: D. Tunney, T. McCracken		7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)
1. PP-10-02, Rev. 0, "Training on NNWSI Procedures," Para. 4.0, Definitions, Subparagraph 4.1, Training, states "In depth instruction provided to (cont'd)

9 Deficiency Contrary to the above requirements a review of the personnel file does not provide objective evidence of the standard training the subject individual is required to receive. (cont'd)

10 Recommended Action(s): ☑ Remedial ☐ Investigative ☐ Corrective
Establish training course applicable to the subject individuals discipline as required in Requirement No. 3. Provide objective evidence that the individual has completed the aforementioned training. (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 11 1988	3/11/88	3/31/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

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. 0, "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 Mining 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.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 3/1/88 | 2 Severity Level ☐ 1 ☒ 2 ☐ 3 | Page 1 of 2

3 Discovered During	3a Identified By	3b Branch Chief Concurrence Date	4 SDR No. / Rev.
WMPO Audit 88-01	R. F. Cote	N/A	114 / 0

5 Organization	6 Person(s) Contacted	7 Response Due Date is 20 Working Days from Date of Transmittal
F&S	D. Tunney, M. Regenda	

8 Requirement (Audit Checklist Reference, if Applicable) 1. PP-60-01, Rev. 0, "Personnel Selection and Indoctrination," Para. 6.2, states in part: "Each Manager and Supervisor shall compare the education, experience (cont'd)

9 Deficiency Contrary to the above requirements a review of personnel position descriptions for both QA and technical personnel (e.g., ESF Design Engineers) does not specify the training required for the individual position description by which the individual is then certified.

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

Specify the required training an individual is to receive prior to management certification, or should it not be the intent to identify the required training in the position description then delete this requirement (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 14 1988	3/18/88	3/18/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

ENCLOSURE

Block 8 Requirement (cont'd)

and training against those specified in the position description and NNWSI procedures. Only employees who meet the standard will be utilized to perform activities that affect quality. The managers and supervisors will certify that requirements have been met in the format specified in Attachment 1. A copy of this shall be sent to Central Files."

2. PP-10-01, Rev. 0, "Personnel Selection and Indoctrination, "Attachment 1.A, Personnel Qualification Evaluation, states in part "Based on my personnel review of the individual's education, experience, and training compared to the employee's position description and NNWSI procedures, I certify this employee for the assigned task.

1._____

Manager or Supervisor Date_____

Recommend Action(s) (cont'd)

from the procedure as stated above and identify to WMPO the procedure which will identify the required training an individual must receive prior to performing activities affecting quality.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 3/1/88	2 Severity Level ☐ 1 ☒ 2 ☐ 3		Page 1 of 3
3 Discovered During Audit 88-01	3a Identified By R. Cote'	3b Branch Chief Concurrence Date	4 SDR No 115 Rev 0
5 Organization F&S	6 Person(s) Contacted D. Tunney		7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable)

1. F&S QAPP-002, Rev. 2, Para. 17.1.1, states "A document is not considered to be a Quality Assurance Record until it satisfies the definition of a Quality (cont'd)

9 Deficiency

Contrary to the above requirements, a review of position description documents for F&S Tulsa and NNWSI Project QA and technical personnel (e.g., Senior (cont'd)

10 Recommended Action(s): ☒ Remedial ☒ Investigative ☒ Corrective

1. Submit list to WMPO of those F&S management personnel (e.g., name, title, and department) and the subordinate position descriptions they are (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 11 1988	3/11/88	3/11/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager Date	PQM/Date

CLOSURE

Requirment (cont'd)

Assurance Record as defined below.

The term records, used throughout this section is to be interpreted as Quality Assurance Records. Quality Assurance Records include individual documents that have been executed, completed, and approved and that furnish evidence of the quality and completeness of data (including raw data), and activities affecting quality; documents prepared and maintained to demonstrate implementation of quality assurance programs (e.g., audit, surveillance, and inspection reports); procurement documents; "other documents, such as plans, correspondence, documentation of telecons, specifications, technical data, books, maps, papers, photographs, and data sheets; magnetic media; and other materials that provide data and document quality regardless of the physical form or characteristics." A completed record is a document that will either receive no more entries or whose revision would normally consist of the reissue of the document; and is signed and dated by the organization and, as applicable, by personnel authorized to approve the document. Records will be distributed, handled, and controlled in accordance with written procedures.

2. PP-60-01, Rev. 0, Personnel Selection and Indoctrination, Para. 6.1, states "Each manager and supervisor shall establish, document, and maintain on file, position descriptions for their direct subordinates."

3. PP-60-01, Rev. 0, Personnel Selection and Indoctrination, Para. 6.2, states "The Director of Personnel, Las Vegas or a designee shall verify the education and experience of employees stationed in Las Vegas and at the NTS. The Administrative Clerk/Personnel, Tulsa, shall verify the education and experience of employees stationed in Tulsa. They will then use Attachment 1 to certify that this verification has been completed. This shall be sent to the cognizant manager or supervisor."

Each manager and supervisor shall compare the education, experience, and training against those specified in the position description and NNWSI Project procedures. Only employees who meet the standard will be utilized to perform activities that affect quality. The managers and supervisors will certify that requirements have been met in the format specified in Attachment 1. A copy of this shall be sent to Central Files.

4. F&S QAPP-002, Rev. 2, Section 17.0, Quality Assurance Records, Subparagraph 17.1.2.2, states in part "Sufficient records will be specified, prepared, and maintained to furnish documented evidence of activities that affect quality. The records will include at least the following: operating logs, the results of reviews, inspections, tests, audits, monitoring of work performance, and materials analyses. Also, the records will include closely related data such as qualifications of personnel, procedures, and equipment."

Deficiency (cont'd)

QA Engineers and QA Engineers) do not provide objective evidence that the subject position descriptions were established and documented by the applicable manager, QA Director, or supervisor as stated in Requirement No. 2.

These position descriptions which establish the basis for the certification of personnel performing quality affecting activities would be considered QA records and must be signed and dated by personnel authorized to approve the subject position description since the revision of these description(s) would normally consist of the reissue of the subject document.

The subject position descriptions must also be included in the personnel qualification files as required in Requirement No. 4 since it establishes the qualification requirements for the initial and continual basis for requalification of all individuals to perform activities which affect quality.

Recommended Action (cont'd)

required to develop per Requirement No. 2 and have the subject management personnel sign, date, and include revision numbers on the position description.

2. Establish a method to control the issues of position descriptions.

3. Include position description(s) as stated above in personnel qualification files, and retain such records as lifetime QA records.

WMPO STANDARD DEFICIENCY REPORT

N-QA-038
3/87

Completed by Originating QA Organization

1 Date 3/8/88	2 Severity Level ☐ 1 ☒ 2 ☐ 3	Page 1 of 2
3 Discovered During: WMPO Audit 88-01	3a Identified By: G. Heaney	3b Branch Chief Concurrence Date: N/A
4 SDR No. 116 Rev. 0		
5 Organization: F&S	6 Person(s) Contacted: M. Regenda, T. McCracken	7 Response Due Date is 20 Working Days from Date of Transmittal

8 Requirement (Audit Checklist Reference, if Applicable) F&S procedure NNWSI-DC-17, "Quality Assurance Records," Rev. 3, establisnes requirements for the administration of F&S QA records generated by the Tulsa Design Office includina the identification, storage, retention, and transmittal of appropriate (cont'd)

9 Deficiency Contrary to the above requirements, F&S Tulsa is not complying with 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 for any of the F&S Tulsa NNWSI-Design Control Procedures.

10 Recommended Action(s): ☒ Remedial ☐ Investigative ☒ Corrective

1. Transmit F&S Tulsa Design Office completed QA records to the NTS Records Center in accordance with procedural requirements. (cont'd)

Aprvl.

11 QAE/Lead Auditor Date	12 Branch Manager Date	13 Project Quality Mgr. Date
MAR 11 1988	3/11/88	3/11/88

Completed by Organization in Block 5

14 Remedial/Investigative Action(s)

15 Effective Date _____

16 Cause of the Condition & Corrective Action to Prevent Recurrence

17 Effective Date _____

18 Signature/Date

Comp. by Orig. QA Org.

19 Response	☐ Accept ☐ Reject ☐ Amended Response	QAE/Lead Auditor/Date	Branch Manager/Date
20 Amended Response	☐ Accept ☐ Reject	QAE/Lead Auditor/Date	Branch Manager/Date
21 Verification	☐ Satisfactory ☐ Unsatisfactory	QAE/Lead Auditor/Date	Branch Manager/Date

22 Remarks

23 QA CLOSURE	QAE/Lead Auditor/Date	Branch Manager/Date	PQM/Date

CLOSURE

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.