

RE: 9260-N 24

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**SEQUOYAH FUELS**  
CORPORATION

March 13, 1992

Certified Mail

Return Receipt Requested

Mr. Robert D. Martin  
Regional Administrator  
U.S. NUCLEAR REGULATORY COMMISSION  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

RE: Sequoyah Fuels Corporation's Response to Additional  
Information Requested in NRC Inspection Report  
No. 40-8027/91-17

Dear Mr. Martin:

In the Nuclear Regulatory Commission (NRC) Inspection Report 40-8027/91-17, the NRC requested additional information regarding (1) the interim management oversight measures being taken during the period required for long-term programs to mature and become effective, (2) NRC concern regarding the permanent staffing of the health and safety technician positions, and (3) the effectiveness of corrective measures taken to improve management's sensitivity to the control of licensed material.

The interim management oversight measures were discussed with the NRC Inspectors in the exit meeting on February 3, 1992 and in our meeting with the NRC staff on February 14, 1992. The material presented in these two meetings has been updated to reflect recent activities and is presented in Attachment 1 to this letter. NRC's criticisms with respect to the functions of the Sequoyah Oversight Team during startup are addressed in paragraph 3 of the Attachment.

The NRC staff has expressed concerns with regard to the permanent staffing of the health and safety technician positions. SFC has taken significant actions to enhance the staffing of the complete Health and Safety (H&S) Department. SFC has increased its number of permanent H&S technicians and services workers to twenty-two positions. Twelve of these twenty-two positions have currently been filled. SFC has increased the number of H&S Supervisor positions from one to two, and an SFC employee started work this month to fill one of the supervisor positions. SFC has also recently filled its

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new Staff Health Physicist position. SFC is committed to continue its evaluation of the staffing needs of the H&S Department as the facility is restarted and as part of the Organizational Functional Analysis Program described in our letter to the NRC dated January 3, 1992, and will make the necessary adjustments to its permanent staff.

In the interim, SFC has taken actions to augment its permanent H&S technician staff with twenty-six experienced contract H&S technicians and two consultants. These contract technicians will be phased out as permanent H&S staff positions are filled and the permanent technicians are trained. These contract H&S technicians provide additional experienced personnel to assure the adequacy of operational practices and to identify potential problems to management. The current plan is to schedule an SFC H&S technician with knowledge of the plant on shift with each H&S contract technician working on shift. The current on-shift SFC H&S technicians will be rotated into additional training after the other SFC H&S technicians complete their training and are available for on-shift duty. Also, SFC plans to carefully coordinate its need for these additional contract H&S technicians with the need for qualified technicians and the ability of SFC's permanent technicians to meet this need.

The inspection report also requested additional information on effectiveness of corrective measures taken to improve management's sensitivity to the control of licensed material, and measures taken to improve communication within the management organization. This issue relates to the discovery of contaminated materials in unrestricted areas at the Sequoyah Facility, including the contaminated materials found in the warehouse and at the Carlile Training Center. By letter dated February 28, 1992, SFC provided a root cause analysis of the event involving contaminated material found at the Carlile Training Center. As noted in that letter, the root cause of the event was significant and rapid changes in the work environment at SFC. Contributing causes included inadequate turnover of job assignments during this time of rapid change and the lack of a plan for the performance of surveys in the unrestricted areas. The actions taken to correct these problems were discussed in our letter of February 28, 1992.

This event is not reflective of the senior management team that is now in place. The changes which have occurred since the time of the cited violation are numerous. The President has now been on the job for about six months rather than only seven weeks, and has had an opportunity to communicate his

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expectations of staff and management performance to all personnel. Also, the Senior Vice President has assumed operational responsibilities, thus allowing the President to devote more time to other responsibilities. The Vice President, Regulatory Affairs has now been on the job for about four months, rather than having just been appointed, and an Environmental Manager has assumed responsibilities, thereby allowing the Vice President, Regulatory Affairs to devote more time to regulatory and Health and Safety activities.

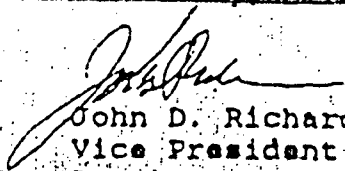
SFC management also believes that its communication of its expectations of staff and management performance has vastly improved during the four months since the surveys in November. Evidence of such improvements in communications were discussed at the February 14, 1992 meeting and listed on the slide entitled "Evidence of Change in Culture". An additional good indicator that management's message is being received by personnel is the results of the interviews by Mr. Selman provided to the NRC with our letter to Mr. Martin of March 9, 1992.

SFC has approved and implemented a plan for the performance of surveys of the Unrestricted Areas. A copy of the plan was also provided to the NRC by our February 28, 1992 letter.

The survey plan for Unrestricted Area surveys has been demonstrated to be effective in meeting the proposed objectives during the past several weeks of its implementation at SFC.

I hope you find the enclosed information useful. If you have any questions, please do not hesitate to call.

Sincerely,

  
John D. Richardson  
Vice President  
Regulatory Affairs

JDR:nv

Attachments

xc: Robert M. Bernero  
John W. N. Hickey  
L. J. Callan, Region IV

Attachment 1

FEEDBACK MECHANISMS AND INTERIM OVERSIGHT MEASURES

- (1) The manager-on-shift program will be implemented for at least 30 days after restart until the President is satisfied it is no longer necessary. If achieving full production is delayed, the program will be extended as appropriate. The managers used for the program will typically be at the level of Area Manager or Department Manager. There will be a manager on every shift. He will be charged with making plant tours and will verify, among other things, the level of procedural adherence. See attached memorandum from J. J. Sheppard to R. Parker, dated November 20, 1991, which provides guidance to the managers in the discharge of their responsibilities under this program.
- (2) SFC is currently utilizing senior experienced consultants. Mr. Murray Selman has been retained to provide consultation to the President and the Senior Vice President, in addition to his service as a member of SFC's Board of Directors and its Nuclear Committee. Mr. Selman's extensive experience in both the uranium conversion industry and the commercial nuclear power industry will be utilized to further assure a successful plant startup and operations. Mr. Selman has been onsite for extended periods during the preparations for startup. He will continue to be onsite for extended periods during the startup and until the plant reaches a steady state of operating conditions, and will be available as needed thereafter. Mr. Selman has and will continue to spend a considerable fraction of his time in the field observing ongoing maintenance and operations activities. In addition, he will undertake special tasks as deemed appropriate. Examples of tasks he has undertaken to date, and indicative of those he will undertake in the future include a review of revised operating procedures to assure the proper level of detail, performance of an independent root cause analysis of the DUF<sub>4</sub> filter incident of January 9, 1992, review with operating personnel of the pre-startup equipment checklists, development of performance indicators for Operations and Maintenance (currently ongoing), and interviews with SFC personnel to assess the extent to which management expectations are understood and accepted. In the performance of the tasks and in his field walkthroughs, Mr. Selman has and continues to observe and to interact extensively with Operations and Maintenance personnel.

Mr. Paul Check also will be utilized to assist management in a number of areas during restart and the early stages of operations. These will include, among others, participation in internal regulatory compliance

self-assessment inspections, such as the one conducted during the week of January 6, 1992; review of SFC regulatory compliance for adequacy, lessons learned, and depth of understanding of issues; and assistance in the preparation and review of ongoing improvement plans and actions addressing issues based on past performance. Both Mr. Selman and Mr. Check were used as part of the senior management inspections during the week of January 6, 1992, and will be used, as appropriate, for such future inspections.

- (3) The Sequoyah Oversight Team, composed of independent experts, has developed a restart plan to provide a focus upon certain critical procedures and activities during the restart period. The plan provides guidance for the use of structured check lists and for the use of established performance indicators. The plan also describes the proposed use of qualified persons for evaluation of Health and Safety and Environmental functions. See attached letters to J. J. Sheppard from PLG, Inc. dated January 10, January 21, and March 13 1992.
- (4) SFC has adopted a program of senior management inspections as a means of self assessment, including selective assessment of procedure upgrades, plant walkdowns to evaluate procedural compliance and review of commitment implementations. Such an inspection was conducted during the week of January 6, 1992. Additional such senior management inspections will be conducted approximately every 8 weeks during the first six months after restart. Additionally, management walkthroughs to identify problems and obtain employee feedback were conducted during the weeks of November 25, 1991, and January 6, 1992. Recent walkthroughs were conducted on February 4, 1992 and March 10, 1992. Such management walkthroughs will continue on a monthly basis for at least 6 months after restart.
- (5) Procedure G-190, "Investigation and Reporting of Accidents, Incidents, Near-misses, and Anomalous Conditions", is being revised significantly, and two procedures, G-192 "Deficiency Reports" and G-193 "Corrective Action Requests" have been prepared and approved on March 5, 1992 by the Plant Operations Review Committee (PORC). These two procedures will be formally implemented after training is provided for the staff. As these procedures are implemented G-190 will be rescinded. G-192 provides the methods through which anyone at SFC can initiate a Deficiency Report based on actual or perceived conditions adverse to health, safety, or the environment. These Deficiency Reports are evaluated and if it is determined that corrective actions are required, then G-193 provides the procedure to process Corrective Action Requests. These procedures provide tools to

provide significant feedback to management, since every individual becomes "eyes and ears" looking for quality problems and a tool is provided for reporting problems and resolving them.

- (6) Operations and Maintenance have adopted a process under which, before the conduct of any non-routine activity not covered by a procedure, there will be an inter-departmental review in order to assure full consideration of safety hazards and environmental questions, as well as to assure employee safety. See attached memorandum from J. Martin to R. A. Parker and L. J. Silverstein dated January 24, 1992.
- (7) Pre-startup check lists have been developed by Operations to provide for a safe, orderly and pre-planned restart of the facility. Pre-startup equipment checklists have been used in physical inspections of equipment to assure that any problems are addressed prior to startup. Process system startup checklists will be used to assure that startup operations are performed by procedure.
- (8) Operations has revised procedures to adopt a process of independent verification of block valves which isolate the UF<sub>6</sub> relief systems. If a system is shut down for an extended period of time there will be independent verification by another individual that the block valves are open.
- (9) Managers make frequent visits to work areas to reinforce work standards and to improve communication between managers and employees, including obtaining feedback regarding problems or concerns.
- (10) Numerous improvements of the QA program are being developed. The conduct of programmatic audits has been initiated. A programmatic audit was performed of the Maintenance program and resulted in the preparation of a Maintenance Improvement Plan. A programmatic audit of the Design Control program has been performed and corrective actions identified.
- (11) The Readiness Review Committee, composed of four senior experts who assessed readiness for restart, will return within 4-6 months after restart to assess the effectiveness of changes that were implemented and whether the desired level of performance has been achieved.
- (12) There are also frequent meetings between SFC management and personnel to reinforce SFC goals, objectives and expectations, to assure that management's messages are being received, and to obtain feedback on problems and concerns. These include the President's periodic meetings with all employees; periodic meetings of the

President, Senior Vice President and Vice President, Regulatory Affairs with small work groups; frequent meetings of the Vice President, Regulatory Affairs, with Health and Safety and Environmental personnel; and weekly meetings of the Manager of Operations with Operations shift personnel and area managers to discuss, among other things, concerns or problems that occurred on shift.

- (13) SFC has initiated efforts to significantly expand and improve the commitment tracking system (CTS). The CTS is currently operational and the first two week "look ahead" reports and set of Reply Forms have been sent out for responses. The CTS currently includes SFC commitments to the NRC and NRC open items. Ultimately it will be expanded to include internal SFC commitments, such as Corrective Action Reports under the new Procedure G-193. An element of the upgraded CTS is improved report format and trending and tracking mechanisms to focus management attention on problem areas. The CTS will be an important component of a Corrective Action Reporting System since it will ensure that each item is tracked and ultimately dispositioned. Implementation of the upgraded CTS will be accomplished in steps, and is expected to be fully completed by April 30, 1992.
- (14) The annual audit by General Atomics of the SFC QA program and SFC nuclear licensing program will be scheduled during the first few months of restart in order to provide early feedback in the effectiveness of these programs during plant operation. Increased oversight of SFC operations will be provided by the SFC Board of Directors, which now includes the new Chairman of the Board, Dr. Richard A. Dean, the Senior Vice President, Reactor Group, of General Atomics, who has extensive nuclear experience, and the new Chief Executive Officer, Mr. Max D. Kemp, a Senior Vice President and Chief Financial Officer of General Atomics. They will also help to bring General Atomics' experience to bear on overall SFC operations. In addition, the SFC Board of Directors will be expanded to include two new outside members, both of whom will have extensive nuclear experience.
- (15) SFC has retained the services of four Kerr-McGee experts, one of whom was formerly director of Kerr-McGee's Research Center and the others essentially designed, started-up and were involved for 20 years in upgrades, problem solving, etc., in the denitration/reduction area, solvent extraction area and UF<sub>4</sub> plant, respectively. They will provide technological information (e.g., design basis) to the SFC plant engineers through seminars. They will also be available for trouble-shooting as problems may come up and to assist SFC technical management, based on their detailed knowledge of the plant, on questions regarding safety, process operations and product quality.

## SEQUOYAH FUELS CORPORATION

## INTERNAL CORRESPONDENCE

TO: Dick Parker

DATE: November 20, 1991

FROM: Joe Sheppard *JS*

SUBJECT: Manager on Shift

As part of our commitments with respect to planning for restart, we have said that we will provide a manager on shift for the first 30 days after restart. The purpose of the manager on shift is not to supersede or replace the Senior Shift Supervisor, but rather to support that individual. The duties I envision for the manager on shift are:

1) Maintain an overview of the overall plant operation. The manager on shift would assure that someone was watching the big picture and not caught up in the individual operational problems that may unduly divert the other supervisors.

2) Maintain an overview of any high potential for contamination activities on the shift to again assure that the whole picture was being reviewed.

3) Maintain an overview of any high or higher than normal potential hazards from chemical activities on the shift.

4) Maintain an overview of the overall use and compliance with procedures on the shift. Provide the shift supervisor with the support to assure that the procedures are available, and being used properly.

5) Provide readily available management support to the shift supervisor to quickly resolve problems by obtaining and committing resources as necessary, e.g. extra operators, maintenance support, etc.

6) Provide me with a shift report on problems encountered and their status, and achievements accomplished on the shift. This is to allow me quick feedback on any additional support that the shifts may need as we implement our new operating and health physics philosophies.

I envision utilizing four managers on twelve hour shifts to accomplish this mission. The twelve hour shifts will provide a continuity over the shift changes to, again, maintain the overview. I would like your comments on the above, your thoughts on who the managers ought to be, and what type of schedule you would like to adopt by November 27.

Please call me if you have any questions.





ENGINEERS • APPLIED SCIENTISTS •  
MANAGEMENT CONSULTANTS

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JAN 13 1992

SEQUOYAH FUELS CORP.

January 10, 1992  
SFC-5074-PLG-113

Mr. James J. Sheppard  
Sequoyah Fuels Corporation  
Interstate 40 and Highway 10  
Gore, OK 74435

Dear Mr. Sheppard:

**SEQUOYAH OVERSIGHT TEAM ACTIVITIES  
DURING RESTART OF SEQUOYAH FACILITY**

During the U.S. Nuclear Regulatory Commission (NRC) audit in December 1991, Mr. Michael Vasquez indicated that the NRC would like a summary of the activities that are planned by the Sequoyah Oversight Team (SOT) during restart of the Sequoyah Facility. This letter presents our planned coverage for the restart. It covers activities from the time of completion of the second NRC audit visit, which is expected on January 17, 1992, through startup of all main process systems and the establishment of normal process flow.

These activities are in two parts. The first is a check of the status of various commitments and activities that are to be completed before facility restart. A summary of commitments and activities that the SOT currently plans to evaluate is given in Enclosure 1.

The second part of the SOT activities will occur as the facility process systems are restarted. These activities will consist of observing the step-by-step completion of selected representative procedures during restart of the process systems. Complete coverage of all procedures is not planned, and the extent of observation on each selected procedure will be based on the quality of performance observed. Our rationale is that the facility staff will have been trained on all new and revised procedures that are effective at the time of restart, and therefore the oversight activity should focus on sampling the performance of these procedures.

To facilitate SOT coverage during restart, we will identify the representative procedures that are to be observed and then coordinate our on-site oversight periods to ensure that the SOT member who is present during the restart is able to observe performance of the selected procedures. A tentative list of procedures that are to be observed is included in Enclosure 2. A form sheet for recording the team member's observations is provided in Enclosure 3.

Mr. James J. Sheppard  
Sequoyah Fuels Corporation

January 10, 1992  
Page 2

Throughout both the pre-restart period and the restart period, the planned SOT coverage will remain at 8 hours in each 24-hour period unless unusual problems are encountered or the NRC requests a higher level of oversight. In view of the extensive effort by SFC to prepare for the restart, we believe that one SOT member spending 8 to 12 hours in each day should be sufficient to provide a satisfactory level of oversight.

Please call me if you have any questions.

Very truly yours,

  
B. John Garrick  
President

Enclosures

Enclosure 1

LIST OF PRE-RESTART ACTIVITIES  
TO BE OBSERVED OR CHECKED BY  
SEQUOYAH OVERSIGHT TEAM

PROCEDURES AND TRAINING

1. All Health & Safety and Environmental procedures committed to completion prior to restart are complete and approved, including responses to NRC comments.
2. Training completed on all procedures in Item 1. Completion includes answers to all questions raised during training, and evidence that the questioners have understood the answers.
3. All temporary operating procedures (TOP) have been properly prepared and distributed, and the appropriate personnel have reviewed the TOPs.

HEALTH AND SAFETY AND ENVIRONMENTAL READINESS

1. Document summarizing the facility ALARA program completed and approved.
2. Planning for Health & Safety coverage during restart completed, and manning level established to support coverage.

OPERATIONS DEPARTMENT READINESS

1. Startup checklists completed, approved, and ready for implementation.
2. Updated shift turnover program established, and turnover checklists available for use by shift supervisors and area managers.
3. All operations personnel have walked through new and revised operating procedures that will be effective during restart.
4. All Hazardous Work Permits are properly accounted for and controlled, including Health & Safety log of permit status.

MANAGEMENT READINESS

1. All new managers appear to be aware of their responsibilities and are prepared to perform any startup activities assigned to them.
2. All SFC commitments for response to the Independent Management Assessment prior to restart have been completed.
3. Adequate coverage for Environmental Department Manager has been established.
4. NRC concerns on Quality Assurance effectiveness have been satisfactorily addressed for startup.

Enclosure 2

PROPOSED REPRESENTATIVE PROCEDURES  
FOR SOT OBSERVATION DURING RESTART  
OF SEQUOYAH FACILITY

Performance of the following procedures will be observed by the SOT member who is onsite at the time that the procedure is initially implemented during the restart of the Sequoyah Facility. This is a proposed list and may be altered based on any comments that you or the NRC provide or on findings of the SOT during the period immediately preceding restart of process operations.

To enable the SOT to be present during initial performance of each of the following process system procedures (N-Series), we request that the expected time of initial implementation for the procedure be provided to the onsite SOT member as soon as possible after determination that the procedure will be implemented. The onsite SOT member will also maintain contact with the facility staff to track the expected start times for each N-Series procedure.

G-111	Access to Restricted Areas and Controlled Access Areas
G-114	Change Room Procedure
G-115	Survey of Low Specific Activity (LSA) Radioactive Shipments and Receipts
G-158	Radioactive Contamination Control
G-304	Hazardous Work Permits
HS-102	Airborne and Liquid Effluent Monitoring
HS-104	In-Plant Air Sampling and MPC-Hour Exposure
HS-301	Radiation, Contamination, and Release Surveys
HS-502	Issuing Respiratory Protection Equipment
HS-506	Laundry Facility Operation
HSDept-119	Entry by Personnel into High Radiation Areas
N-170-1	H2-F2 Burner and Scrubber Operation
N-230-1	Digestion of Yellowcake and Transfer of Slurry
N-240-2	Solvent Rework
N-250-1	Uranyl Nitrate Hexahydrate (UNH) Boil-down
N-270-4	Primary Cold Trap Operation
N-270-8	Primary Fluorination Tower Operation
N-270-10	Ash Grinding
N-280-1	Uranium Hexafluoride Product Handling and Shipping
N-340-1	Receiving Anhydrous Hydrofluoric Acid (AHF)
N-340-8	Anhydrous Hydrofluoric Acid Vaporization
N-800-2	Operation of the Autoclaves and UF6 Feed System
N-800-7	Operation of the Anhydrous Hydrogen Fluoride (AHF) Recovery System

Enclosure 3

SEQUOYAH OVERSIGHT TEAM  
PROCEDURE OBSERVATION RECORD

PROCEDURE NO. \_\_\_\_\_ REVISION NO. \_\_\_\_\_ DATE/TIME OBSERVED \_\_\_\_\_

PROCEDURE TITLE:

\_\_\_\_\_  
\_\_\_\_\_

PERSON(S) PERFORMING PROCEDURE:

\_\_\_\_\_  
\_\_\_\_\_

PERSON(S) TRAINED: YES \_\_\_ NO \_\_\_  
TRAINING DEFICIENCIES IF ANY:

\_\_\_\_\_  
\_\_\_\_\_

STEPS OBSERVED (List step numbers or page numbers observed):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OBSERVATIONS ON PERFORMANCE  
PERFORMANCE SATISFACTORY: YES \_\_\_ NO \_\_\_  
DEFICIENCIES NOTED:

\_\_\_\_\_  
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OTHER REMARKS OR COMMENTS:

\_\_\_\_\_  
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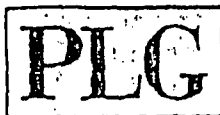
SOT OBSERVER

DATE

\_\_\_\_\_  
(Printed Name)

\_\_\_\_\_  
(Signature)

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January 21, 1992  
SFC-5074-PLG-117

Mr. James J. Sheppard  
Sequoyah Fuels Corporation  
P.O. Box 610  
Gore, OK 74435

Dear Joe:

**REVISIONS TO SEQUOYAH OVERSIGHT TEAM ACTIVITIES  
DURING RESTART OF SEQUOYAH FACILITY**

Subsequent to my letter of January 10, 1992, additional information and documentation on Sequoyah restart activities were provided to the Sequoyah Oversight Team by you and your staff. Therefore, we are submitting the following revisions to Enclosures 1 and 2 of my letter.

Please call me if you have any questions.

Very truly yours,

A handwritten signature in black ink, appearing to read 'B. John Garrick', with a long horizontal flourish extending to the right.

B. John Garrick

Enclosures

RECEIVED

JAN 23 1992

Sequoyah Fuels Corporation

Enclosure 1

Revised

January 21, 1992

LIST OF SEQUOYAH OVERSIGHT TEAM ACTIVITIES  
TO BE OBSERVED/VERIFIED BEFORE RESTART

PROCEDURES AND TRAINING

1. All Health & Safety and Environmental procedures committed for completion prior to restart are completed, approved, and implemented.
2. Training completed on all procedures in Item 1, including evidence of appropriate training for revisions to procedures after they were implemented.
3. Training completed on all other procedures or procedure revisions that have been implemented.
4. All temporary operating procedures (TOP) have been prepared and distributed per procedure G-002 revision currently in effect, and TOPs have been reviewed by appropriate personnel.

HEALTH & SAFETY AND ENVIRONMENTAL READINESS

1. Planning for Health & Safety coverage during restart completed and manning level established to support coverage.
2. Environmental manager in place and prepared to direct environmental program.
3. Coordination of all sampling (environmental, process, and health & safety) pertinent to environmental monitoring has been established.

OPERATIONS READINESS

1. Startup checklists completed and approved (Includes system status checks and any other prestartup alignment checks).
2. Shift turnover program established and turnover checklists available for use by shift supervisors.
3. Hazardous Work Permits are being properly accounted for and controlled per Procedure G-304.
4. Manager-on-Shift program established.

MANAGEMENT READINESS

1. Emergency plan readiness established, including confirmation of manager assignments and understanding.
2. All prestartup commitments have been completed; e.g., from Independent Management Assessment.
3. U.S. NRC concerns on Quality Assurance effectiveness have been addressed for startup.

Enclosure 2  
Revised  
January 21, 1992

PROPOSED REPRESENTATIVE PROCEDURES  
FOR SOT OBSERVATION DURING RESTART  
OF SEQUOYAH FACILITY

Performance of the following procedures will be observed by the SOT member who is onsite at the time that the procedure is initially implemented during the restart of the Sequoyah Facility. This is a proposed list and may be altered based on any comments that you or the NRC provide or on findings of the SOT during the period immediately preceding restart of process operations.

To enable the SOT to be present during initial performance of each of the following process system procedures (N-Series), we request that the expected time of initial implementation for the procedure be provided to the onsite SOT member as soon as possible after determination that the procedure will be implemented. The onsite SOT member will also maintain contact with the facility staff to track the expected start times for each N-Series procedure.

G-111	Access to Restricted Areas and Controlled Access Areas
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G-304	Hazardous Work Permits
HS-102	Airborne and Liquid Effluent Monitoring
HS-104	In-Plant Air Sampling and MPC-Hour Exposure
HS-301	Radiation, Contamination, and Release Surveys
HS-502	Issuing Respiratory Protection Equipment
HS-505	Laundry Facility Operation
HSDept-119	Entry by Personnel Into High Radiation Areas
N-170-1	H2-F2 Burner and Scrubber Operation
N-230-1	Digestion of Yellowcake and Transfer of Slurry
N-240-2	Solvent Rework
N-250-1	Uranyl Nitrate Hexahydrate (UNH) Bolldown
N-270-4	Primary Cold Trap Operation
N-270-8	Primary Fluorination Tower Operation
N-270-10	Ash Grinding
N-280-1	Uranium Hexafluoride Product Handling and Shipping
N-340-1	Receiving Anhydrous Hydrofluoric Acid (AHF)
N-340-8	Anhydrous Hydrofluoric Acid Vaporization
N-800-2	Operation of the Autoclaves and UF <sub>6</sub> Feed System
N-800-7	Operation of the Anhydrous Hydrogen Fluoride (AHF) Recovery System





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March 13, 1992  
SFC-5074-PLG-132

Mr. James J. Sheppard  
Sequoyah Fuels Corporation  
P.O. Box 610  
Gore, OK 74435

Dear Mr. Sheppard:

**RESPONSE TO U.S. NUCLEAR REGULATORY COMMISSION (NRC) COMMENTS  
ON SEQUOYAH OVERSIGHT TEAM (SOT) PLANS FOR RESTART**

*Handwritten: 4/1/92*  
As discussed with Mr. John Richardson on March 12, 1992, we have prepared the enclosed response to NRC comments on SOT plans for coverage of restart and continuing operation of the Sequoyah Facility. The response describes how the SOT will use the Performance Observation Monitoring Record to establish data that can be used to evaluate the performance of the facility staff in areas of critical importance to NRC concerns. As you are aware, we have already made trial use of the record form. Only limited opportunity existed since the facility was shut down and most activity was limited to cleaning and painting.

Our response also outlines our plan to augment the SOT staff with persons who are qualified to exercise independent oversight of the Health and Safety and Environmental functions at the facility. We plan to provide one qualified person in each area. Because of the short notice for this manning requirement, we are currently confirming availability of these individuals since they have other competing commitments. When we are assured that we have suitable individuals, we will provide their resumes for your approval and for review by NRC. In view of the urgency of this requirement, Dr. B. John Garrick is personally involved in this effort so that we can provide these individuals as soon as possible.

We would appreciate your review and comments on the enclosed response. Please call me or talk to the onsite SOT member if you have any questions.

Very truly yours,

Willard C. Gekler

cc: Enclosure

Enclosure

**PROPOSED SEQUOYAH OVERSIGHT TEAM PLAN FOR PERFORMANCE MONITORING  
DURING RESTART OF THE SEQUOYAH FACILITY**

**BACKGROUND**

In letters to Sequoyah Fuels Corporation (SFC) on January 10, 1992, and January 12, 1992, the Sequoyah Oversight Team (SOT) provided a basic plan for SOT activities during the restart of the Sequoyah Facility. It was recognized in February 1992 that a more formal and structured approach to the collection and evaluation of SOT observations would be needed during restart. Subsequently, during the week of February 24, 1992, a structured performance monitoring checklist with acceptance criteria was developed to provide more definitive guidance on documenting observations during the restart activities. This checklist was used on a trial basis during the week of March 2, 1992. Some of the results of the structured checklist application were provided to the U.S. Nuclear Regulatory Commission (NRC) in the March 9, 1992, letter from SFC to the NRC on "Information and Data Collected on Facility 'Cultural' and Performance Improvements."

**APPROACH**

Based on the successful use of the structured performance monitoring checklist for SOT observations, the enclosed form and acceptance criteria are planned to be used during the restart of the Sequoyah Facility. The observations collected will be tracked and trended during restart to identify and quantify any adverse trends. The intent will be to determine if any identified problem areas are randomly occurring or are part of a pattern or trend. Based on the compiled and trended performance monitoring data, recommendations will be made for any activities that the SOT believes needs corrective action. Such recommendations will be supported with the specific observations, patterns, and/or trends obtained from the SOT performance observation records.

During restart, observations of any problem conditions by the SOT will be handled as follows:

1. **Conditions Representing Clear and Imminent Danger** — The SOT member shall bring to the immediate attention of the onsite SFC management representative any condition believed to be unsafe or not in conformance with license conditions or related NRC regulations. The SOT member has the authority to order the President of SFC, or his designee, to shut down any or all facility operations as required to ensure compliance with procedures, license conditions, and NRC regulations if, in the judgment of the SOT, the SFC response is insufficient to protect the health and safety of the SFC employees, the general public, or the environment. This authority will be exercised in accordance with Section 3 of the "Sequoyah Oversight Team Guidance Document" (see SFC letter to NRC, dated December 18, 1990).
2. **Conditions Representing Potential Danger** — The SOT member onsite shall bring to the immediate attention of SFC management any condition believed to be potentially unsafe; i.e., no immediate danger to the health and safety of employees, the public, or the

environment. Corrective action by SFC personnel will be assessed by the SOT to determine if appropriate remedial action is being taken. If appropriate action is not promptly taken and the SOT Manager concurs with the SOT member's assessment of a need to shut down any or all plant operations, the actions in Item 1 may be invoked.

3. **Conditions Representing Inappropriate Actions** — The SOT member onsite shall promptly bring to the attention of SFC management any condition considered to be inappropriate; i.e., not involving any imminent or potential danger. Examples of such conditions would be intentional procedure violations, poor contamination control practices, or inadequate posting of controlled access areas.

The SOT Performance Monitoring Observation Record form will be used to document all observed inappropriate actions as well as actions that are correctly performed. Principal areas of observation that will be trended are shown on the enclosed Performance Observation Record form. They are as follows:

- Training Adequacy
- Procedural Adherence
- Personal Contamination Control Practices
- Facility Radiological Control Practices
- Industrial Safety Practices
- Professional Attitude Toward Work

Attributes that would be noted in performing observations of any of these areas are listed on the back of the Performance Observation Record.

On a daily basis, the SOT observations will be summarized in the SOT daily report. On a weekly basis, the collected observations will be evaluated to determine if a significant pattern or trend is evident. This evaluation will be the basis for escalating an issue by notifying the President of SFC or his designee. The weekly evaluation of observations to identify patterns or trends also will be summarized in the SOT weekly report.

#### QUALIFIED PERSONS FOR EVALUATION OF HEALTH AND SAFETY AND ENVIRONMENTAL FUNCTIONS

Current SOT team members have become fully cognizant of all aspects of operation, maintenance, personnel safety, and environmental protection at the Sequoyah Facility. This background has been used on numerous occasions to identify potential health and safety and environmental problems. Many of these observations or concerns are documented in daily reports. For example, the SOT has identified weaknesses in laundry operations and in change room frisking practices, observations have been made of potentially hazardous spills and leaks and of inadequate posting of controlled access areas, and the SOT has continued to monitor, trend, and evaluate various key environmental release data for adverse trends. This latter effort has been documented in continuing performance monitoring charts in SOT weekly reports; e.g., the combination stream, various collection systems for uranium containing water, and the HF scrubber offgas and site perimeter monitor readings.

In addition, SOT members have reviewed all Health and Safety and Environmental procedures that have been upgraded for facility restart. These reviews have resulted in joint identification by SOT and SFC personnel of incompatibilities between facility operations and

the upgraded procedures. In these cases, the SOT has requested timely resolution of the incompatibility. For example, sample removal from controlled access areas in accordance with Procedure G-158 did not permit timely delivery of the samples to the process laboratory and provided the setting for possible procedural violations. SFC promptly resolved this incompatibility.

The SOT also recognizes the NRC concern that particular expertise in the Health and Safety and Environmental areas be provided during restart and subsequent facility operations to ensure that adequate oversight of these functions be provided. Therefore, the President of PLG has initiated action to augment the SOT with at least one person who is expert in each of these areas as soon as possible. Resumes of the individuals who are proposed for these roles will be provided to SFC and the NRC as soon as their availability for SOT duty tours is fully confirmed.

Currently, PLG is planning to use these experts in the normal rotation of SOT members. This rotation normally involves presence onsite for at least 8 hours each day for 7 consecutive days. (Most SOT members have been spending 9 to 12 hours onsite each day.) During the initial tour for each of these individuals, they will be accompanied by a current SOT member to provide the quickest possible orientation to Sequoyah Facility operations, Health and Safety and Environmental functions, and to SOT methods and practices. Should it be desired, these individuals also will be scheduled onsite with another SOT member during critical periods of restart if those periods occur after the initial orientation tours.

## -----INTERNAL CORRESPONDENCE-----

SEQUOYAH FUELS  
CORPORATIONOPERATIONS  
DEPARTMENTTO: R. A. Parker/  
L. J. Silverstein

DATE: January 29, 1992

FROM: J. K. Martin *JM*SUBJECT: Notification of Planned  
Non-Routine Maintenance  
or Operations Activities

It is essential that our plant start up and operations occur with the minimum number of unexpected transients and perturbations. To this end, I recently requested you to notify me of any planned maintenance or operations activities that are non-routine and potentially require unique or unusual precautions to assure they are completed without incident. It is my intent that we conduct and document a thorough review with all potentially affected departments, including Health and Safety and Environmental, prior to execution of such activities.

General guidelines to use in identifying such activities include:

- 1) Activities requiring unique or unusual personnel protective measures.
- 2) Activities that temporarily weaken or remove barriers to emissions, internal or environmental, such as filters, scrubbers, dust collection systems, vacuum systems, critical emissions monitoring instrumentation, etc.
- 3) Activities requiring unique or unusual measures to prevent contamination.
- 4) Activities with higher than normal potential for regulatory or environmental non-compliance.
- 5) Activities with a potential to adversely affect production.
- 6) Any special test or operation with the potential for any of the characteristics described in items (1) through (5).

You must obviously use your good judgement in identifying those activities requiring the proposed review. Activities that are routinely performed and thoroughly proceduralized should not, in most cases, require a special review. However, those activities that are first-time evolutions or performed on an in-frequent basis and have the characteristics described above deserve the extra level of review.

If you have any questions or comments please call.

JKM:am

xc: J. J. Sheppard  
J. D. Richardson  
R. J. Adkisson