(31)

POLICY ISSUE

(NEGATIVE CONSENT)

SECY-87-177

July 20, 1987

For: The Commissioners

From: Victor Stello, Jr.
Executive Director for Operations

Subject: PROPOSED ENFORCEMENT ACTION FOR SEQUOYAH FUELS CORPORATION AND REDUCTION IN COVERAGE BY THE INDEPENDENT OVERSIGHT TEAM AT SEQUOYAH FUELS UF6 FACILITY (EA 87-108)

Purpose: To resolve the issues arising out of the Sequoyah Fuels Facility OI investigation by recommending: (1) issuing a Show Cause Order concerning certain supervisors and concerning activities by two attorneys; (2) issuing a Notice of Violation and Proposed Imposition of Civil Penalties; and (3) reducing the coverage by the Independent Oversight Team (IOT) at the Sequoyah Fuels UF6 Facility.

Background: On January 4, 1986 at the Sequoyah Fuels Facility at Gore, Oklahoma, an overfilled cylinder of uranium hexafluoride (UF6) was heated and ruptured, causing the death of one employee. The accident was promptly investigated by an Augmented Investigation Team (AIT). On January 21, 1986, Congressmen Markey and Synar, chairmen of House subcommittees, sent a list of questions concerning the incident to the NRC, which requested assistance from Kerr-McGee/Sequoyah Fuels Corp in developing the responses. In March 1986 the Office of Investigations (OI) commenced an investigation to determine, among other matters, whether Sequoyah Fuels Facility (SFF) personnel willfully heated overfilled cylinders in the past, whether record falsification had occurred in relation to heating overfilled cylinders, whether management and supervisory personnel made willful false statements concerning their knowledge of heating of overfilled UF6 cylinders, and whether a letter from Kerr-McGee to the NRC dated January 29, 1986, for use in responding to the Congressional inquiry, contained material false statements.

As a condition of restarting operations at SFF, an Order Modifying License dated October 2, 1986 required, among other things, a third party, 24-hour daily oversight during operations. In several meetings in September and October 1986 the Commission considered authorizing restart of operations at SFF. As the OI investigation was not complete at that time, the OI report was not available, but the investigation had, among other things, raised serious doubt

Contact: James Lieberman, OE
28214
Geoffrey D. Cant, OE
28822

DESIGNATED ORIGINAL

Certified By

about the candor of several supervisors during the investigations and that of the licensee's attorneys in preparing a response to the Commission. The option of excluding or reprimanding these supervisors was not implemented at the time, since revealing their names and the reasons for the actions prior to completion of the OI report and possible DOJ consideration might have compromised possible DOJ actions. Thus, the concept of the IOT was adopted to provide time to resolve the concerns about those supervisors who may have demonstrated a lack of candor during the investigations and to ensure compliance with operating procedures. On October 16, 1986, the Commission authorized the staff to permit restart when this oversight was in place. The team has been in place at the Facility since November 5, 1986, and operations were resumed December 11, 1986. In addition, as a result of the failure to provide accurate information to the NRC in the January 29, 1986 response, the Order Modifying License also required that all information submitted to the NRC be under the oath or affirmation of the President, Sequoyah Fuels Corporation.

The NRC issued a Notice of Violation and Proposed Imposition of Civil Penalties on October 14, 1986 for violations of procedures, some of which were associated with the accident. Sequoyah Fuels Corporation (SFC) responded and an Order Imposing Civil Monetary Penalties in the amount of $310,000 was issued February 5, 1987. The penalties were paid by SFC on March 2, 1987.

The OI investigation report was completed December 9, 1986. OI concluded, among other things, that several supervisors made willful false statements to NRC investigators and that a senior Kerr-McGee corporate attorney and an outside attorney, both of whom were responsible for the preparation of the response to the Congressional inquiry, had significant information in their possession which they willfully and knowingly withheld from the NRC. OI also concluded that some employees knowingly and intentionally heated overfilled cylinders in violation of procedures, that some supervisors failed to ensure compliance with procedures, that one operator, Sanders, intentionally deceived the NRC as to his knowledge concerning the heating of overfilled cylinders, and that operators routinely recorded incorrect cylinder weights on status sheets and falsified entries for overfills of more than 200 pounds. On January 14, 1987 OI referred these matters to DOJ. On May 28, 1987 DOJ declined to prosecute.

In letters dated February 24, 1987, April 6, 1987, and May 7, 1987, Sequoyah Fuels Corporation (SFC) requested phased reduction of the IOT. These letters included reports from the IOT indicating a satisfactory level of

performance and fulfillment of objectives. The IOT report attached to the May 7, 1987 letter (Enclosure 1) also states that the QA program is "fully developed, appropriate, and is being effectively implemented." The issue of reducing the IOT was presented to the Commission in April 1987, SECY 87-96. The Commission directed the staff to defer the recommended reduction until DOJ had acted on the referral.

In a letter dated June 19, 1987, Mr. James G. Randolph, President of SFC, requested that the requirement for submitting information under his sworn signature be rescinded, stating: "There is nothing to suggest that during this time period, nor prior to the institution of the requirement, that SFC has been anything but candid with the NRC."

Discussion: The staff now proposes to take action as follows to resolve the outstanding issues at Sequoyah Fuels Facility.

The Order Modifying License that required the IOT provided the Director, Office of Inspection and Enforcement, with the authority to modify the oversight requirement. After review of the IOT reports and NRC inspections, the staff believes that reduction of IOT coverage should be accomplished in two phases, and that reduction to one shift per day, on a random basis, is now appropriate.

To accomplish the second phase, complete removal of the IOT, the NRC must have further assurance that it can rely on the performance and integrity of all of the supervisors. Therefore the staff has prepared the enclosed Order to Show Cause why four supervisors should be permitted to perform licensed activity in the absence of the OIT, in order to provide the NRC with the requisite confidence. The Order seeks information as to disciplinary action, training, and management controls instituted, and also requires information as to replacement personnel if the company should decide to remove the named supervisors.

Question 11 of the January 21, 1986 Congressional request sought information as to supervisory or management knowledge of heating of overfilled cylinders. (The question and answer are quoted in the Notice of Violation, included in Enclosure (2).) The licensee's response indicated that management did not have that knowledge, but was silent as to supervisory personnel, although management, including the Assistant General Counsel-Litigation, Thomas McDaniel, knew that at least one supervisor was aware of the improper practice. In the course of preparing the response, McDaniel directed that a reference to supervisory personnel be deleted from a draft because he knew that at least one supervisor was aware of the practice. Thus, the response was false by

omission. The question also inquired as to prior circumstances of heating of overfilled cylinders. The company's answer to that part of the question advised that an investigation was in progress to determine whether "there had been any instances of overfilling", and thus suggested that there was no knowledge of the prior instances when, in fact, the company already had information that such instances had occurred. The company's answer to that part of the question was drafted by outside counsel, Peter Nickles. The OI investigation makes clear that the corporate response was prepared by attorneys and without adequate supervision by corporate management and technical personnel.

The responses to Question 11 are false statements that were material to the actions of the NRC. While the submission may not have been a deliberate effort to provide false information, the submission was clearly misleading. The submission constitutes a careless disregard for the need to provide complete and accurate information to the Commission. The Order to Show Cause allows the licensee to show why the requirement for submitting information under the sworn signature of the President should not be continued as long as Mr. McDaniel or Mr. Nickles is involved in preparing responses for submission to the NRC. In addition, a Notice of Violation is attached and proposes a civil monetary penalty in the amount of $8,000 for each of the false elements of the answer submitted to Question 11. Each of the false statements is categorized as a Severity Level II violation.

In view of the penalties previously imposed and the changes in management at the Facility, additional penalties are not being proposed for other violations that occurred prior to the accident.

As this additional enforcement action is based largely on information developed in the OI investigation, the staff expects that it will be necessary to provide a copy of the OI investigation report to the licensee. In the course of the investigation, two individuals were granted confidential status. OI is providing a redacted copy of the report that can be released.

Coordination: The Office of General Counsel has no legal objection to this action.

Recommendation: The staff intends to: (1) authorize reduction of the IOT coverage to one shift as described above and (2) issue the enclosed letter, Show Cause Order and the Notice of Violation and Proposed Imposition of Civil Penalties two weeks from the date of this paper unless the Commission directs otherwise. Note: Because this matter involves enforcement issues, it should not be publicly disclosed.

Victor Stello, Jr.
Executive Director for Operations

Enclosures: (1) Letter of May 7, 1987 from Sequoyah Fuels Corp.
(2) Letter to Licensee, enclosing Order to Show Cause and Notice of Violation and Proposed Imposition of Civil Penalties

SECY NOTE: In the absence of instructions to the contrary, SECY will notify the staff on Tuesday, August 4, 1987 that the Commission, by negative consent, assents to the action proposed in this paper.

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ENCLOSURE 1

Enclosure 1

RE: 8731

SEQUOYAH FUELS CORPORATION

POST OFFICE BOX 25861 • OKLAHOMA CITY, OKLAHOMA 73125

May 7, 1987

JAMES G. RANDOLPH
PRESIDENT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Victor Stello, Jr.
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: License SUB-1010; Docket 40-8027
Request To Reduce IOT Coverage

Dear Mr. Stello:

In an Order Modifying License SUB-1010, dated October 2, 1987, James M. Taylor, Director, Office of Inspection and Enforcement issued conditions required of Sequoyah Fuels Corporation in order to receive permission to restart the UF_6 Facility at Gore, Oklahoma. One requirement was that an independent organization be retained to oversee operation of the facility. The Order also set forth the mechanism with which the provision could be relaxed or rescinded.

In letters dated February 24, 1987, and April 6, 1987, to Mr. Taylor, Sequoyah Fuels Corporation respectfully requested authorization to reduce around-the-clock coverage provided since November 5, 1986 by the Independent Oversight Team (IOT). We have not received a response to our latest request.

These previous requests were based in part, on recommendations made by the IOT in their monthly reports dated February 20, 1987 and March 30, 1987. In their sixth report, dated May 1, 1987 (copy enclosed) the Program Manager of the IOT states:

> "In view of the fact that all of the objectives for the Independent Oversight Team in the NRC Order of October 2, 1986, have now been fulfilled and in view of the good performance of SFC in all aspects of operating the Sequoyah Facility, we recommend that continuous Independent Oversight Team coverage be immediately terminated."

To date, 216 cylinders have been filled with UF_6 since restart and either have been shipped or are awaiting shipment. To date, 30 cylinders have been heated in the remodeled steam chest and the contents recycled because the product specification limit of 10 ppm chromium had been exceeded. Methods are being implemented to reduce the possibility of chromium reaching the product.

3.0 OPERATIONAL INCIDENTS

3.1 Cooling Water Line Break

At about 0840 on April 10, 1987, an "Alert" was declared by the Sequoyah Facility shift supervisor because of a loss of cooling water input to the Facility. This was caused by a contractor-operated bulldozer rupturing the 16-inch buried input line from the Lake Tenkiller source while digging drainage ditches for SFC on company property. All operations were shut down and remained down until the damaged section of pipe could be replaced and tested; this was completed at 1930. To prevent similar future problems, each company employee or contractor preparing to perform any future digging operations will be briefed by a member of the Engineering Department as to the location of all buried lines in the work area.

We feel that the incident was very properly handled by the licensee, and we believe the remedies are appropriate.

3.2 High Beta Accumulations

Twice in the past month, very high beta readings (over 10 R/hr) were discovered in two different parts of the process. One was in the material filtered from the UF_6 during draining to fill shipping cylinders and the other in solid material remaining in "emptied" cylinders after washing. In both cases, the material is believed to be thorium-234, the 24-day half-life daughter of uranium-238, together with its 5-hour half-life daughter, protoactinium-234. This hypothesis has been confirmed by several isotopic analyses to date, and it is believed that other pending analyses will confirm that it is the only isotopic pair significantly involved in both places. Both of these daughter products are very low energy beta-gamma emitters, but their high degree of accumulation in these two places requires special plant practices.

The high accumulations in UF_6 filter solids and in cylinder residues are due to the physical characteristics of ThF_4, which is insoluble in both UF_6 and water and not volatile. Therefore, it would be expected to accumulate in the UF_6 filters and to remain in "emptied" shipping cylinders.

The Program Manager further recommends that intermittent IOT coverage be provided one week per month for two months and one week per quarter for the balance of the year.

SFC fully concurs in both recommendations made by the IOT. In view of these recommendations and SFC's sustained performance, we believe good cause to rescind the provision has been conclusively demonstrated. Accordingly, SFC requests your timely review of this request for prompt phased reduction of IOT coverage at the Sequoyah Facility. We are prepared to meet with you at your earliest convenience to discuss our request in more detail, should you feel a meeting would be worthwhile.

Sincerely,

James G. Randolph, President
Sequoyah Fuels Corporation

JGR/jkw

Enclosure

xc: H.L. Thompson, Jr., NMSS
L.V. Rouse, NMSS
R.D. Martin, Region IV

RE: 8731

A F F I D A V I T

STATE OF OKLAHOMA
COUNTY OF OKLAHOMA

SS: License SUB-1010; Docket 40-8027
Request to Reduce IOT Coverage

I, James G. Randolph, President, Sequoyah Fuels Corporation, hereby attest that the facts contained in the attached documents are accurate to the best of my knowledge.

James G. Randolph, President
Sequoyah Fuels Operations

Subscribed and sworn before me on this 7th day of May, 1987.

Janette K. Weeden
Notary Public

My Commission Expires:
December 5, 1990

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May 1, 1987

Steven D. Emerson, General Manager
Sequoyah Fuels Operations
Kerr-McGee Center
123 Robert S. Kerr Boulevard
Oklahoma City, OK 73124

Dear Dr. Emerson:

Reference: License SUB-1010, Docket 40-8027
Order Modifying License

Subject: Sixth Report of Independent Oversight Team

In accordance with the Statement of Work for the Independent Oversight Team at the Sequoyah Facility and as required by the NRC Order Modifying License of October 2, 1986, we are enclosing the sixth formal report of the activities and findings of the Independent Oversight Team.

If there are any questions on any item in this report, please let me know.

Sincerely,

James A Buckham

James A. Buckham
IOT Program Manager

JAB/slm
Enclosure

cc: R. D. Martin, Region IV Administrator, Nuclear Regulatory Commission
J. G. Randolph, President, Sequoyah Fuels Corporation
W. L. Utnage, General Manager, Sequoyah Facility
B. J. Garrick, President, Pickard, Lowe and Garrick, Inc., Program Director
E. M. Ward, Vice President, Pickard, Lowe and Garrick, Inc.

May 1, 1987

SEQUOYAH FACILITY

INDEPENDENT OVERSIGHT TEAM

SIXTH FORMAL REPORT

1.0 ORGANIZATION

The Independent Oversight Team has been organized and in place at the Sequoyah Facility since November 5, 1986. The team consists of a Program Director, a Program Manager, a Program Assistant Manager, and 16 other team members. All team members have received the requisite training for performing shift surveillance coverage and have been approved by the Nuclear Regulatory Commission as qualified for this activity.

With the exception of the 4-day Christmas plant shutdown, the Independent Oversight Team has maintained 24-hour surveillance of operational and maintenance activities since November 5, 1986, with appropriate overlaps in coverage by team members to permit exchange of information on plant status, activities and plans. In addition, the Program Manager or Assistant Program Manager has been on duty during this entire period, serving a normal work day at the Facility and being continuously available to team members by telephone or paging service.

As discussed later in this report, the Independent Oversight Team has fulfilled the objectives set forth for it in the October 2, 1986 Order Modifying License. Therefore, we have recommended prompt reduction in coverage to a level consistent with verifying continued good performance by Sequoyah Fuels Corporation in all areas previously reviewed.

2.0 FACILITY OPERATIONS AND STATUS

Following completion of pre-restart activities, approval for restart of Facility operations was received on November 14, 1986. The normal startup problems were systematically resolved and normal UF_6 production operations have been occurring since December 11, 1986. The first UF_6 cylinder filling was completed on December 17, 1986.

The restart phase of operations has now been completed, and the operating difficulties caused by the extended shutdown were resolved by the end of January. Production operations were initiated at a nominal throughput rate of 300 metric tons of uranium per month, with this rate being exceeded in both February and March. Starting in March, about 30 additional operating personnel were hired and their training was initiated. This permitted additional equipment to be operated simultaneously in April and an April production goal of 400 metric tons of uranium was established. Actual April production was 411.9 metric tons of uranium.

No significant beta exposures to personnel were measured from either source of accumulated beta emitters, but Sequoyah Facility personnel responded aggressively to both findings and have instituted new practices to prevent any personnel exposure from these accumulations of high intensity beta emitters. Additional beta-detection survey instrumentation has been ordered, and beta surveys will routinely be made in many plant areas. During the course of changing and cleaning of UF6 filters, personnel will be continuously shielded from the beta fields, and health physics technicians will carefully monitor all steps with beta detecting instrumentation. Cylinder washing and drying operations are being modified to collect and recycle all residues. However, in keeping with the ALARA principle, the major improvement in practices will be to delay washing of cylinders and filters for many months so that the 24-day-half-life Th-234 will have largely decayed.

We feel that the rapid response and overall management attention to the discovery of these accumulations of beta emitters has been excellent, and the corrective measures adopted are appropriate and adequate.

3.3 General Emergency Exercise

On April 30, 1987, the Sequoyah Facility held an exercise of its emergency procedures, including the off-site practices that would be involved in a General Emergency. Observers from several State and local agencies and the NRC were present.

The exercise lasted nearly four hours and the scenario was not revealed to Facility personnel in advance. The scenario involved initiation of events from high winds and a nearby tornado. It began as an "Unusual Event" when several hundred pounds of yellowcake were spilled from toppled drums that are stored outside. The event escalated to an "Alert" and a "Site Area Emergency" when wind damage toppled a signboard on the roof which broke ductwork. A General Emergency was declared when a wind-hurled object broke the piping atop an outdoor tank used to store anhydrous ammonia. The offsite sirens were then activated as was the automatic telephone system used to notify nearby residents and appropriate officials of the nature of the emergency.

The exercise was well conducted and over 100 employees participated. Some proved to be better actors than others; some employee responses did not include performing all steps in the way that would be required in an actual emergency, although this was very likely due to the realization that the hazards weren't really present.

Some valuable lessons were learned from the exercise, and these will be incorporated in improved procedures. Such exercises are required at least every five years, but partial drills will be held at much more frequent intervals, (e.g. The offsite sirens and telephone notification system are tested monthly).

4.0 OPERATING PROCEDURE AUDITS

Field monitoring of the performance by Sequoyah Facility personnel of the operating procedures has been the principal activity of the Independent Oversight Team. To insure that this activity was performed so as to emphasize safety-related activities, we chose to give highest priority to those procedures involving receiving, transfer, production, or use of HF, F_2, or UF_6, as well as to those activities performed to prevent release of hazardous materials to the environment. Procedures were assigned an audit priority number in accordance with this emphasis.

Each of the 37 Priority No. 1 procedures were audited thoroughly at least twice, while all of the other 137 auditable procedures were audited thoroughly at least once.

A total of 47 Audit Report Forms were issued because of an apparent difference between procedure language and either intent or performance. None of these reports represented an operator willfully or otherwise violating an operating procedure. Most represented omissions or apparent contradictions in the procedure language or suggestions to improve the safety-related coverage of the procedure.

Sequoyah Fuels Corporation management issued written responses to each Audit Report Form. In a few cases, the Independent Oversight Team was not satisfied with the initial response, and revised responses have been issued in those cases. The Independent Oversight Team is now completely satisfied with the response on all 47 Audit Report Forms, and all actions promised by SFC in these responses have been effectively implemented.

Having finished the complete auditing of all procedures, we have switched in the past two months to selective surveillance of key portions of those procedures judged to have the greatest safety significance, since reauditing of complete procedures appeared to be of diminishing value. We have also turned our attention more to surveillance of other safety-related activities such as non-routine maintenance. These activities are unlikely to result in the preparation of additional Audit Report Forms.

5.0 SUGGESTION REPORTS

We also submitted over 100 written suggestions to SFC Management on Independent Oversight Team Suggestion Report Forms on observations not related to procedures or on minor wording problems in procedures such as typographical errors. These reports have received serious consideration by SFC management. Over 2/3 of them have been effectively implemented, while others are still under active consideration.

6.0 REVIEWS

The Statement of Work required special reviews by the Independent Oversight Team in four areas. Our comments on these reviews follow:

6.1 Qualifications, Training, Commitment, Adequacy, and Capability of SFC Employees

As stated in our last report, we feel our review of this area has been completed, but we are continuing adequate observations to assure continued good performance by Sequoyah Fuels Corporation.

6.2 Adequacy and Accuracy of Procedures

As indicated in our last report, we feel our review of this area has been completed. If any new procedures are issued during our coverage, we will review them and audit their implementation.

6.3 Adequacy of SFC Record Keeping

We have observed no instance of record keeping that is not adequate to demonstrate regulatory and procedural compliance. We feel our review in this area has been completed but we will continue adequate observations to assure continued good performance.

6.4 Quality Assurance

We have continued our extensive review of the SFC Quality Assurance (QA) program this month. With the considerable progress made the past month, we now feel that the program is fully developed, appropriate, and is being effectively implemented. Comments on various elements of this program are contained in the ensuing subsections.

6.4.1 QA Procedural Auditing

As was done by the Independent Oversight Team, under the SFC QA Program the operating procedures have been given an audit priority by the SFC QA Manager, with the ones having a significant safety aspect being given a Priority No. 1 rating and others being rated Priority No. 2, 3 or 4. As required by License Condition 31 of the October 2, 1986 Order, all Priority No. 1 operating procedures are being audited annually while those of a lower priority level are being selected for audit through a systematized selection system. A comparison of the SFC selection system with that of the Independent Oversight Team leads us to the conclusion that the SFC system is appropriate.

We have carefully reviewed the SFC QA procedural audit findings to date and have found that their auditing appears to be very thorough. This is borne out by the fact that on several procedures previously audited and found by the Independent Oversight Team to be satisfactory, the SFC QA audit found and recommended several procedural improvements, albeit of minor safety significance.

Each SFC procedural audit includes verification of the adequacy of the training received by the operators involved, pointedly observes the operator attitude, and verifies the adequacy of the associated record keeping. Thus, continued review in the areas required of the Independent Oversight Team in the October 2 Order is covered by the SFC QA Program.

Two other important features of the Independent Oversight Team system are incorporated in the SFC QA Program. First, timely written responses (within 30 days) must be made to the QA Manager on all audit findings. These responses must provide commitments to timely resolution of identified problems. Second, the QA program requires reaudits of the procedure by the QA Manager until he is assured that all responses to audit findings are appropriately implemented. Only then is the audit report closed out. Both of these features are now being effectively implemented.

6.4.2 Periodic Surveillance

The Independent Oversight Team found that a majority of our beneficial contributions came from observations made in the field on plant walkthroughs and the verbal comments made on those observations to SFC supervisors. The SFC QA Manager has adopted a similar system of weekly walkthroughs and verbal transmittal of his observations. These walkthroughs are now required by a revision in the QA procedures. The SFC QA Manager maintains a written record of his observations in a log book, appropriately varies the areas walked through, and periodically reviews his findings to detect any long-term trends.

6.4.3 Receipt of Bulk Chemicals

We have reviewed the detailed written analysis prepared by the Facility QA Manager of the operational quality requirements for each of the bulk chemicals used at the Sequoyah Facility together with the quality assurance aspects of ordering and receiving these chemicals. We believe this document is appropriate and complete and that adequate quality assurance is being provided to bulk chemical receipt.

6.4.4 Selection of Material for Repairs

A procedure has been issued for making and segregating critical materials such as plate, piping, valves, pipe fittings, and gaskets according to material of construction to provide assurance that proper materials are selected for repair work at the Sequoyah Facility. We have audited the implementation of this procedure and found no deviations. The SFC QA Manager has also scheduled this procedure for an early audit.

6.4.5 Follow-Up on Plant Incidents

The SFC QA procedures have been revised to require follow-up by the QA Manager of each plant incident to assure that appropriate "lessons learned" have been identified and are being implemented in a timely manner. This follow-up is now being appropriately implemented.

6.4.6 Follow-up on Independent Oversight Team and NRC Findings

Systems are now in-place, including computerized logging, for follow-up by SFC of all NRC and IOT recommendations.

In summary, the SFC Quality Assurance program is now fully implemented and operational. It has been thoroughly reviewed by the Independent Oversight Team and we find it to be totally appropriate. The practices of the Independent Oversight Team have been incorporated appropriately into this program, and it will serve effectively when the Independent Oversight Team is no longer providing continuous on-the-floor coverage and its functions are assumed by the SFC QA Manager.

7.0 STATUS OF PRIOR RECOMMENDATIONS

7.1 Open Recommendations in First Independent Oversight Team Report -- None

7.2 Open Recommendations in Second Independent Oversight Team Report

7.2.1 Off-Gas Burner Failures

Considerable maintenance and engineering effort, including the help of outside experts, has been applied to reducing the frequency of off-gas burner failures. The frequency of these failures has been reduced to an acceptably low level, and this recommendation is now considered closed.

7.2.2 SFC Procedures for Material Selection

As indicated earlier, we have reviewed and audited this procedure. We find it to be appropriate and that it is being effectively implemented. Therefore, this recommendation is considered closed.

7.3 Open Recommendations in Third Independent Oversight Team Report -- None

7.4 Recommendations in Fourth Independent Oversight Team Report

7.4.1 Emergency Valve Closure System

SFC Operating Procedures have been revised to require railroad-car-type seals instead of padlocks to hold open the block valves ahead of relief valves on vessels. This will permit emergency closing of these valves should the relief valve develop a leak. The procedure requires filing of an incident report if any seal is broken in an emergency. We have audited this procedure and find it to be appropriate and fully operational. This recommendation is considered closed.

7.4.2 Study of Exposures Caused and Saved by Strapping Yellowcake Drums

Tests and studies are being planned by SFC to determine if the strapping of yellowcake drums causes more radiation exposure than it is likely to prevent. These tests and studies appear appropriate. We recommend that follow-up to assure proper implementation be incorporated in the SFC QA system and that this recommendation be considered closed by the Independent Oversight Team.

7.5 Recommendations in Fifth IOT Report

The fifth IOT report contained two recommendations for SFC to request NRC approval of reduced IOT coverage. SFC did make these requests, but to date no response has been given by the NRC. We now consider these commendations closed and replaced by a new recommendation in this report.

8.0 CURRENT RECOMMENDATIONS

8.1 Termination of IOT Coverage

In view of the fact that all of the objectives for the Independent Oversight Team in the NRC order of October 2, 1986, have now been fulfilled and in view of the good performance of SFC in all aspects of operating the Sequoyah Facility, we recommend that continuous Independent Oversight Team coverage be immediately terminated.

8.2 Follow-On Intermittent Oversight

In order to verify continued good performance by SFC in all areas previously reviewed, it is recommended that intermittent IOT coverage be provided one week per month for two months and one week per quarter for the balance of the year. This coverage should become an integral part of the SFC QA program and should be provided entirely by PLG (usually the Program Manager).

No significant safety concerns were noted during this reporting period, and no official notifications to the NRC were necessary.

Respectfully submitted,

James A Buckham

James A. Buckham, Program Manager
Independent Oversight Team

JAB/slm

ENCLOSURE 2

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket No. 40-08027
License No. SUB-1010
EA 87-108

Sequoyah Fuels Corporation
ATTN: J. G. Randolph
President
Kerr-McGee Center
P.O. Box 25861
Oklahoma City, OK 73125

SUBJECT: ORDER TO SHOW CAUSE AND NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

This refers to the inspections and investigations conducted at the Sequoyah Fuels Facility, Gore, Oklahoma during the period of January 4. 1986 through September 16, 1986. These efforts were undertaken as a followup to the January 4, 1986 accident in which a cylinder filled with uranium hexafluoride ruptured while it was being heated in a steam chest. Investigations were conducted by an Augmented Investigation Team (AIT) and by the NRC Office of Investigations (OI). A copy of the OI Report 4-86-005 synopsis is enclosed.

The OI investigation was conducted to determine, among other matters, whether Sequoyah Fuels Facility management and supervisory personnel made willful false statements to the NRC regarding their knowledge of heating of overfilled uranium hexafluoride cylinders and whether a letter from Kerr-McGee to the NRC dated January 29, 1986 included material false statements.

Following the January 4, 1986 accident, Kerr-McGee agreed not to restart the Sequoyah Fuels Facility until NRC authorization had been obtained. Additional commitments were made and confirmed in a Confirmation of Action Letter issued by NRC Region IV to the licensee on January 17, 1986. In an Order Modifying License issued October 2, 1986, the NRC identified certain actions that would be required before restart of the Facility would be authorized. A condition in this Order was the presence of an approved Independent Oversight Team (IOT) on a 24 hour per day basis while the plant is operating. The IOT was required because of the NRC's concerns about individuals with supervisory responsibilities who appeared to have demonstrated a lack of candor. The IOT has been continued pending completion of the NRC investigations and review of the results of those investigations. Close monitoring was also necessary to ensure full compliance with all procedures and to ensure that management and supervisory personnel demonstrate, in attitude and implementation, a proper commitment to safe operating practices.

The IOT has been in place at the Facility since November 5, 1986. The Facility resumed operations December 11, 1986. In letters dated February 24, 1987, April 6, 1987, and May 7, 1987, Sequoyah Fuels Corporation requested phased reduction of the IOT. These requests were supported by reports from the IOT concerning the

areas monitored by the team. These reports indicate a satisfactory level of operational performance and that the objectives for the IOT have been achieved. I have reviewed these reports and reports of NRC inspections and concluded that the operation of the Facility now justifies reduction of the IOT coverage and that reduced coverage will still ensure fulfillment of remaining objectives. Therefore, the IOT coverage requirement may now be reduced to one shift per day, seven days per week, with shift coverage to be conducted randomly during the 24-hour period.

After careful review of the OI investigation report, the NRC staff has concluded that several Sequoyah Fuels Corporation employees were aware of improper practices at the Facility and did not fully disclose their knowledge of these practices to NRC investigators. In particular, it appears that certain supervisors were aware of the weight limitations and the prohibitions on heating overfilled cylinders. These supervisors acquiesced in, if not condoned, heating of uranium hexafluoride cylinders with more than the maximum net weight and then failed to reveal the full extent of their knowledge. They signed cylinder status sheets reflecting excessive cylinder weights. Their actions demonstrated a lack of candor with the NRC that cannot be accepted. Thus, I cannot completely remove the IOT without further assurance that the NRC can rely on the performance and integrity of supervisory personnel at the Facility.

Accordingly, I am issuing the enclosed Order to Show Cause why certain supervisors should be permitted to perform licensed activity without IOT presence in order to provide the NRC with the necessary confidence as to those supervisors. The Order lists various management actions that should be considered and addressed. The Order also requires information as to replacement personnel if the company should decide to remove the named supervisors from licensed activity. Following receipt of your response to the Order, the NRC intends to schedule a meeting concerning these issues. Thereafter, I will consider complete removal of the IOT requirement.

The NRC is also concerned about the actions and lack of candor of some of the operators at Sequoyah Fuels Facility, especially Patrick Sanders. However, no enforcement action is being taken as to these operators; as we believe that by directing enforcement action to the supervisors, they will ensure proper performance by the operators and create an atmosphere that will lead to candor with the NRC in the future.

The NRC issued a Notice of Violation and Proposed Imposition of Civil Penalties on October 14, 1986 for violations of procedures, some of which were associated with the January 4, 1986 accident. The total proposed civil monetary penalty was $310,000. Sequoyah Fuels Corporation responded to the Notice of Violation and an Order Imposing Civil Monetary Penalties in the amount of $310,000 was issued February 5, 1987. The penalties were paid by Sequoyah Fuels Corporation on March 2, 1987. In view of these penalties and the changes in management at the Facility, additional penalties are not being proposed for violations that occurred prior to the accident.

However, in January 1986 the NRC requested assistance from Kerr-McGee/Sequoyah Fuels Corporation in answering certain questions asked by members of the Congress.

One question sought information as to supervisory or management knowledge of heating of overfilled cylinders. The licensee's response, dated January 29, 1986, indicated that management did not have that knowledge but was silent as to supervisory personnel, when in fact management, including the Assistant General Counsel-Litigation, knew that at least one supervisor was aware of the improper practice. Thus, the response was false by omission. A second part of the same question inquired as to prior instances of heating of overfilled cylinders. The company's answer responded to that part of the question by advising that an investigation was in progress, indicating that there was no knowledge of the prior instances, when in fact the company already had information about heating of overfilled cylinders. The response was prepared by corporate attorneys with input from outside counsel, but without adequate supervision by corporate management and technical personnel. The response was signed by Dr. John C. Stauter, Director, Nuclear Licensing and Regulation, Kerr-McGee Corporation, who did not read the report of the company's Internal Investigation Team, but instead relied entirely on the work of the attorneys. In fact, he still had not read the report as of the date he was interviewed by OI in April 1986. Because of this failure to meet the responsibility to provide accurate information to the NRC, the Order Modifying License of October 2, 1986 required that all information provided to the NRC be submitted under oath or affirmation of the President, Sequoyah Fuels Corporation. (Order at 8). On June 19, 1987 the licensee requested that this requirement be lifted.

The responses contained in the January 29, 1986 letter are false statements that were material to the actions taken by the NRC and could have resulted in the NRC submitting incorrect information to the Congress. While this submission may not have been a deliberate effort to provide false information, the submission was clearly misleading. The submission constitutes a careless disregard for the need to provide complete and accurate information to the Commission. The NRC must be confident that it can rely on the information furnished by a licensee. Misleading the Commission by omission of facts that are known to a licensee cannot be tolerated. These deficiencies were apparently caused by management's delegation of its responsibility for preparing the responses to its attorneys, who did so without adequate oversight or input by licensee personnel who had knowledge of the requested information. Therefore, if the licensee desires a relaxation of this requirement, the attached Order allows the licensee to show cause why the requirement for the President to sign all submissions under oath or affirmation should not be continued if certain attorneys are involved with submissions to the NRC.

In addition, I am issuing the enclosed Notice of Violation and Proposed Imposition of Civil Penalties in the amount of $16,000 for the violations described in the enclosed Notice to emphasize the importance of complete candor in dealing with the NRC. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987) (Enforcement Policy), each of the violations described in the enclosed Notice has been categorized at a Severity Level II. The escalation and mitigation factors in the Enforcement Policy were considered and no adjustment has been deemed appropriate. Since this civil penalty is intended to focus attention on the need for management involvement in preparing responses, a separate action is not being taken for Dr. Stauter's failure to assure that the response was complete and accurate.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice and Order when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence of the violations for which you have been cited. After reviewing your responses to this Notice and Order, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the Public Document Room.

The responses directed by this letter and the enclosed Notice and Order are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Sincerely,

James M. Taylor
Deputy Executive Director
for Regional Operations

Enclosure: Notice of Violation
and Proposed Imposition
of Civil Penalties
Order to Show Cause
OI Report 4-86-005 Synopsis

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
SEQUOYAH FUELS CORPORATION	)	Docket No. 40-08027
P. O. Box 5801	)	License No. SUB-1010
Oklahoma City, OK 73125	)	EA 87-108

ORDER TO SHOW CAUSE

I.

Sequoyah Fuels Corporation (the licensee) (SFC) is the holder of Source Material License No. SUB-1010 which authorizes the licensee to possess and use source material for the purpose of refining uranium from uranium ore concentrates and converting this uranium to uranium hexafluoride (UF_6) for use by enrichment facilities. The license was most recently renewed on September 20, 1985 and will expire on September 30, 1990.

II.

On January 4, 1986 a cylinder containing in excess of 30,000 pounds of UF_6 ruptured while being heated in a steam chest at the Sequoyah Fuels facility in Gore, Oklahoma. The cylinder had been overfilled to the point that its contents exceeded the cylinder's maximum allowable shipping weight of 27,560 pounds. A process operator, with the consent of his supervisor, had placed the cylinder in a steam chest to heat the cylinder to facilitate removal of the excess UF_6. While the cylinder was being heated, the cylinder wall ruptured because of the expansion of UF_6 as it changed from the solid to the liquid phase. Heating of the overfilled cylinder was contrary to the requirements of the license and the licensee's operating procedures. The high pressure in the cylinder and the large size of the rupture resulted in the rapid release of much of the

UF_6 into the atmosphere. One individual employed by the licensee died because of exposure to hydrogen fluoride (a hydrolysis product of UF_6). Other employees received exposures to uranium and hydrogen fluoride.

By letter dated January 9, 1986, the licensee committed not to restart the UF_6 conversion process at the Sequoyah facility without the concurrence of the NRC. In addition, the licensee made a number of commitments in meetings with the NRC Region IV staff. These commitments were confirmed in a Confirmation of Action Letter issued by Region IV to the licensee dated January 17, 1986.

Kerr-McGee Corporation promptly instituted an internal investigation of the event. (A letter from Sequoyah Fuels Corporation to the Director, Office of Inspection and Enforcement, dated September 24, 1986, summarizes the results of this investigation.) The NRC initiated a number of inspections, investigations, and reviews after the January 4 accident with the assistance of other State and Federal agencies to determine the cause and effects of the event and the efficiency and adequacy of the response of the licensee to the event. The NRC also has inspected and reviewed all of the requirements of the license.

As a result of these efforts, several violations of NRC requirements were identified. These violations were addressed in a Notice of Violation dated October 14, 1986 and an Order Imposing Civil Monetary Penalties issued February 5, 1987. These actions addressed procedural deficiencies in the management and operation of the Sequoyah facility, which were associated with the January 4, 1986 accident.

In an Order Modifying License issued October 2, 1986, the NRC specified certain actions required before restart of Sequoyah Fuels Facility would be authorized. These conditions included imposition of an independent oversight team (IOT) to maintain a 24-hour surveillance while the facility is in operation. The IOT was required to ensure full compliance with required procedures because of NRC concerns as to the candor of certain supervisors. The Director, Office of Inspection and Enforcement, was authorized to relax or rescind all or part of those requirements. On October 16, 1986 the Commission authorized restart and the facility has resumed operations. Reports of the IOT and NRC inspections have been reviewed by the staff. Based on NRC consideration of these reports and submittals from the licensee, in a letter accompanying this Order, the Deputy Executive Director for Regional Operations has reduced the required IOT coverage from 24-hours to 8-hours per day.

III

The NRC investigations of the accident and the management and operation of the facility sought information concerning possible overfilling and heating of UF_6 cylinders, including supervisory knowledge of and acquiescence in those practices which violated authorized procedures. An NRC Augmented Investigation Team (AIT) conducted its inquiry immediately following the accident. In addition, subsequent to the accident, Sequoyah Fuels Corporation formed an Internal Investigation Team (IIT) to investigate the cause of the accident. The IIT report concluded that the January 4, 1986 rupture was "most likely caused by heating of the overfilled cylinder" and also noted that overfilling regularly occurred.

In March 1986, the Office of Investigations (OI) commenced an investigation which, in addition to the above areas of inquiry, also examined whether willful material false statements were made in the January 29, 1986 letter.

The NRC investigations revealed that several Sequoyah Fuels Corporation employees in supervisory positions apparently were aware that UF_6 cylinders were being filled beyond the authorized limit and were subsequently heated while in an overfilled condition. The licensee's September 24, 1986 response to a question from the Commission stated that: "some supervisory personnel either acquiesced in or condoned this practice" (i.e., heating with more than the maximum net weight). In the course of responding to questions from the various investigators, Messrs. J. Brewer, L. McCoy, L. Reid, and J. Swimmer did not appear to fully disclose their knowledge of the overfilling and heating of the UF_6 cylinders. Information provided by other SFC employees, including the operators and the Facility Manager, indicated that these supervisors were more aware of the subject practices than they revealed. These supervisors were aware of the weight limitations for cylinders and the provisions of Operating Procedure N-280-1, Revision 6, which prohibited the heating of overfilled cylinders. They all signed cylinder status sheets reflecting excessive weights. Further, some of the statements of these individuals to the investigators were inconsistent.

In January 1986, the NRC requested assistance from Kerr-McGee Sequoyah Fuels Corporation, in answering certain questions asked by members of the Congress. One question sought information as to supervisory or management knowledge of heating of overfilled cylinders. The licensee's response, dated January 29, 1986, indicated that management did not have that knowledge but was silent as

to supervisory personnel, when in fact, management, including the Assistant General Counsel-Litigation, Thomas McDaniel, knew that at least one supervisor was aware of the improper practice. In the course of preparing the response, McDaniel directed that a reference to supervisory personnel be deleted from a draft because he knew that at least one supervisor was aware of the practice. Thus, the response was false by omission. The question also inquired as to prior circumstances of heating of overfilled cylinders. The Company's answer to that part of the question advised that an investigation was in progress to determine whether "there had been any instances of overfilling," and thus, suggested that there was no knowledge of the prior instances when, in fact, the Company already had information that such instances had occurred. The response was prepared by corporate attorneys with input from outside counsel, Peter Nickles. Corporate managerial and technical personnel did not supervise preparation of the response, which was incomplete and misleading. As a result, the Order Modifying License of October 2, 1986 required that all information provided to the NRC by the company be submitted under oath or affirmation of the President, Sequoyah Fuels Corporation.

IV.

The holder of a license from the NRC has a clear obligation to be candid and forthcoming in dealing with the NRC and its staff. The effectiveness of the regulatory program is dependent on the ability of NRC investigators to obtain complete and accurate information in determining the causes of accidents in order to protect the public health and safety as well as workers in licensed facilities. The OI investigation revealed a lack of candor among supervisory

personnel, specifically with regard to Messrs. Brewer, McCoy, Reid, and Swimmer. It appears that these supervisors knew about and acquiesced in practices that were contrary to authorized procedures. The NRC needs assurance that these supervisors will properly run plant operations, ensure that these operations will be conducted in accordance with authorized procedures, and in the future provide complete and accurate information to the NRC. The NRC must also be confident that employees at all levels of a licensee organization and its attorneys will be responsive to the agency's requests for information, and that the agency can rely on the information provided.

V.

In view of the foregoing, pursuant to Sections 63, 161 b, i, and o, 182, and 186 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.202 and Part 40, IT IS HEREBY ORDERED THAT THE LICENSEE:

A. Show cause why the following individuals should be allowed to perform licensed activity in the absence of the IOT:

1. J. Brewer, Shift Supervisor
2. L. McCoy, Area Supervisor
3. L. Reid, Shift Supervisor
4. J. Swimmer, Shift Supervisor

The response should at a minimum address areas such as disciplinary action taken or to be taken, training conducted or scheduled to be conducted and management controls, including disciplinary policies, instituted to address these issues. The response should also state why, if these employees are allowed to perform licensed activities without IOT presence, the licensee will have, and the NRC should have, confidence that each of these individuals will be candid with the NRC in the future. If the licensee should decide to remove these supervisors from licensed activities, the response should include information concerning their replacements, to provide assurance that the replacements are qualified and will be candid with the NRC so that they can be relied on to provide complete and accurate information.

B. If the licensee desires to relax the requirement of Paragraph A.2 of the Order Modifying License of October 2, 1986 requiring that all information submitted to the NRC be under oath or affirmation of the President of Sequoyah Fuels Corporation, show cause why the oath or affirmation requirement should not be continued so long as T. McDaniel or P. Nickles are involved in preparing responses for submission to the NRC.

VI.

The licensee may show cause why this Order should not have been issued and should be vacated by filing a written answer under oath or affirmation within 30 days of the date of this Order which sets forth the matters of fact and law on which the licensee relies. The licensee may answer, as provided in 10 CFR 2.206(d), by consenting to the entry of orders in substantially the form proposed in this Order, in which case the license will be modified as stated in

Section V. If the licensee fails to file an answer within the specified time the Deputy Executive Director for Regional Operations may issue without further notice an Order described above.

The licensee or any other person who has an interest adversely affected by this Order may request a hearing on this Order within 30 days of the date of its issuance. Any answer to this Order or request for hearing shall be submitted to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D. C. 20555, with copies to (1) the Assistant General Counsel for Enforcement, Office of the General Counsel, and (2) the Regional Administrator, Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 1000, Arlington, TX 76011. If a person other than the licensee requests a hearing, that person shall set forth with particularity the manner in which the person's interest is adversely affected by this Order and should address the criteria set forth in 10 CFR 2.714(d).

If a hearing is requested, the Commission will issue an Order designating the time and place of any hearing. If a hearing is held, the issue to be considered at the hearing shall be whether this Order shall be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Deputy Executive Director
for Regional Operations

Dated at Bethesda, Maryland
this day of 1987

NOTICE OF VIOLATION
AND
PROPOSED IMPOSITION OF CIVIL PENALTIES

Sequoyah Fuels Corporation
Sequoyah Fuels Facility
Gore, Oklahoma

Docket No. 40-08027
License No. SUB-1010
EA 87-108

As a result of NRC investigations conducted January 4, 1986 through September 16, 1986, violations of NRC requirements have been identified. In accordance with the "General Statement of Policy and Procedure or NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1987), the Nuclear Regulatory Commission proposes to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, ("ACT"), 42 U.S.C. 2282, PL 96-295, and 10 CFR 2.205. The particular violations and associated civil penalties are set forth below.

In January 1986 the NRC requested the Kerr-McGee Corporation, owner of Sequoyah Fuels Corporation, to provide information to enable the NRC to respond to members of Congress. Question 11 asked:

> "Did company supervisory or management personnel approve of the practice of reheating overfilled cylinders at the Sequoyah plant, or have any knowledge of this procedure? Had other overfilled cylinders ever been reheated before at this facility, and if so, was it with or without the knowledge of management? List all instances where overfilled cylinders were reheated."

In a letter dated January 29, 1986 and signed by the Director, Nuclear Licensing and Regulation, the Kerr-McGee Corporation responded to the question propounded by the NRC as follows:

> Management personnel had no knowledge that any such practice was ever followed at the Sequoyah Facility and had specifically prohibited it. The written procedure for "Uranium Hexafluoride Product Handling and Shipping", a copy of which is attached, prominently states in two places:
>
> > "Note: Do not heat a cylinder which has been overfilled. Evacuate the overfilled cylinder without heating until the maximum net weight is attained. This is necessary to prevent rupture of the cylinder due to hydrostatic pressure."
>
> Interviewing of employees and reviewing of records are continuing in order to determine whether there have been any instances of cylinder overfilling in the past, and if overfilling has occurred, the nature and degree of overfilling and what steps were taken by the company. (Emphasis added)

A. Contrary to Section 186 of the Atomic Energy Act of 1954, as amended, the statement made in the January 29, 1986 letter that "management personnel had no knowledge that any such practice was ever followed" constitutes a material false statement. The statement is false in that, although the question sought information regarding the approval or knowledge of supervisory or management personnel regarding reheating overfilled cylinders, the response omitted mention of supervisory personnel although the licensee had knowledge that some supervisors knew of this practice. This statement had the ability to mislead the NRC in that it omitted information

regarding the licensee's knowledge that supervisors knew of the practice and, to the contrary, gave the impression that supervisory personnel did not know of or approve of the heating of overfilled cylinders. In fact, the licensee had information that some supervisors did know of the practice, and the response to the question as it was first drafted was modified as a result of the licensee's knowledge that supervisors knew of this practice. The statement was material in that it addressed an issue that was important for the NRC to resolve in ensuring that the plant would be operated safely before authorizing restart of operations and had the capability of influencing the NRC with regard to its resolution of this issue and in preparing and submitting the NRC's response to Question 11 to Congress.

This statement constitutes a material false statement and is a Severity Level II violation (Supplement VII).

Civil Penalty - $8,000.

B. Contrary to Section 186 of the Atomic Energy Act of 1954, as amended, the statement made in the January 19, 1986 letter that "interviewing of employees and reviewing of records are continuing in order to determine whether there have been any instances of cylinder overfilling in the past" constitutes a material false statement. The statement is false in that it indicates a lack of knowledge of past instances of heating of overfilled cylinders when, in fact, the company's own investigation at the time of the response had shown that the practice had occurred. The statement was material in that it addressed an issue that was important for the NRC to resolve in ensuring that the plant would be operated safely before authorizing restart of operations and had the capability of influencing the NRC with regard to its resolution of this issue and in preparing and submitting the NRC's response to Question 11 to Congress.

This statement constitutes a material false statement and is a Severity Level II violation (Supplement VII).

Civil Penalty - $8,000.

Pursuant to the provisions of 10 CFR 2.201, Sequoyah Fuels Corporation is hereby required to submit a written statement or explanation to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D. C. 20555 with copies to (1) the Assistant General Counsel for Enforcement, Office of the General Counsel, and (2) the Regional Administrator, U. S. Nuclear Regulatory Commission, Region IV, within 30 days of the date of this Notice. This reply should be clearly marked as a reply to a Notice of Violation and should include for each alleged violation: (1) admission or denial of the alleged violation, (2) the reasons for the violation if admitted, (3) the corrective steps that have been taken and the results achieved, and (4) the corrective steps that will be taken to avoid further violations.

If an adequate reply is not received within the time specified in this Notice, the Deputy Executive Director for Regional Operations may issue an order to

show cause why the license should not be modified, suspended, or revoked or why such other action as may be proper should not be taken. Consideration may be given to extending the response time for good cause shown. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Within the same time as provided for the response required above under 10 CFR 2.201, Sequoyah Fuels Corporation may pay the civil penalties by letter addressed to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555 with a check, draft, or money order payable to the Treasurer of the United States in the cumulative amount of Sixteen Thousand Dollars ($16,000) or may protest imposition of the civil penalties in whole or in part by a written answer addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555. Should Sequoyah Fuels Corporation fail to answer within the time specified, the Deputy Executive Director for Regional Operations will issue an order imposing the civil penalties in the amount proposed above. Should Sequoyah Fuels Corporation elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalties, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalties should not be imposed. In addition to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

In requesting mitigation of the proposed penalties, the five factors addressed in Section V.B of 10 CFR Part 2, Appendix C (1987), should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of Sequoyah Fuels Corporation is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing civil penalties.

Upon failure to pay any civil penalties due which subsequently have been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalties, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

FOR THE NUCLEAR REGULATORY COMMISSION

James M. Taylor, Deputy Executive
Director for Regional Operations

Dated at Bethesda, Maryland
this day of June 1987

SYNOPSIS

On January 4, 1986, a 14 ton cylinder filled with UF6 ruptured while it was being heated in a steam chest in Sequoyah Fuels Facility (SFF), Gore, Oklahoma. SFF is the UF6 conversion facility of Sequoyah Fuels Corporation (SFC) which is a wholly owned subsidiary of the Kerr McGee Corporation (KMC), Oklahoma City, Oklahoma. Immediately following the accident at SFF, the NRC formed the Augmented Investigation Team (AIT) to investigate the circumstances surrounding the accident. The AIT investigation included reviews of SFF records and the interviews of numerous SFF employees. The AIT investigation attributed the cause of the accident to the heating of the overfilled 14 ton cylinder which resulted in the expansion of the UF6 and the ultimate rupture of the cylinder. Subsequent to the accident, SFC formed an Internal Investigation Team (IIT) which conducted an investigation to determine the cause of the accident. The IIT investigation included interviews of all SFF personnel interviewed by the AIT.

On January 21, Congressmen Edward J. Markey and Mike Synar sent a letter to the Chairman of the NRC in which they posed a number of questions relative to SFF and the accident which occurred there. Question 11 asked, "Did company supervisory or management personnel approve of the practice of reheating overfilled cylinders at the Sequoyah plant, or have any knowledge of this procedure? Had other overfilled cylinders ever been reheated before at this facility, and, if so, was it with or without the knowledge of management? List all instances where overfilled cylinders were reheated." Subsequent to the NRC receipt of the letter, the KMC Director of Nuclear Licensing and Regulation was asked, by an NRC representative, to provide answers to several of the Congressmen's questions, one of which was question 11. The January 29, 1986 KMC letter to the NRC, responding to these questions, stated with response to question 11 "Management personnel had no knowledge that any such practice was ever followed at Sequoyah facility and specifically prohibited it." The response to question 11 concluded stating, "Interviewing of employees and reviewing of records are continuing in order to determine whether there have been any instances of cylinder overfilling in the past, and if overfilling has occurred, the nature and degree of overfilling and what steps were taken by the company."

On March 6, 1986, the NRC Executive Director of Operations (EDO) requested that OI conduct an investigation at SFF/SFC/KMC to determine whether SFF personnel had knowingly and willfully heated overfilled UF6 cylinders in the past, in violation of SFF procedures; whether record falsification had occurred in relation to the overfilling and/or heating of overfilled cylinder; whether SFF supervisors and management personnel made willful false statements, to the NRC AIT, regarding their knowledge of overfilled UF6 cylinders being heated at SFF and whether the KMC Director of Nuclear Licensing and Regulation made willful material false statements to the NRC in the KMC letter responding to question 11.

The OI investigation consisted of numerous interviews of SFF nonsupervisory personnel, SFF supervisors, SFF management personnel, SFC management personnel, and KMC officials. The investigation additionally involved an extensive review of SFF and KMC records. The investigation disclosed that

10 and 14 ton cylinders were regularly overfilled by 100-120 pounds and heated in the steam chest, which violated SFF procedure N-280-1, Revision 6 (REV 6). Interviews also disclosed that 10 and 14 ton cylinders are sometimes overfilled by various amounts from 120 to 4,500 pounds and heated. OI investigation additionally determined that the KMC IIT received SFF employee testimony concerning overfilled cylinders being heated during their early January 1986 investigation at SFF.

The OI investigation concluded that SFF chemical operators intentionally overfilled 10 and 14 ton cylinders by 100-120 pounds and heated them. Five chemical operators admitted having heated overfilled cylinders knowing it violated REV 6, whereas the remaining chemical operators involved in overfilling cylinders were unaware of REV 6. Three shift supervisors admitted knowledge of the practice of heating overfilled cylinders and knowingly and willfully violated REV 6 by failing to ensure employee compliance. Further, all of the SFF supervisors were at a minimum in careless disregard of the provisions of REV 6, by failing to exercise proper supervisory control, willfully allowing violation of this procedure accordingly. It was concluded that with regard to overfills of greater than 120 pounds, chemical operators falsified the net weight cylinder status sheet entries inasmuch as such entries did not reflect the true net weight of UF6 placed in cylinders overfilled by that amount. It was also concluded that four SFF supervisors made willful material false statements to the NRC AIT, in that they did not disclose the full extent of their knowledge regarding overfilled cylinders being heated when questioned regarding that occurrence. Finally, it was concluded that the KMC Director of Nuclear Licensing and Regulation did not make a willful material false statement in the January 29, 1986 letter to the NRC. However, it was found that the senior KMC legal department attorney and the Kerr McGee legal consultant, both of whom were responsible for overseeing the preparation of and response to question 11, had significant information in their possession which they willfully and knowingly withheld from the NRC. In addition, their response clearly implied that they did not possess such information when, in fact, they did. It was additionally found that these individuals intentionally withheld information relative to supervisory personnel knowledge of the heating of overfilled cylinders.