

NOV 20 1990

Docket: 40-8027/90-05  
License: SUB-1010

Sequoyah Fuels Corporation  
ATTN: Reau Graves, Jr.  
President  
P.O. Box 0  
Gore, Oklahoma 74435

Dear Mr Graves:

This refers to the follow-up inspection conducted by members of the NRC Augmented Inspection Team (AIT) during the period September 10 through 13, 1990, to the daily onsite inspection activities during the period September 14 through October 8, 1990, and to in-office reviews of information your staff submitted to the NRC during these periods. These inspections were conducted of the activities authorized by NRC Source Material License SUB-1010 for your facility, and to the discussions with you and members of your staff at the conclusion of the inspections on September 13, October 1 and 8, 1990.

The AIT inspection was conducted to review the circumstances following the discovery of uranium contaminated water in an open excavation for a reinforced concrete vault around two underground storage tanks immediately adjacent to the solvent extraction building. After the initial AIT fact-finding inspection, which occurred during the period August 27 through August 29, 1990, you provided commitments to the NRC described in your letter of August 30, 1990, regarding actions to be taken prior to restart of the solvent extraction process. The AIT follow-up inspection was conducted to review the findings of the AIT, and also review the actions taken by your staff as a result of your August 30, 1990, letter. The inspectors determined that your staff's actions taken to satisfy those commitments were appropriate. Subsequently, on September 13, 1990, NRC verbally concurred on the restart of the solvent extraction process, and documented this concurrence in our letter to you dated September 14, 1990. At the same time verbal concurrence was granted, NRC decided to maintain daily onsite inspector coverage at the Sequoyah Fuels Corporation facility as a result of the concerns identified during the AIT and the AIT follow-up inspections.

The AIT follow-up inspection identified two failures to satisfy NRC requirements as described in Section 3 of the enclosed report. The inspectors found that no evaluations were performed to evaluate the potential worker exposure prior to workers entering the open excavation and radiological surveys that were performed were inadequate, contrary to 10 CFR 20.201(b) requirements.

PM:URFO *lgy*  
PJGarcia  
11/20/90 *for*

PM:URFO *lgy*  
GRKonwinski  
11/20/90 *for*

RIV:NMLS *lgy*  
GMVasquez  
11/20/90 *for*

DD:URFO *lgy*  
EFHawkins  
11/20/90 *for*

DE:DRSS \* RA  
ABBeach RDMartin  
11/20/90 / /90

\*Previously Concurred

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PDR ADOCK 04008027  
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The fact that personnel were working in yellow-colored water, yellow precipitate was visibly stratified in the soil on a wall of the excavation, and numerous water sample results indicated elevated uranium concentrations, should have indicated to your staff that a potential worker hazard existed. The inspectors also concluded that the failure to report the discovery of the contaminated water within 24 hours was contrary to 10 CFR 20.403(b) requirements. Concerns involving reportability were discussed with you and your staff at an enforcement conference earlier this year. It appears that actions taken were not so extensive as to prevent this most recent example of another failure to communicate with the NRC.

The AIT follow-up inspection also identified organizational and communication weaknesses that are fully described in paragraph C to section 3 of the enclosed report. The inspector's review of your programs and actions concerning the discovery of the uranium-contaminated water indicated several weaknesses and areas of concern.

After the completion of the AIT follow-up inspection on September 14, 1990, a few hours after restart activities began, your staff notified NRC Region IV of the existence of a shallow well in the denitration area. NRC was concerned about this well referenced in this document as the "subfloor process monitor" because contaminated liquids have been recovered from under the Main Process Building (MPB) since the mid-1970s. NRC was also concerned because (1) the MPB could have extensive contamination under the building, (2) the subsurface characteristics under the building were not known with the same degree of certainty as they were around the solvent extraction building, (3) underground support structures may have penetrated the shale layer providing a direct pathway for ground-water contamination, and (4) the MPB forms the southeast corner of the restricted area boundary and licensed material could have migrated south or east of the building into the unrestricted area where there are no monitoring wells. Because NRC did not believe your staff exhibited the same sense of urgency as we did for this potentially larger problem posed to environmental contamination, NRC issued an Order Modifying License on September 20, 1990.

The NRC inspector coverage at the Sequoyah Fuels Corporation has observed and verified many of the activities performed by your staff and contractor personnel in response to the Order. Although NRC remains concerned about the September 14, 1990, report of this event, the NRC acknowledges the work and resources you have dedicated to this effort. A review and evaluation of all of your efforts in this area is still continuing. As described in the paragraph C to Section 4 of the enclosed report, more recent information and investigations indicate that the monitoring network may not be properly designed. Therefore, this same level of effort will be needed to assure that the entire site will be appropriately characterized.

The NRC also acknowledges the improvements in reports made by your staff and/or notifications to the NRC. These are fully described in paragraph B to Section 5 of the enclosed report. However, one failure of NRC requirements was identified in our review of your report of a September 27, 1990, unusual event when a worker was sprayed with process liquids in the digestion area. Even though the report of the event by your staff on September 28, 1990, indicated that procedures existed which specified appropriate restrictions on the use of specific materials in certain parts of the process, the NRC found that no procedure did, in fact, exist. This failure to provide the NRC staff complete and accurate information is considered to be a violation of 10 CFR 40.9(a) requirements.

As you are aware, our reviews of these matters is continuing, and other organizational weaknesses, as well as additional potential enforcement actions resulting from these reviews, will be addressed in a subsequent inspection report for inspections conducted October 8 through November 16, 1990. Any decision regarding enforcement considerations will be deferred until the completion of those inspections.

Please also note that three unresolved items were identified during this inspection period. Unresolved items are issues where additional information is needed before the NRC can determine whether or not any enforcement action should be taken. These three unresolved items are:

1. Six contractor personnel who actually worked in the solvent extraction excavation area may not have received adequate radiation safety training.
2. Failure to clearly delineate the responsibilities for identifying changing conditions during work that might require a modification to a Hazardous Work Permit (HWP) or a new HWP.
3. Routinely, it appears liquids such as from the subfloor process monitor, were pumped directly from the ground into the process without any proper characterization or evaluation.

The enclosed copy of our inspection report also identifies other areas examined during the inspection. Within these areas, the inspection consisted of selective examination of procedures and representative records, interviews with personnel, independent measurements, and observation by the inspectors.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

*Original Signed By:*

A. B. BEACH

A. Bill Beach, Director  
Division of Radiation Safety  
and Safeguards

Enclosure:  
Inspection Report  
40-8027/90-05

cc:  
Oklahoma Radiation Control Program Director

bcc:  
DMB - Original (IE-07)  
RDMartin  
ABBeach  
LAYandell  
GJackson, OC/LFDCB (4503)  
\*WLFisher  
\*CLCain  
\*Inspector  
\*NMSIS  
\*MIS System  
\*RIV Files (2)  
\*RSTS Operator  
\*REHall, URFO  
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