In Reply Refer To: Docket: 40-8027/90-04 License: SUB-1010

Sequoyah Fuels Corporation ATTN: Reau Graves, Jr. President P.O. Box 610 Gore, Oklahoma 74435

Dear Mr. Graves:

This refers to the inspection conducted by the NRC Augmented Inspection Team (AIT) during the period August 27 through August 29, 1990, 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 inspection.

This 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. You notified NRC of this issue on August 22, 1990, and reported elevated uranium contamination levels. The NRC considered those levels significantly elevated, and dispatched an inspector from NRC Region IV to the Sequoyah Fuels Corporation facility. Based upon his preliminary review, on August 24, the NRC decided an AIT inspection should be initiated to determine the causes, conditions, and circumstances relevant to the high uranium bearing water discovered during excavation activities at the facility.

The AIT found that concerns involving elevated levels of uranium contaminated water in the excavation pit were expressed by the Manager, Environmental to the Senior Vice President as early as on August 7, 1990. However, it was not until August 17, 1990, that responsible personnel became aware of the actual elevated sample results. Additional water sample results that were taken during this time period also showed significantly elevated uranium levels (up to eight grams per liter). Although responsible personnel were aware of these levels, another five days elapsed before this information was communicated to the NRC. Additional water sample results were apparently lost and not available to the responsible health and safety organization. However, after your report of the contamination problem was made to the NRC (August 23), copies of the water sample results were received. No one at your facility could satisfactorily explain to the AIT the reason for the lost water sample results.

The AIT also found that the contamination issue at SFC was apparently caused by the degradation of the concrete floor in the solvent extraction building prior to 1984, and leaks from an evaporator located immediately north of the solvent extraction building that was replaced by a new evaporator in 1980, although it functioned as an auxiliary unit until 1985. Although this contamination problem existed for an extended period of time, the AIT concluded there was no

*D: DRSS: RXW MRA WE *PM: URFO *PM: URFO NMLS: RIV *DD: URFO PJGarcia/db GRKonwinski GMVasquez ABBeach | RDMartin EFHawkins 10/2/90 10/2/90 / /90 10/3/90 / /90 to 10 /90 *Previously concurred

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indication workers involved in these operations were excessively exposed to radiation, nor were any workers contaminated. There also was no release of the contaminated materials outside of the restricted area from the information that was available at the time of the AIT.

However, the AIT also concluded that the your staff did not demonstrate the necessary sensitivity to the potential for uranium contamination, nor understand the urgency and potential significance of such a problem. In fact, although a number of your staff were aware of the contamination problem beneath the solvent extraction building floor, work activities progressed to the extent of placing the concrete floor in the vault over contaminated material in the bottom of the excavation pit the day after the issue was communicated to the NRC. The AIT found that no one had ever considered stoppage of work to prevent the placement of the concrete floor because of the significant elevated concentrations of uranium. The AIT also observed that this problem so stressed your organization that significant communication weaknesses between the various departments were exhibited. In fact, information given to the AIT was, at times, difficult to obtain probably because of the facility's focus on restart and a number of other activities that were progressing during the outage that, at least in your staff's view, "overshadowed" the elevated concentrations in the vault.

As a result of these concerns raised by the NRC, specific to the solvent extraction processes, you committed to: (1) assure integrity of the floor and sump in the solvent extraction building, (2) complete actions necessary to adequately characterize the quantity and location of the pockets of licensed material under or around the solvent extraction building, (3) identify all potential pathways that could contribute to migration of licensed material away from the solvent extraction building, and (4) control and maintain contaminated soil and water removed from the excavation north of the solvent extraction building as described in your letter of August 30, 1990. In addition, you committed to the NRC that an independent party would review SFC's entire response to the elevated contaminated levels found in the water in the excavation pit.

The review of your actions taken as a result of your commitments in this letter was reviewed in NRC's inspection conducted September 10-13, 1990. Also, the broader issues concerning organization and communication weaknesses, as well as any potential enforcement actions resulting from this inspection, will be addressed in the report of that inspection. Our review of your activities as well as the activities of your staff in characterizing the solvent extraction building and addressing other issues identified after this inspection was completed, is still continuing.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of selective examination of procec "s 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 do discuss them with you.

Sincerely,

Original Signed By:
A. B. BEACH

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

Enclosure: Inspection Report 40-8027/90-04

Oklahoma Radiation Control Program Director

bcc:
DMB - Original (IE-07)
RDMartin
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LAYandell
GJackson, OC/LFDCB (4503)
RWise
*WLFisher
*CLCain
*Inspector

*w/766

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