



40-8027

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240



In Reply Refer To:
ER-74/539

ENVIRONMENTAL FILE

APR 2 1975

Dear Mr. Chitwood:

Thank you for transmitting copies of the final environmental statement for Kerr-McGee Nuclear Corporation's Sequoyah Uranium Hexafluoride Plant, Sequoyah County, Oklahoma, which we received on February 13, 1975.

One of the main comments by the Department of the Interior on the draft environmental statement concerned the admitted leakage of raffinate waste from one of the retention ponds. While more information has been provided in the final environmental statement, there remain a few points which require further clarification.

On page V-7 it is stated that "The leak was confined to a relatively narrow band, possibly to a single fissure terminating in well no. 2314." It is unrealistic to believe that all the leakage from the pond is finding its way to a monitoring well which, by chance, intercepts the fissure through which leakage takes place. Also in this connection, we are not clear about the significance of the data shown on pages D-16 and D-29. The data implies that the leakage from the pond is computed as the rate at which water re-enters monitoring wells previously bailed out.

We question the conclusions on pages D-17 and D-18 about the leak in raffinate pond no. 2 and, in particular conclusion no. 6 which indicates that the usage of storage ponds is a successful means of long-term disposal of raffinate liquid waste even though conclusions no. 1 admits to radioactive waste leakage from one of the waste storage ponds.

We believe the additional comments starting on page 60 and the reports also referenced on that page do not provide sufficient detailed information to support the conclusions reached regarding the impermeability of the pond liners and the underlying geology to prevent undetected leakage from the raffinate ponds into the groundwaters or the Illinois Rivers.



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FROM: U.S. Dept. of the Interior Washington, D.C. 20240		DATE OF DOCUMENT April 2, 1975		DATE RECEIVED April 7, 1975		NO. 0668	
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TO: R. Chitwood		XX					
		ACTION NECESSARY <input type="checkbox"/>		CONCURRENCE <input type="checkbox"/>		DATE ANSWERED	
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Ltr. comments on the final environmental report on Sequoyah Uranium Hexafluoride Plant Sequoyah County, OK..... (1 cy)		Chitwood: w/2 extras 4-10					
		ENVIRONMENTAL FILE CN					
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The computations shown on page D-66, regarding concentration of contaminants to the Illinois and the Arkansas Rivers are presumably based on the data collected at the monitoring well and unsupported assumptions as to the area through which leakages take place. In addition, the average flows of the rivers are used in the above computations, whereas the low flows of the rivers should have been used to provide a more meaningful measure of contamination hazards. Also, the radioactivity shown should be total river radioactivity obtained by adding that originating from the leak to that present in the river at low flow.

In summary, it appears that some of the assumptions underlying the assessment of raffinate liquid waste leakage may not be true and it is suggested that a more thorough hydrogeologic investigation of the problem be carried out.

We hope these comments will be helpful to you.

Sincerely yours,

Stanley D. Doremus

Deputy Assistant Secretary of the Interior

Mr. R. B. Chitwood
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