

June 3, 1970

Kerr-McGee Corporation
Kerr-McGee Building
Oklahoma City, Oklahoma 73102

Attention: Mr. George E. Wuller
Senior Staff Engineer,
Licensing and Regulation

Gentlemen:

This letter is to inform you of the results obtained from analysis of the liquid samples collected during the inspection of the Sequoyah facility on April 29 and 30, 1970. The following concentrations were measured in the indicated samples:

Location	Isotope	Concentration in uc/ml
Illinois River, upstream	U nat	1.4×10^{-8}
	Ra ²²⁶	$< 3.0 \times 10^{-10}$
	Th ²³⁰	$< 2.0 \times 10^{-8}$
Illinois River, downstream	U nat	1.2×10^{-8}
	Ra ²²⁶	$< 3.0 \times 10^{-10}$
	Th ²³⁰	$< 2.0 \times 10^{-8}$
Combined outfall, as discharged to Illinois River	U nat	6.0×10^{-9}
	Ra ²²⁶	$< 6.0 \times 10^{-10}$
	Th ²³⁰	$< 2.0 \times 10^{-8}$
HF scrubber outfall after neutralization and prior to combination	U nat	2.2×10^{-8}
	Ra ²²⁶	$< 6.0 \times 10^{-10}$
	Th ²³⁰	$< 2.0 \times 10^{-8}$
North Test Well #22	U nat	4.7×10^{-9}
	Ra ²²⁶	$< 6.0 \times 10^{-10}$
	Th ²³⁰	$< 2.0 \times 10^{-8}$
#1 Retention Pond	U nat	1.9×10^{-5}
	Ra ²²⁶	2.2×10^{-8}
	Th ²³⁰	3.8×10^{-8}

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Kerr-McGee Corporation

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June 1, 1970

Fluorides measured in the upstream and downstream samples of the Illinois River were < 2.5 ug/ml. Fluorides measured in the sample collected from the HF scrubber outfall after neutralization and prior to combination showed 21.2 ug/ml.

Sincerely yours,

Original signed by
Herman J. Paas

Herman J. Paas, Jr.
Radiation Specialist

sent copy to J.R. Roden