

40-8027



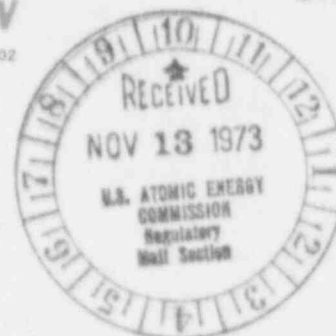
KERR-MCGEE CORPORATION

KERR-MCGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73102

November 7, 1973

Regulatory

File Cy.



Mr. Jack Rothfleisch
Materials Branch
Directorate of Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

Dear Mr. Rothfleisch:

In regard to your question as to the conflicting evaporation and data presented in our initial application on November 5, 1970, and given in the Supplement #3 to our environmental report, the following data are presented:

Supplement #3 was based upon 1949 to 1965 data taken from the U.S. Weather Bureau, Climatology Office, Oklahoma City, and is summarized on Table I. As you will see, the net evaporation for these years was 2.76 inches. Two inches were used to be slightly more conservative than the historical average.

The average net evaporation rate provided in our Amendment dated November 5 to the Sequoyah Facility License Application cites 8.7 to 10.7 inches annually based on a Department of Commerce Weather Bureau reported data for years 1931 to 1955 for Lake Tenkiller and Sallisaw, Oklahoma. No record can be found in our file of the original data, but we understand that it is available from the National Climatic Center, Federal Building, Ashville, North Carolina 28801, upon request.

Since the earlier data covered the period of the 1930's when a well recognized drought condition existed in most of the western United States, specifically in Oklahoma, we believe it is more pertinent to the current situation to use the lower net evaporation rate given in our Supplement #3 dated August 1, 1973.



8512200179 731107
PDR ADOCK 04008027
C PDR

8264

FROM:
Kerr-McGee Corp.
Oklahoma City, OK 73102

DATE OF DOCUMENT:
Nov. 7, 1973

DATE RECEIVED
Nov. 13, 1973

NO.:
8264

LTR. ☒ MEMO: ☐ REPORT: ☐ OTHER: ☐

TO:
Jack Rothfleisch

ORIG.: ☒ CC: ☐ OTHER: ☐

ACTION NECESSARY ☐ CONCURRENCE ☐ DATE ANSWERED:
NO ACTION NECESSARY ☐ COMMENT ☐ BY:

CLASSIF:
U

POST OFFICE
REG. NO:

FILE CODE:
Docket No. 000 40-8027

DESCRIPTION: (Must Be Unclassified)

Ltr. pertaining to our question as to
the conflicting evaporation & data
presented on Nov. 5, 1973

ENCLOSURES:
Table I (Net Evaporation Data)

REMARKS:

REFERRED TO	DATE	RECEIVED BY	DATE
Chitwood 4 cys	11-13		
Distribution environmental file cy			
PDR			
LPDR			
RO (3)			
J. Shafer			
Rouse (2)			
H. Lowenburg			
S. Seiley			
C. Miles			
NSIC			
DTIE			
Nussbaumer			

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ACKNOWLEDGED

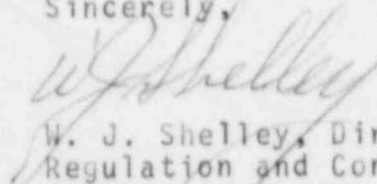
U.S. ATOMIC ENERGY COMMISSION

MAIL CONTROL FORM FORM AEC-3588
(8-60)

Mr. Jack Rothfleisch
November 7, 1973
Page Two

Please let me know if you have further questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. J. Shelley".

W. J. Shelley, Director
Regulation and Control
Nuclear Division
Kerr-McGee Corporation

WJS:m1

TABLE I

Sequoyah Facility - Net Evaporation Data

<u>Year</u>	<u>Annual Pan Evaporation (Inches)</u>	<u>Annual Lake Evaporation (Inches)</u>	<u>Annual Precipitation (Inches)</u>	<u>Net Annual Evaporation (Inches)</u>
1949	57.23	40.06	49.69	(9.63)
1950	52.57	36.80	39.87	(3.07)
1951	58.02	40.61	46.33	(5.72)
1952	64.68	45.28	38.31	6.97
1953	65.82	46.07	41.64	4.43
1954	75.54	52.88	32.41	20.47
1955	67.56	47.29	31.80	15.49
1956	76.30	53.41	31.11	22.30
1957	58.06	40.64	58.40	(17.76)
1958	56.99	39.89	52.78	(12.89)
1959	58.82	41.17	45.84	(4.67)
1960	60.33	42.23	49.58	(7.35)
1961	54.52	38.16	47.44	(9.28)
1962	60.35	42.24	32.97	9.27
1963	67.69	47.38	22.33	25.05
1964	63.91	44.74	38.82	5.92
1965	<u>60.67</u>	<u>42.47</u>	<u>35.11</u>	<u>7.36</u>
17-Year Average	62.30	43.61	40.85	2.76
Maximum	76.30	53.41	58.40	+25.05
Minimum	52.57	36.80	22.33	-17.76