

SEP 30 1975

Mr. W. J. Shelley, Director
Regulation and Control
Kerr-McGee Nuclear Corporation
Kerr-McGee Center
Oklahoma City, Oklahoma 73125

Dear Mr. Shelley:

In your letter of August 13, 1975, to Mr. William Crow you requested an amendment to Source Material License SUB-1010 to allow the unlimited use of treated solvent extraction raffinate as fertilizer. The accompanying supporting data and information was reviewed and several questions were raised which should be answered before we complete the environmental assessment of the disposal methods proposed for the treated raffinate and barium sulfate cake containing the removed radium.

1. In addition to RA-226, the raffinate solutions contain Th-230. What is the activity of the Th-230 in the treated raffinate proposed for use as a commercial fertilizer?
2. What concentrations of Th-230 are present in the commercial fertilizers listed in Table II of the supporting data for the license amendment?
3. The disposal method for the barium sulfate cake containing the precipitated radium is to be transported to the Kerr-McGee Grants, New Mexico, millsite. What activity of Ra-226 and Th-230 will be expected per unit weight of the barium sulfate cake?
4. What is the estimated annual weight of barium sulfate cake that will be formed from the processing of the raffinate wastes for radium removal based on the future 10,000 tons of uranium per year?

8512230068 750930
PDR ADOCK 04008027
C PDR

OFFICE					
EXHIBIT					
DATE					

Mr. W. J. Shelley

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SEP 30 1975

If you have any questions regarding the requested information, please do not hesitate to call me.

Sincerely,

Richard B. Chitwood, Chief
Fuel Cycle Environmental
Projects Branch
Division of Fuel Cycle and
Material Safety

DISTRIBUTION:

RBChitwood

JRothfleisch

WCrow

LCrouse

RHansen

PDR

LPDR

Docket File

NMSS R/F

MF:FCEP R/F

OFFICE	MF:FCEP	MF:FCEP				
SURNAME	JRothfleisch	RBChitwood				
DATE	9/26/75	9/29/75				

MATER LS DATA INPUT S/SNM

4 - SOURCE AND SNM
REFERENCE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

<input type="checkbox"/> NEW LICENSE	<input type="checkbox"/> AMENDMENT TO RENEW LICENSE	<input type="checkbox"/> AMENDMENT TO TERMINATE	<input type="checkbox"/> VOID	DOCKET NUMBER	MAIL CONTROL NUMBER	CHANGE NAME/ ADDRESS
<input type="checkbox"/> NEW LICENSE AND NEW LICENSEE	<input checked="" type="checkbox"/> OTHER AMENDMENT	<input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT		049-08027	01710	<input type="checkbox"/>

B. INDICATIVE INFORMATION:

INDIVIDUAL LICENSEE	NAME (LAST, FIRST, MIDDLE)		NAME (LAST, FIRST, MIDDLE)	
	NAME (LAST, FIRST, MIDDLE)		NAME (LAST, FIRST, MIDDLE)	
	NAME (LAST, FIRST, MIDDLE)		NAME (LAST, FIRST, MIDDLE)	
ORGANIZATION	ORGANIZATION NAME (ALPHABET SEQUENCE)			
	Kerr McGee Nuclear Corporation			
DEPARTMENT OR BUREAU				
BUILDING, STREET		CITY	STATE	ZIP CODE
ADDRESS		Oklahoma City	OK	73125
TYPE OF APPLICANT	<input type="checkbox"/> U. S. GOVERNMENT AGENCY <input type="checkbox"/> INDIVIDUAL LICENSEE <input checked="" type="checkbox"/> ORGANIZATIONAL LICENSEE	DATE REQUEST RECEIVED 15 08-13-75	INSTITUTION CODE 12636	PENDING PROG. CODE ACTUAL PROG. CODE
SECONDARY PROGRAM CODES AS REQUIRED:				
#1	#2	#3	#4	#5
LICENSE NUMBER SUB-1010		DATE LICENSE ISSUED OR ACTION COMPLETED	EXPIRATION DATE	
APPLICANT'S COMMUNICATION DATED: 08-13-75		CLASSIFICATION U	ASSIGNED TO:	RESULTING AMD. NO.

ENCLOSURES:

Supporting Data for Amendment to Source Material License SUB-1010

12 cys

UNCLASSIFIED DESCRIPTION:

Request to allow the unlimited use of treated solvent extraction raffinate fm the Kerr McGee K Sequoyah Facility

DISTRIBUTION:

reg file cy
PDR
LPDR
RO (2)
Rothfleisch

OTHER REFERRALS

NAME	DATE	NAME	DATE
Crow 6 extras	8-19-75		
eeb			