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PDR/LPDR

APR 22 1987

Ms. Jessie DeerInWater
Chairperson
Native Americans for a Clean Environment
Route 2, Box 51-B
Vian, Oklahoma 74962

Dear Ms. DeerInWater:

By letter to the Commission dated March 25, 1987, you requested information on a letter dated August 10, 1983, from Kerr-McGee Corporation to the Nuclear Regulatory Commission regarding permanent disposal methods for the solid waste component of treated raffinate generated at the Sequoyah Facility, Gore, Oklahoma.

The information you requested, in the form of comments and questions, was extracted from your letter and responses are provided in Enclosure 1.

Also enclosed is a copy of the subject letter dated August 10, 1983 (Enclosure 2).

Sincerely,

Original Signed by

Leland C. Rouse, Chief
Fuel Cycle Safety Branch
Division of Fuel Cycle, Medical,
Academic, and Commercial Use Safety, NMSS

Enclosures: As stated

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Docket 40-8027 ✓
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ENCLOSURE 1

Comment 1

"We want to know if this facility was built and if it is presently in operation or ever was in operations (sic)".

Response 1

In a letter dated August 10, 1983, from Kerr-McGee Corporation to the NRC, Kerr-McGee stated: "Since final disposal of the sludge by burial at Sequoyah or processing at the Ambrosia Lake mill has not been approved, Kerr-McGee Nuclear Corporation does not believe it prudent to commence construction of the sludge processing plant."

To date, neither final disposal nor processing of the sludge, as described in Sequoyah Fuels Corporation's (formerly Kerr-McGee Nuclear Corporation) Comprehensive Radiological Solid Waste Management Plan, dated November 13, 1986, has been approved by NRC. Accordingly, SFC has remained consistent with the aforementioned statement and has never constructed (nor operated) a sludge processing plant at the Gore, Oklahoma, site.

Also, based on the information contained in the Solid Waste Plan of November 13, 1986, and through discussions with a licensee representative, SFC no longer intends to include sludge processing, using an onsite sludge processing plant, or disposal by onsite burial as part of its proposed waste disposal process.

Comment 2

"Also, we would like to know if any company is presently reprocessing raffinate sludge for Kerr-McGee for the purpose of recovering uranium."

Response 2

In the Comprehensive Radiological Solid Waste Management Plan, dated November 13, 1986, SFC proposed as a waste management method that the raffinate sludge be shipped to a licensed uranium mill for processing in the mill circuit. However, as described in Response 1 above, the NRC has not authorized Kerr-McGee to process raffinate sludge. No other company or mill is presently processing raffinate sludge for Kerr-McGee for the purpose of recovering uranium.



KERR-MCGEE CORPORATION

KERR-MCGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

ENVIRONMENT AND HEALTH MANAGEMENT DIVISION

August 10, 1983

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. R.G. Page, Chief
Uranium Licensing Branch
Division of Fuel Cycle & Material Safety
NMSS
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: License SUB-1010
Docket Number 40-8027

Dear Mr. Page:

In the last renewal of the subject license, dated October 1977, Condition No. 13 required that we discontinue the use of Pond No. 2 on December 31, 1980 and that Kerr-McGee determine a permanent disposal method for the liquid and solid components of the neutralized raffinate and submit those to the NRC for approval.

Disposal plans for the excess liquid component of the raffinate have been approved and disposal is progressing in an orderly fashion. Disposal of the solid component of the raffinate, raffinate sludge, has been the subject of several proposals as listed below.

1. An application to dispose of raffinate sludge by solidification in an on-site burial pit was submitted on May 22, 1980.
2. An application to amend the prior submittal and reduce raffinate volume by calcination prior to burial or transport calcined raffinate sludge to Kerr-McGee Nuclear Corporation's Ambrosia Lake, New Mexico mill for processing to recover the uranium content was submitted on March 19, 1982.
3. An application to construct and operate a sludge processing plant for calcining raffinate sludge was submitted on September 1, 1982. The NRC subsequently approved construction of the plant on December 28, 1982.

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Mr. R.G. Page
August 10, 1983
Page 2

Processing sludge for its uranium content has been proposed in our renewal application to the State of New Mexico for the Ambrosia Lake mill license. As yet, no response has been received from New Mexico.

Since final disposal of the sludge by burial at Sequoyah or processing at the Ambrosia Lake mill has not been approved, Kerr-McGee Nuclear Corporation does not believe it prudent to commence construction of the sludge processing plant.

Storage space for sludge will be exhausted during 1984 when two cells of the clarifier will be filled. Therefore, we request NRC to amend License SUB-1010 to allow us to store raffinate sludge in Pond No. 4, beginning January 1, 1984. Currently, Pond No. 4 is reserved as a spare for emergencies or storing treated raffinate liquid.

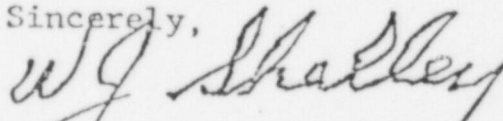
Justification:

Two alternatives exist for storage of raffinate sludge: (1) construction of a new lined pond; or (2) use of an existing pond."

The use of Pond No. 4 for treated raffinate until September 1984 was requested on June 21, 1983. During 1984, we plan to inject at least 5 million gallons of treated raffinate in the well and apply about 2.5 million gallons as fertilizer. As a result, Pond No. 4 will be empty of treated raffinate by mid-1984 and the inventory in Pond No. 3 will also be reduced. The transfer of the sludge from the clarifier to Pond No. 4 would occupy only 4 million gallons of its 15 million gallon capacity. The volume remaining should provide sufficient storage space in the event of a leak in Ponds 3E or 3W. In this event the treated raffinate, after contact with the raffinate sludge, would need to be re-treated -- a small extra cost compared to the construction of an additional storage pond.

Your consideration and approval of this request in a timely fashion will be appreciated. If you have any questions, please call me.

Sincerely,



W.J. Shelley, Vice President
Nuclear Licensing & Regulation

WJS/br