40-8027 B. Crow PDR - 40 Return 396-55 KERR-MCGEE CORPORATION KERR-McGEE CENTER . OKLAHOMA CITY, OKLAHOMA 73125 ENVIRONMENT AND HEALTH MANAGEMENT DIVISION August 26, 1982 CERTIFIED MAIL - RETURN RECEIPT REQUESTED S. MUCLEAR REGULATORY COMMISSION Mr. R. G. Page NMSS Uranium Licensing Branch Division of Fuel Cycle & Mat'l Safety, NMSS OCKETED U.S. Nuclear Regulatory Commission USHAC Washington, D.C. 20555 SEP 1 5 1982 MAIL SECTION RE: License SUB-1010 DOCKET CLERK Docket No. 40-8027 ATTN: Mr. W. A. Nixon: Please refer to the application for amendment to License SUB-1010 Docket 40-8027 requesting approval to use the deep disposal well at the Sequoyah facility for the permanent disposal of treated raffinate. Enclosed is a letter from the Oklahoma State Department of Health, Industrial Waste Management Division transmitting a draft permit for the use of the well for this purpose. Note that a notice is attached which the applicant is required to have published and broadcast on a local radio station. A copy of the pertinent regulation is enclosed. The date of publication will be September 2, which requires comments to be due by October 18. If I can supply additional information, please let me know. Sincerely, Shelley, Vice-President aclear Licensing & Regulation FEE EXEMPT,

WJS/pd

cc: Bill Crow, U.S.N.R.C.

B. Crow State Board of Kealth AOBERT D MCCULLOUGH, D.O. PRESIDENT JOAN K. LEAVITT, M.D. EDWARD H. FITE, JR., M.D., VICE PRESIDENT HAROLD A TOAZ SECRETARY WALLACE BYRD M D Oklahoma State Department of Kealth JOHN B CARMICHAEL, D.D.S. JAMES A COX JR . M.D. LINDA M. JOHNSON, M.D. WALTER SCOTT MASON, HI W. A. "TATE" TAYLOR Post Office Box 53551 Oklahoma City, Oklahoma 73152 August 24, 1982

Mr. W. J. Shelley, Vice-President Nuclear Licensing and Regulations Ker-McGee Corporation Kerr-McGee Center P.O. Box 25861 Oklahoma City, Oklahoma 73125

Dear Mr. Shelley:

The Industrial Waste Division of the Oklahoma State Department of Health has completed review of the application and addenda for the operation of the injection disposal well at the corporation's Sequoyah facility. A draft permit is under preparation by the Divison, however, the following requirements need to be satisfied before the final permit could be issued:

- Two cross-sections of the geological formations normal to each other and passing through the well bore and extending over a twomile radius.
- 2. Closure plan(s) for the disposal facility.
- Demonstration of financial assurance and ability to operate, maintain and close the facility.

The Division would be happy to discuss any of these requirements with you or members of your staff, should that need arise.

Very truly yours,

Donald A. Hensch, P.E., Director

Industrial Waste Division Waste Management Service

DAH/JK/sh

OKLAHOMA STATE DEPARTMENT OF HEALTH 1000 Northeast 10th Street Post Office Box 53551 Oklahoma City, Oklahoma 73152

INDUSTRIAL & SOLID WASTE SERVICE ENVIRONMENTAL HEALTH SERVICES

DRAFT

PERMIT

for an
"OTHER INDUSTRIAL WASTE" INJECTION WELL

PERMIT NUMBER

Kerr-McGee Nuclear Facility

DATE

August, 1982

EXPIRATION DATE: August, 1987

having complied with the requirements of the law is hereby granted permission to operate, monitor and maintain an Other Industrial Waste injection disposal well located 3094 feet from the South line and 1482 feet from the East line of Section 3, Township 12 North, Range 21 East of Sequoyah County, Oklahoma.

This site shall be subject to the following provisions:

- 1. The permittee shall operate and maintain the facility in accordance with the Oklahoma Controlled Industrial Waste Disposal Act, the Rules and Regulations for Industrial Waste Management, and the application for permit and addenda as approved by the Oklahoma State Department of Health.
- 2. Injection into the disposal well is strictly limited to that of the treated raffinate from the processing facility at Gore.
- 3. The concentrations and radioactivity levels of the waste constituents, in particular that of the Nitrates and Radium, shall not exceed 45 mg/l and 10 pci/l respectively. The levels of the injected raffinate shall not exceed 20% of the level of activity naturally occuring in the receiving formation.
- 4. The injection of five million gallons (5 x 10⁶) per year within sixty (60) days each year shall be permitted. The same injection rate will be maintained throughout the permit duration.

	(Continued)	Chief, Industri	al & Solid Was	ste Service
	Deputy Commissioner for Environmental Health Services			
			Commissioner	of Health

- The injection pressure shall not to exceed 300 psi.
- 6. A monitoring well located about 200 feet West or Southwest of the injection well shall be installed to monitor the groundwater quality and waste migration. This well is to be properly constructed and completed to a depth of 400 feet.
- 7. Existing monitoring well number six (#6) (5000 feet East of injection well) shall be considered as part of the monitoring network due to its location and depth.
- Representative samples of the raffinates of the holding ponds shall be obtained and analyzed by permittee prior to injection from each pond.
- Seismic monitoring instruments shall be used to give background and post injection pressures.
- 10. Continuous monitoring of the injection and annulus pressures shall be conducted throughout the injection period. Flow rates and temperatures shall also be recorded continuously and reported on charts.
- Groundwater monitoring and sampling via both wells shall be carried out on a monthly basis.
- Monitoring injection and test results shall be reported to the Industrial Waste Division of Oklahoma State Department of Health on a monthly basis.
- 13. Background information of formation fluids from both monitoring wells and injection well shall be established before injection commences.
- 14. Any change in operations (injection rates, duration, injection pressures, etc.) shall require prior approval by the Department.

15. All monitoring, recording and safety instruments shall be properly installed, tested and housed.

Donald A. Hendell, P.E., Direct Industrial Waste Division

Waste Management Service

ISSUANCE OF DRAFT PERMIT

NOTICE

On July 17, 1981, an application for an operating permit for an "other" industrial waste facility was submitted to the Oklahoma State Department of Health, Industrial Waste Division, by Kerr-McGee Nuclear Corporation, P.O. Box 25861, Oklahoma City, Oklahoma, 73125. The facility is to be located at the Kerr-McGee Nuclear Corporation's Sequoyah uranium hexafluoride (UF6) facility, the location of which is described as: SE ¼, SW ¼, NE ¼, Section 21, Township 12 North, Range 21 East, Sequoyah County, Oklahoma.

The application was filed for the purpose of operating a non-hazardous waste storage well (Oklahoma State Department of Health Regulations, Chapter 9, category: "Other" Industrial Waste Disposal) for disposition of Sequoyah Facility pretreated, liquid effluent (treated raffinate). Treated raffinate is a near neutral ph, ammonium nitrate solution. The treated raffinate will be injected through the waste storage well which penetrates into the Arbuckle formation to a total depth of approximately 3,122 feet. The operation of the waste storage well will provide for an integrated system of liquid effluent control at the Sequoyah UF6 facility.

Additional information may be obtained from W. J. Shelley, Kerr-McGee Corporation, P.O. Box 25861, Oklahoma City, Oklahoma, 73125, (405) 270-2631, or from the Director of the Industrial Waste Division, Oklahoma State Department of Health, by calling (405) 271-5338 or writing to the address listed below.

A draft permit has been prepared and is available from the Industrial Waste Division, Oklahoma State Department of Health, P.O. Box 53551, Oklahoma City, Oklahoma, 73152. Any person wishing to do so may submit comments on the draft permit. Additionally, any person residing or doing business in Oklahoma may request an informal public meeting to present written or oral views opposing the application. Such request must be in writing, and must state that the site is being opposed. All comments and request for an informal public meeting must be written and received at the Industrial Waste Division, Oklahoma State Department of Health, P.O. Box 53551, Oklahoma City, Oklahoma, 73152, by the close of business

hearing on the merits of the application. Such request must be in writing and must be received at the above address by the close of business on (date) ."

The statement: "The Industrial Waste Division is currently reviewing the application, and will consider all comments pertaining to physical and technical suitability of the proposed facility. Following this review, and upon certification that the application is complete, the Department will issue either a draft permit or a draft denial of the permit, and will allow further comment thereon by additional published notice. Any requested meetings or hearings shall be held prior to formal permit issuance or denial."

8.8.2.2 8.8.2.2

Upon issuance of a draft permit, the applicant shall cause to be published a notice of the availability of the draft permit in at least two (2) newspapers of general circulation in the general area of the proposed facility, and have said notice broadcast over at least one (1) local radio station.

8.8.2.2.1 8.8.2.2.1

The required notice shall appear in the two (2) newspapers at least twice, with publication dates approximately one (1) week apart and as nearly as possible coinciding with each other.

8.8.2.2.2 8.8.2.2.2

The required notice shall be broadcast at least twice on one day, coinciding as nearly as possible with the date of first publication in the newspapers. At least one broadcast shall occur between the hours of 8:00 a.m. and 12:00 noon, and at least one shall occur between the hours of 6:00 p.m. and 10:00 p.m.

8.8.2.2.3 8.8.2.2.3

The notice shall provide at least forty-five (45) days for submission of comments, beginning the first day after the first publication date. Should the last day of this period fall on a weekend or holiday, the comment period shall be extended to the next working day.

8.8.2.2.4 8.8.2.2.4

The notice shall follow the format shown in Appendix 8-B, and shall contain at least the following information:

- (a) Name and address of the Industrial Waste Division of the Oklahoma State Department of Health.
- (b) Name and address of the applicant and facility, including legal description of the facility.
- (c) A brief description of the business conducted and activity proposed at the facility.
- (d) Name, address, and telephone number of a person or persons from whom additional information can be