



# KERR-McGEE NUCLEAR CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

May 21, 1975

Regulatory

File On.



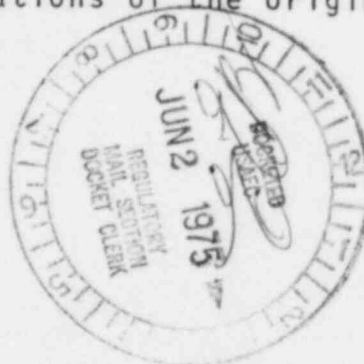
Mr. Richard B. Chitwood, Chief  
Fuel Cycle Environmental Projects Branch  
Division of Material and Fuel Cycle Facility  
Licensing  
Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Chitwood:

Kerr-McGee Nuclear Corporation, under License #SUB-1010, Docket #40-8027, is authorized to possess and use unlimited quantities of natural uranium for the purpose of conversion of ore concentrates to UF<sub>6</sub>. The initial license, granted in 1970, expired on February 28, 1975, and an application for renewal was submitted on January 24, 1975.

During 1974, it became apparent that the future growth of the Uranium market and the requirement for the services supplied by the Sequoyah Facility would reach a level during 1978, which would make it advantageous for Kerr-McGee Corporation to enlarge the capacity of the Sequoyah Facility to 10,000 TPY. Several months were occupied with establishing the scope of the work, selecting an architect engineer and considering a building contractor. The schedule eventually established contemplated a design period of approximately 18 months and a construction period commencing in early 1975 with completion scheduled for December 1977. This schedule was selected in order:

1. to provide ample time for long delivery of special equipment,
2. to minimize the impact of construction activities on continuing production operations of the original plant, and



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**Kerr McGee Nuclear Corp.  
Oklahoma City, OK**

DATE OF DOCUMENT  
**May 21, 1975**

DATE RECEIVED  
**May 27, 1975**

NO  
**1073**

LTR  
**X**

MEMO

REPORT

OTHER

TO

ORIG

CC

OTHER

**Richard Chitwood**

ACTION NECESSARY ☐  
NO ACTION NECESSARY ☐

CONCURRENCE ☐  
COMMENT ☐

DATE ANSWERED  
BY

CLASSIF  
**U**

POST OFFICE  
REG NO

FILE CODE  
**Docket No. 40-8027**

DESCRIPTION (Must Be Unclassified)  
**Ltr. states additional environmental  
info has been delayed until July 1,  
1975**

REFERRED TO

DATE

RECEIVED BY

DATE

**Chitwood  
3 extras**

**6-2**

**environmental file cy  
PDR  
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RO (2)  
Rouse (2)  
J. Shafer**

ENCLOSURES  
**Diagram (Sequoyah Facility showing new  
and proposed additions)**

**6 cys**

**DO NOT REMOVE**

REMARKS

**1073 eeb**

Mr. Richard B. Chitwood  
May 21, 1975  
Page Two

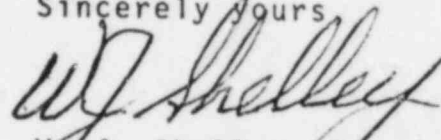
3. permit better utilization of technical and construction personnel, thus avoiding a large buildup of temporary personnel for a short period.

It was recognized that an amendment to License SUB-1010 permitting the operation of the expanded plant and submission of environmental information amending the earlier environmental statement for the expanded facility were required. Several verbal discussions were held with the licensing staff on the subject. Unfortunately, due to the press of events and demands upon the staff in late 1974 and early 1975, the application and additional environmental information has been delayed until approximately July 1, 1975.

Therefore, in accordance with 10 CFR 40.14, Kerr-McGee Nuclear Corporation requests a specific exemption from the requirements of 10 CFR 40.31(f). A description of the need for and justification of this exemption is described in greater detail in the enclosure to this letter.

Initial construction is scheduled to commence upon your approval of the request. Your prompt consideration of this request is solicited.

Sincerely yours



W. J. Shelley, Director  
Regulation and Control

Kerr-McGee Nuclear Corporation

WJS:m1

Encl

## ENCLOSURE

Kerr-McGee Nuclear Corporation (formerly Kerr-McGee Corporation, Uranium Division) designed and constructed, commencing in 1967, a Conversion Plant (the "Sequoyah Facility") for the processing of Uranium ore concentrates to purified  $UF_6$ . After appropriate submission of application, License #SUB-1010, Docket #40-8027, was received on February 28, 1970. Operations have been in progress continuously during the ensuing period.

In accordance with NEPA review requirements, Kerr-McGee submitted its initial Environmental Report on the Sequoyah Facility on November 8, 1971, followed by a revised report on November 24, 1971, and Supplemental Reports in June 1972, December 1972, and August 1973. The application and the various reports resulted in the issuance of a final Environmental Statement by the United States Nuclear Regulatory Commission in February 1975.

An amendment requesting the extension of the operating license was submitted to the U.S. NRC on January 24, 1975, and on February 13, 1975, the NRC responded by extending License SUB-1010 until such time that review was completed.

During 1974, marketing projections made it evident that, commencing in 1978, the potential market for the services of the Sequoyah Facility exceeded the present installed capacity for these services and planning was commenced to expand the Sequoyah processing capacity. The ensuing months have been occupied with engineering planning, preliminary cost estimation, corporate review and authorization, selection of an architect engineer and consideration of various modes and schedules of construction.

The schedule selected provided that engineering would commence in June 1974 and continue for approximately 18 months. Supervision would be supplied by Kerr-McGee during the construction period. It is planned that construction would be initiated in early 1975 and proceed, one area at a time, until the expansion was completed at the end of 1977. Such a schedule permits the least interruption of continued production operations and minimizes impact upon local labor markets for short term construction employees and upon the Kerr-McGee employees assigned to the expansion project.

#### Environmental Impact

The environmental impact of operation at the expansion level will not be significantly greater than that described in the FES, page ii, paragraph 3.

Kerr-McGee Nuclear Corporation is cognizant of the limitations placed upon plant operation by paragraph 7, page iv, of the FES and is currently implementing the limitations described.

Development of the environmental information on plant operation at the expanded rate is under way and will be submitted to the U.S. NRC by July 1.

#### Environmental Effects of Construction

Construction and installation of the additional expansion will involve the following:

1. The construction outside of the current confines of the building as shown on the attached drawing, SQ-1, of a fluorine cell building to provide elemental fluorine for the flourination reaction.
2. The enlargement of the tank farm by the installation of an additional ammonia tank immediately to the west of the current tank and the installation of additional nitric acid and hydrofluoric acid tanks immediately west

of the fuel oil storage tank and north of the current tank farm. These installations will be made with exactly the same instrumentation and protective containment dikes as described in Supplement #2.

3. An additional fuel oil tank will be installed to the east of the present tank. Coal fired boilers are being investigated by the architect engineer as an oil conservation measure.

4. Process Additions

Since the plant was originally constructed to provide for additional capacity, the majority of the process additions will involve the addition of unit processes in space provided in the initial construction. There are two exceptions:

- a. An additional raffinate tank will be installed adjacent to the current tanks on the north side of the solvent extraction building.
- b. An additional re-extraction column will be installed on the north side of the solvent extraction building.

As can be seen by this description and the attached drawing, SQ-1, no disturbance to the environment during the construction phase will occur except for the removal of soil for piers and foundations (an estimated 500 cubic yards) and its disposal within the present area of the plant.

#### Exemption

In view of the above description, Kerr-McGee Nuclear Corporation requests an exemption from the requirements of 10 CFR 40.31(f) in accordance with the provisions of 10 CFR 40.14 for the following reasons:

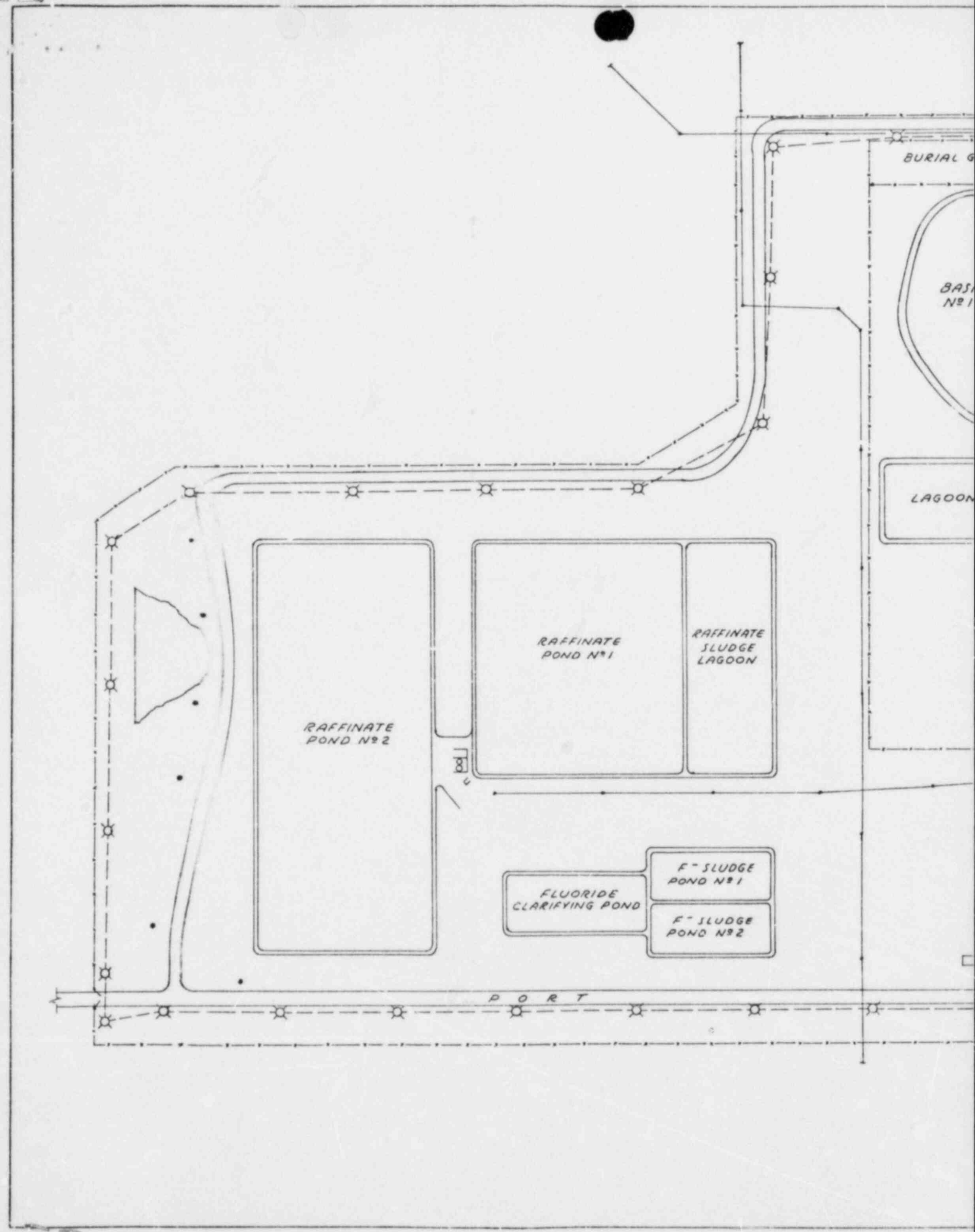


1. To allow scheduling of initial construction work without delay, pending submission of more detailed environmental information on the expansion planned, in view of the minimal environmental impact of this work.
2. To reduce the impact of additional construction personnel on nearby communities through the extended schedule described.

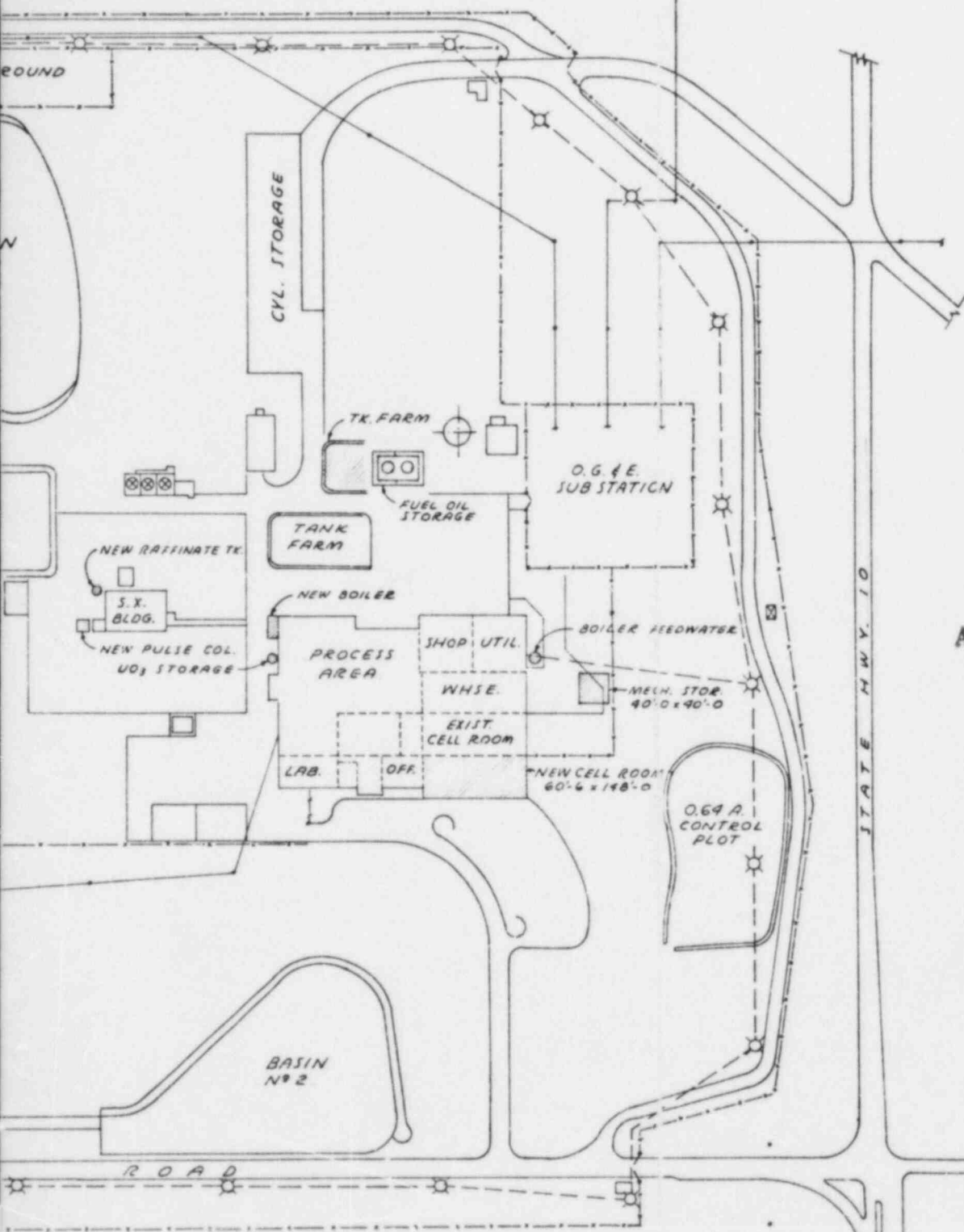
We believe, in support of this request, that the standards provided for exemption in 10 CFR 14(b)(2) are met as follows:

1. No adverse effect to the environment will be caused by this initial construction activity beyond that already described in the initial submittals noted above and in the conclusions described in the FES.
2. Any adverse impact can be redressed by the termination of construction, in the event that it is concluded that insufficient benefit will be derived from the construction.
3. Continuation of the initial construction activities would not foreclose upon any alternates.
4. Postponement of initial construction would delay the entire construction schedule and the employment of approximately 24 people in a labor surplus area.

In view of the above, the public interest will be best served by allowance of the limited exemption requested.








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NO.	DATE	REVISION	BY	APP.
 <b>KERR-McGEE NUCLEAR CORPORATION</b> KERR-McGEE CENTER OKLA. CITY, OK. 73125				
DESIGNED K.B.	DATE 5-20-75	SEQUOYAH FACILITY SHOWING NEW AND PROPOSED ADDITIONS		SCALE 1" = 100' SHEET NUMBER SQ-1