HEALTH ENVIRONMENT department

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT DIVISION
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DEPUTY SECRETARY

M E M O R A N D U M

TO: THOMAS E. BACA, Director, EID

THRU: CUBIA L. CLAYTON, Assistant Director, EID
THEODORE A. WOLFF, Chief, Radiation Protection Bureau, EID
GERALD W. STEWART, Program Manager, Uranium Licensing Section, Radiation Protection Bureau, EID

SUBJECT: RECOMMENDATION FOR ISSUANCE OF A RADIOACTIVE MATERIAL LICENSE TO GULF MINERAL RESOURCES COMPANY

DATE: December 4, 1980

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1. Attached for your review/concurrence is a proposed Radioactive Material License which is recommended for issuance under Section 3-310 of the New Mexico Radiation Protection Regulations. Also enclosed is a draft letter of notification to Gulf and a proposed press release.

2. This recommendation for issuance of a license is a follow-up to an earlier memo dated May 23, 1980 that summarized proposed license conditions and recommended a public hearing in order to receive testimony and public comments on the preliminary proposal for issuance of a license.

3. Subsequent to the May 23, 1980 recommendation, and following additional review and evaluation of the application, public hearings were held during the week of September 22 to 26, 1980 on the applicant's Groundwater Discharge Plan and Radioactive Material License application.

4. The staff of the Radiation Protection Bureau has reviewed the transcripts of the hearings, supplemental testimony, and final comments for the administrative record. Based on this review proposed final license conditions were developed (copy attached). It is noted that the Radioactive Material License conditions are supplemented by conditions developed by the EID Water Pollution Control Bureau, EID legal staff and, by the Office of the State Engineer of New Mexico.

5. This proposed action has been coordinated with the Office of Legal Services and the Water Pollution Control Bureau.

JAMES L. MACKIN

Attachments:
(1) Draft license (2) Proposed letter of submission (3) Press release
(4) Copy of memo to J. Stewart and T. Wolff from J. Mackin, dated 11-21-80 ← SEE 11/21/80 FOR COPY OF ATTACHMENT 4

HEALTH ENVIRONMENT department

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

RADIOACTIVE MATERIAL LICENSE

Pursuant to the New Mexico Radiation Protection Act of 1971, and the Radiation Protection Regulations Part 3, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect, of the New Mexico HED Environmental Improvement Division and to any conditions specified below.

1. LICENSEE NAME	3. LICENSE NUMBER
Gulf Oil Corporation (Gulf) acting by and through its division, Gulf Mineral Resources Co.	NM-GUL-ML-00
2a. ADDRESS	**4. EXPIRATION DATE**
1720 South Bellaire Street Denver, Colorado 80222	December , 1980
	5. PREVIOUS/OTHER LICENSE NUMBER
2b. TELEPHONE NO.	**2c. ACTUAL LOCATION OF OPERATION**
(303) 758-1700	Near the town of San Mateo, McKinley County, New Mexico (see 9.(1) below).

6. RADIOACTIVE MATERIALS (element and mass number)	7. CHEMICAL or PHYSICAL FORM	8. MAXIMUM QUANTITY Licensee may Possess at Any One Time
All natural radioisotopes of uranium ore encountered in milling of natural uranium.	Any required in the milling production of U_3O_8.	As necessary for the throughput authorized in Item 9.(1).

CONDITIONS

(1) AUTHORIZED USE (Unless otherwise specified, the authorized place of use is the location stated in Item 2c. above)

Uranium ore processing at the licensee's Mt. Taylor Uranium Mill is authorized at a nominal throughput of 4200 dry tons per stream day in accordance with the procedures described in the licensee's application dated May 6, 1978, supporting documents, and with written documentation submitted in support of the license application (introduced at public hearing at Apodaca Hall, PERA Building, Santa Fe, New Mexico on September 26, 1980 as EID Exhibits EID-4 and EID-5). The authorized place of use is at the licensee's uranium milling facility located in Lower San Lucas Canyon, Section 1, T13N, R8W, McKinley County, New Mexico, approximately 3.5 miles north of the town of San Mateo, and at the tailings disposal area located in La Polvadera Canyon, Sections 14, E 1/2 15, and N 1/2 23, T14N, R8W, McKinley County, New Mexico, approximately six miles north of the mill site.

(2) The licensee is hereby exempt from the requirements of 4-220.E.2 of the Radiation Protection Regulations for areas within the mill provided all entrances to the mill are conspicuously posted in accordance with 4-220.E.2 and with the words "any area within this mill may contain radioactive material."

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(3) In addition to the planned program of staged covering and reclamation of tailings, a formal documented program of fugitive dust control at the mill ore handling and storage areas and at the tailings trenches shall be developed and followed. The effectiveness of the control methods used shall be evaluated quarterly by means of documented inspections of the mill ore handling and storage areas and of the tailings disposal area. The inspection documents and evaluations shall be made available for EID inspection.

(4) The license shall implement the environmental monitoring program in the licensee's application. The licensee shall establish a control program that shall include written procedures and instructions and shall provide for periodic management audits to determine the adequacy of implementation of the control program. The licensee shall maintain sufficient records to furnish evidence of compliance with the environmental controls. In addition, the licensee shall annually review land use in the area within 5 miles of the mill site and tailings disposal site respectively and document any significant land use changes. The records of the environmental control program shall be made available for EID inspection.

(5) The licensee shall conduct the meteorological monitoring program documented in the licensee's application. The data obtained from this program shall be tabulated and made available for EID inspection.

(6) The licensee shall, on a quarterly basis, collect representative samples of the evaporation pond liquid and by suitable measurement estimate the total volume of liquid in the pond. The liquid samples shall be assayed for uranium, Ra-226, Th-230, Pb-210, Po-210, total dissolved solids and pH. The data shall be submitted quarterly to the EID. The sampling requirements of this condition shall be coordinated with the provisions of the Groundwater Discharge Plan.

(7) Mill tailings or any separated materials therefrom (e.g. sands) shall not be transferred from the project site without specific prior approval of the Division. Use of mill tailings or any separated materials therefrom for mine backfilling will require specific prior approval of the Division obtained through application for amendment of this license.

(8) Daily inspections of the tailings disposal facilities shall be conducted and documented. The licensee shall immediately notify the Radiation Protection Bureau, Environmental Improvement Division, by telephone and in writing of any failure in a tailings or waste retention system, slurry pipeline, or other plant system which results in a release of radioactive material into unrestricted areas.

For the New Mexico HED Environmental Improvement Division

Date _____ By _____

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(9) Within six months after construction of the mill is completed, and prior to the discharge of tailings the licensee shall submit to the Division an emergency plan describing the administrative and technical procedures to be used for responding to unanticipated releases of radioactive material into unrestricted areas. The radioactive material releases will be assumed to result from realistic accident scenarios that are based upon the actual design and capacity of the mill.

(10) The licensee shall accomplish annually a stability and safety evaluation in accordance with the guidelines of NRC Regulatory Guide 3.11 of the diversion system, evaporation pond dam, and exposed tailings disposal trench walls. The evaluation shall be made by a professional engineer registered in the State of New Mexico. A report shall be furnished to the Division within 90 days of the evaluation.

(11) The licensee shall, within 4 years following the date of issuance of the license, submit to the Division detailed plans for reclamation of the sedimentation and evaporation ponds during final site cleanup and decommissioning. The plans should include procedures for removing and ultimately disposing of contaminated materials from the mill site and the sedimentation and evaporation ponds. In addition, the licensee, as part of each renewal of the license, shall submit a revised plan to the Division for review and approval.

(12) The settling and evaporation pond areas shall be maintained as "restricted areas". To insure that such areas remain restricted to the general public each area shall be enclosed with a fence designed to minimize human and animal intrusion and posted with signs which read "No Trespassing" and "Any area beyond this fence may contain Radioactive Material."

For the New Mexico HED Environmental Improvement Division

Date _____ By _____

December , 1980

FOR RELEASE DECEMBER , 1980

Contact: Thomas E. Baca
827-5271, ext. 200
Cubia Clayton
287-5271, ext. 244

SANTA FE -- Thomas E. Baca, Director of the Environmental Improvement Division of the Health and Environment Department announced today his approval of the discharge plan and uranium mill license for the Gulf Mineral Resources Co. Mt. Taylor Uranium Mill Project. The announcement followed a week long public hearing in Santa Fe in September, 1980.

The project will consist of construction and operation of a mill with a nominal processing capacity of 4200 dry tons of uranium ore per stream day. The licensee has designed for a 20-year project lifetime. At full capacity the mill will produce approximately 4200 tons of yellowcake (uranium oxide) per year.

Waste materials (tailings) from the mill will be transported by pipeline to a disposal site six miles north of the mill. Sequential preparation, filling and reclamation of below grade tailings trenches are planned. Compared to conventional single dam impoundments, this disposal method will decrease significantly the amount of tailings exposed (and radon exhaled) during operation of the mill.

December , 1980

Mr. F. S. Mooney, Senior Vice President
Gulf Mineral Resources Co.
1720 South Bellaire Street
Denver, Colorado 80222

Dear Mr. Mooney:

In accordance with Section 3-310 of the New Mexico Radiation Protection Regulations I have approved the issuance of the enclosed Radioactive Material License (NM-GUL-ML-00) for construction and operation of the proposed Mt. Taylor Uranium Mill Project. In addition to the required license conditions Gulf is hereby requested to:

(1) provide the Division with at least 45 days advance notice of the estimated operational date in order to provide for a pre-operational inspection by the EID of the mill and tailings disposal site and

(2) advise the EID of any changes in the mill circuit, equipment, engineering methods and key staff members responsible for operational safety and environmental protection.

The EID looks forward to cooperations with the Gulf staff during the construction and operational phases of the Mt. Taylor Project.

Sincerely,

TEB

Enclosures