KERR-MCGEE CORPORATION

KERR-McGEE CENTER . OKLAHOMA CITY, OKLAHOMA 73125

ENVIRONMENT AND HEALTH MANAGEMENT DIVISION

February 4, 1983

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Don Hensch, Director Industrial Waste Division Oklahoma Department of Health 1000 Northeast 10th Street P.O. Box 53551 Oklahoma City, OK 73152

Dear Mr. Hensch:

We have received the report entitled "Underground Injected Disposal of Other Industrial Waste at the Kerr-McGee Nuclear facility near Gore, Oklahoma (Permit No. IW 68005)" prepared by your group.

After a thorough review of this document, we offer the following comments which include recognized typographical errors and additions or alterations intended to clarify the discussion.

Introduction, page 1 (Changes underlined):

Paragraph 1, 2nd sentence: Reference to Barium 236 is incorrect and should read Radium 226.

Paragraph 1, last sentence: The original application was denied by the AEC in 1973. Surface disposal by applying the treated raffinates to pasture land was granted with some conditions, in 1982.

Paragraph 2, 2nd sentence: "The treatments, however, elevated the nitrogen (NH2) content..."

Disposal and Confining Formations (page 2):

Page 2, 1st sentence: "The base of the Arbuckle Formation is at 3102

2nd sentence (P.2): "...the effective disposal zone is substantially FEE EXELOT smaller than that."

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4th full paragraph, last sentence: "The second fault also maintains the same northeast orientation. Another fault is located about five (5) miles north-northwest..."

The Waste Stream (p.2):

1st paragraph, 3rd sentence: "The raffinate is subjected to ammonia and barium treatments (neutralization/precipitation/decantation) yielding the final waste with a 1980 average nitrogen content of 36.5 grams..." (note: This change also identifies the proper order for raffinate treatment steps).

2nd paragraph, 1st sentence (p.2): "The liquid waste generation..."

2nd paragraph, 2nd sentence: "This treated waste is transferred..."

Attachments to OSDH Report:

Item III - Geological Information - Description of Injection Unit:

(p.2) Chemical Characteristics of formation fluid:

Sp. Gravity = 1.104

TDS = 142,000ppm

Geohydrology of Freshwater Aquifers in Vicinity:

Gross alpha = 14 pCi/1

Ra-226 = 7.5 pCi/1

(Source: Monitor Well 2307 - June, 1981)

(p.3) Item IV Waste Characteristics:

Avg. N - 36.5 gms/1

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(p.4) Item VI Operation Characteristics:

Special requirements: (Total N#, Radium- $\underline{60}$ gms/l and 10 pCi/l).

Since this document was prepared at the request of the USNRC, we have taken the liberty of providing a copy to them.

Please advise if you have questions related to this subject that we can answer.

Sincerely

W.J. Shelley, Vice-President Wuclear Licensing & Regulation

WJS/ALD/pd-m

ycc: W. Crow, USNRC