UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
FIRST INTERNATIONAL BUILDING
1201 ELM STREET
DALLAS, TEXAS 75270

October 12, 1976

Mr. Raymond Cooperstein
Fuel Cycle and Material Safety Division
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Cooperstein:

This is in reference to our telephone conversation on September 30 regarding the plans at the Kerr-McGee Sequoya Conversion Plant to use treated raffinate for on-site irrigation. I have discussed this matter with EPA enforcement and legal staff and believe I can provide you with an initial indication of EPA's views on the proposed project, based on the facts you presented during our telephone conversation.

A controlling factor is whether or not a part of the raffinate from the operation will reach the off-site hydrologic environment, either through collection and controlled release, or through natural run off. This is one point we did not discuss over the telephone, to my recollection. If such will not occur, EPA would not consider that the present discharge permit will be violated.

If, however, waters leaving the site and entering the off-site hydrologic environment will contain undesirable impurities from the operation significantly in excess of average natural background levels typical for the Region, then EPA will consider the discharge to be subject to the discharge permit. Modification of the NPDES discharge permit would thus be required since the existing permit stipulates no discharge of raffinate wastewater. Since the raffinate contains low levels of radioactivity, and the plant is an NRC-licensed facility, we presume the proposed operation will be reviewed by the U.S. NRC for prior approval. In their review, the NRC would evaluate the acceptability of the radioactivity levels in the raffinate and, in particular, the long term build-up of radioactivity in the soil and possible reconcentration mechanisms that might lead to future levels of radioactivity which are harmful to man or the environment.

We discussed the possibility that the NRC might require a system of dikes and holding pond to collect run off for return flow and

IV

1807

release excess precipitation run off under controlled conditions. In such an event, EPA would require modification of the NPDES permit. I believe, based on my meeting with enforcement and legal staff, that the NPDES permit could be written to allow monitored release of excess precipitation run off. Excess precipitation flow from initial flushing of the field will likely contain high concentrations of contaminants and will have to be returned to the holding pond.

I hope you find this reply responsive to your request for information. If I can be of any further assistance, please let me know.

Sincerely,

H. D. May
Radiation Representative

cc: John C. White, Regional Administrator, EPA Region VI
Eloy R. Lozano, Director, Air & Hazardous Materials Division, EPA Reg. VI
Dr. Norman E. Dyer, Chief, Pesticides & Hazardous Materials Branch
EPA, Region VI
Bud Lively, Acting Director, Enforcement Division, EPA Region VI
Jim Collins, Chief, Legal Branch, EPA Region VI