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KERR-McGEE NUCLEAR CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

October 15, 1980

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ross A. Scarano, Chief
Uranium Recovery Licensing Branch
Division of Waste Management
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

RE: SUA-1378, SPRB-Evaporation Pond Contingency Plan
License Conditions 16 and 20

Dear Mr. Scarano:

Please refer to your letter of September 25, 1980, amending SUA-1378 by authorizing a change of date for submitting the contingency plan. This letter contains a discussion of our Evaporation Pond Contingency Plan for the SPRB uranium extraction/IX-program. Additionally, for your review, we are including a drawing (ATW-05-C-01) of the pond design showing the two cells, separating dam and leak detection system.

Results of soil testing (standard penetration test - permeability) and other specific requirements outlined in license condition 20 will be submitted upon completion.

Please let me know if any additional information is required.

Very truly yours,

W. J. Shelley, Vice President
Nuclear Licensing & Regulation
Environment & Health Management

WJS/hmw

Enclosures

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15 October 1980

Kerr-McGee Nuclear Corporation
Source and By-Product Material License
Number SUA-1378, LC-16

CORRECTIVE ACTION IN CASE OF LEAKAGE FROM THE
EVAPORATION POND

The pipeline collection system is designed to detect leakage of the pond contents. A routine sampling procedure will be used to monitor pond leakage. The sampling frequency will be as follows:

- a) Daily for the first five days after beginning use of the basin, then
- b) weekly for four weeks, then
- c) two week intervals.

The detection system is normally expected to be dry. If no liquid is obtained from a sampling point, the sampling record will be marked "Dry". In the event that liquid is collected, it will be analyzed for chloride. If the liquid sample shows an unusually high chloride content, an estimate of the leak rate will be made by using a suitable pumping method with volume per unit of time recorded. The severity of the leak can be determined by this procedure. Samples showing high chloride content will also be analyzed for the following constituents: sodium, ammonium, radium, gross alpha and gross beta. If the leak rate is considered low, a more frequent sampling may be done and the pipeline system periodically pumped dry and the pumped seepage will be returned to the basin.

A more severe problem would be flooding of the pipeline system. If this condition is found to exist, the contents of the affected basin will be transferred as soon as possible to the spare basin and the leak will be located and repaired. The sampling frequencies listed previously will be used each time a basin is first put into service.