

PDR TCS



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SEP 25 1980

WMUR:RSH  
Docket No. 40-8727  
SUA-1378, Amendment No. ?

Kerr McGee Nuclear Corporation  
ATTN: Mr. William J. Shelley  
Kerr McGee Center  
Oklahoma City, Oklahoma 73125

Gentlemen:

Pursuant to Title 10, Code of Federal Regulations, Part 40, and in accordance with your application dated August 27, 1980, Source Material License No. SUA-1378 is hereby amended by revising Condition No. 16 to read as follows:

- 16. The evaporation pond shall be re-designed to include the following additional features. The pond shall consist of two cells roughly equivalent in size and separated from each other by a dividing dam so in the event there was major leakage, solutions could be pumped from one pond into the other. The dam shall have the same height as the Earth Fill Dike (dike) that surrounds the entire pond. The dam surfaces (as well as the bottoms of the cells) shall be lined with 30 mil reinforced hypalon. The dividing dam shall be constructed of the same fill materials as the dike. Further, the dam shall have 6 inches of sand fill below the lining.

KMNC shall establish a leak detection system beneath each cell of the solar evaporation pond. Each leak detection system shall be independent of the other and shall consist of a network of pipes (as described in Section 4.1 of the Environmental Appraisal), embedded below the liner and from which sample fluids will be collected. The bottom of the cells shall be sloped with a gradient (3° or more) toward the collection pipes, so that any leakage will be directed toward the pipes and collected. The pipes shall be laid down in depressed trenches located at the lowest points of the sloped surfaces of the cell bottoms. The permeability of the soil in which the pond lining and sand fill will be embedded shall be lower, by at least two orders of magnitude, than that of the sand

fill. KMNC shall institute and implement a quality assurance program for the construction of the pond to insure the materials are being installed according to the requirements specified above. Construction of the pond shall be conducted under the supervision of an individual qualified to determine, through on-site inspection and testing, that construction is being carried out meeting design requirements.

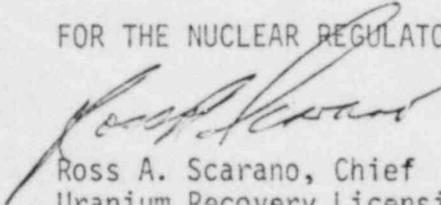
Samples shall be collected at two week intervals from the leak detection system and analyzed for the following constituents: chloride, sodium, sulfate, ammonium, radium, gross alpha and gross beta. The NRC will be notified immediately if the concentrations of any of these constituents is found to be approaching or above EPA or other applicable drinking water standards. KMNC shall evaluate the situation and take immediate corrective action in the case of a leak. KMNC must file a report to the NRC, describing the corrective action and the results of that action, within one month of first notifying the NRC. If KMNC does not believe there is need to take any action (i.e., there is no leak), KMNC shall submit a report to the NRC, within two weeks of first notifying the NRC, justifying its decision.

KMNC shall submit to the NRC, by October 15, 1980, a contingency plan describing the corrective actions to be taken in the case of a major leak from either cell of the pond or where either cell has been determined to be incapable of effectively containing the wastes. KMNC shall obtain written NRC approval of the contingency plan before discharging any wastes into the evaporation pond.

All other conditions of this license shall remain the same.

The effect of this amendment is to authorize a change of date for submittal of a contingency plan describing the corrective actions to be taken in the case of a major leak from either cell of the pond, or where either cell has been determined to be incapable of effectively containing the wastes.

FOR THE NUCLEAR REGULATORY COMMISSION



Ross A. Scarano, Chief  
Uranium Recovery Licensing Branch  
Division of Waste Management