



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

SEP 14 1979

DOCKET NO.: 40-8027
APPLICANT: Kerr-McGee Nuclear Corporation
FACILITY: Sequoyah Uranium Hexafluoride Production Plant
SUBJECT: SAFETY EVALUATION REPORT - LICENSE AMENDMENT APPLICATION FOR
AUTHORIZATION TO CONSTRUCT AND USE OF A NEW LIQUID WASTE
STORAGE POND NO. 4, LICENSE NO. SUB-1010, AMENDMENT NO. 7

Reviewer: A. L. Soong

Background

July 7, 1978, the NRC gave Kerr-McGee authorization to construct a new retention pond No. 3 for storage of treated raffinate solution (amendment No. 2 to license SUB-1010). The constructed pond No. 3 has been in service since January 19, 1979, and its performance is considered to be very satisfactory.

By letter dated June 27, 1979, Kerr-McGee requested authorization to construct an additional new pond No. 4 for storage of treated raffinate solution.

Discussion

The proposed new pond No. 4 will be constructed immediately east of existing pond No. 3 and identical to each basin of the pond No. 3. The description and safety evaluation of the pond construction was analyzed in detail in "Safety Evaluation Report - License Amendment Application for Authorization to Construct and Use of a New Liquid Waste Storage Pond No. 3, License No. SUB-1010, Amendment No. 2" dated July 7, 1978.

The highlights of the construction of pond No. 4 are as follows:

1. The interior of the pond will be lined with Hypalon liners to prevent seepage.

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2. The pond will be constructed in accordance with the Regulatory Guide 3.13.
3. Two independent monitoring systems will be installed for detecting leakage; they are
 - a. perforated pipelines system at the bottom of the liners, and
 - b. monitoring wells system around the pond.
4. Action levels and corrective action to be taken in case of leakage from the pond have been detected.

The amendment application was discussed with Robert Everett of Region IV I and E principal inspector for the Kerr-McGee's Sequoyah facility, on September 11, 1979, and he saw no reason from a regulatory point of view, why the amendment to authorize construction of the pond should not be granted.

Conclusion

On the basis of the finding in the current assessment, it is recommended that this amendment No. 7 to license No. SUB-1010 be approved.

A. L. Soong

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Uranium Process Licensing Section
Uranium Fuel Licensing Branch
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Approved By:

W. T. Crow

W. T. Crow, Section Leader