

AUG 13 1982

DOCKET NO.: 70-1257  
LICENSEE: Exxon Nuclear Company, Inc. (ENC)  
SUBJECT: SAFETY EVALUATION REPORT, AMENDMENT APPLICATION  
FOR CONTINGENCY STORAGE LAGOON, JULY 27, 1982,  
07001257070S

I. Background

ENC has four non-overflow storage lagoons which could reach storage capacity early in 1983. In 1983, ENC plans to construct storage lagoons, with double liners, in conjunction with a liquid waste treatment facility. In the subject application, ENC requests approval to construct a lagoon with a single liner, to be used only if current storage capacity is exceeded prior to construction of a double-lined lagoon.

II. Discussion

The proposed lagoon would be constructed next to existing Lagoon No. 1 as shown in the attached Figure. The lagoon would be used only if existing capacity is exceeded before a permanent lagoon is constructed in 1983.

Because the proposed lagoon is to be used only on a contingency basis for 3 to 6 months, ENC plans to install just one liner. Construction must be started soon as hypalon can be easily worked and sealed only at temperatures above 60°F. Following construction of a double-lined lagoon in 1983, the proposed lagoon will be taken out of service and a second liner installed.

The purpose of the double liner is to provide redundant protection against chemical and radiological contamination of the environment and to accommodate a leak detection system between the two liners. Lack of the second liner and the leak detection system will increase the risk of environmental contamination. This risk does not seem to be unreasonable, however, because the lagoon, if used at all, would be used only 3 to 6 months. The volume of liquid in the lagoon would be small unless liquid from one of the existing lagoons had to be transferred to the proposed lagoon on an emergency basis.

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One environmental test well would be destroyed by the construction of the proposed lagoon. Two new test wells will be installed near the proposed lagoon to provide early warning if the lagoon system leaked. The land area for the new lagoon is dedicated to industrial use and the proposed use will have no significant environmental effect.

III. Conclusions and Recommendation

The staff finds that the proposed installation and use of a single-lined lagoon for use for 3 to 6 months early in 1983 does not provide an unreasonable risk to the public health and safety or to the environment. Approval of the application is recommended.

Original signed by  
George H. Bidinger

G. H. Bidinger  
Uranium Process Licensing Section  
Uranium Fuel Licensing Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

Original Signed By:  
W. T. Crow

Approved by:

W. T. Crow, Section Leader

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GHBidinger (2)

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