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

JUN 17 1980

Docket No. 70-687

MEMORANDUM FOR: L.C. Rouse, Chief,
Advanced Fuel and Spent Fuel Licensing Branch

FROM: A.T. Clark, Jr.
Advanced Fuel and Spent Fuel Licensing Branch

SUBJECT: REVIEW OF UNION CARBIDE (TUXEDO) APPLICATION FOR AMENDMENT TO LICENSE NO. SNM-639. DATED JUNE 2, 1980

Re: Letter, L. C. Rouse to Union Carbide (Voth), dated May 22, 1980

I have reviewed the subject application and provide the following comments.

1. In general Union Carbide has responded to our request in the reference Letter.

2. Some information is lacking on the monitoring instrumentation and the expected source term for normal operation. This can be remedied by requiring specific sampling and analyses at specific locations during startup and early operation. Radioisotopes of interest are: ^{106}Ru, ^{103}Ru, ^{137}Cs, ^{134}Cs, ^{131}I, and gross β-γ. The sampling point of interest is the evacuated container for gas samples described on page E-4. If the evacuated container samples indicated significant releases, in the initial run, subsequent one-quarter level runs should be undertaken with additional downstream sampling and analysis to furthur define the contribution of the Uranium Waste Farm Process to effluent releases.

3. Union Carbide should provide a report summarizing the startup test. The report should include an estimate of the separation factor (starting quantity of radioisotope divided by the quantity released from the stack during each run) and the ratio of the UWFP of the total release.

These points were discussed with Mr. Mark Voth and Mr. Fred Morse of Union Carbide on June 16, 1980. They agreed in principal with the additional requirements for sampling and reporting.

A separate memorandum on the criticality review is expected soon from Mr. R. G. Page.

A. Thomas Clark, Jr.
Advanced Fuel and Spent Fuel
Licensing Branch
Division of Fuel Cycle and
Material Safety