

UNITED STATES GOVERNMENT

# Memorandum

TO : Files

DATE: March 9, 1964

FROM : R. L. Stevenson *RLS* *COZ*  
Criticality Evaluation Branch  
Division of Licensing and Regulation *70-58*

SUBJECT: TELECON WITH C. W. KELLER AND W. OSMYER OF MARTIN-MARIETTA CORPORATION OF MARCH 2, 1964, REGARDING SHIPMENT OF AIR FILTERS VIA MOTOR TRUCK FROM BALTIMORE, MARYLAND, TO ERWIN, TENNESSEE

The applicant was informed that his proposed Amendment No. 20 to SNM License No. SNM-53 should consider the following:

1. Shoring of containers on the truck should be adequate to withstand an impact causing a (b)(4) deceleration. *E<sub>x</sub>4*
2. The total mass of U-235 in a 55-gallon drum of small filters should not exceed 800 grams and should be scaled down as the number of filters per drum is reduced from 20.
3. The medium size filters, at a maximum 870 grams U-235 per drum, should be spaced according to the  $k_{eff}$ -omega criterion with  $k_{eff}$  calculated based on water soaking of filters but without water between filters or drums.
4. The analysis of the hazards of shipping large filters, if these are packed in wooden boxes instead of metal drums, should be based on a possible impact, fire, and wetting.
5. The preferred over-all arrangement would be that in which the large filters in metal drums separate the drums of small filters from the drums of medium filters.

cc: D. A. Nussbaumer, DLR

*B/116*