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

MAR 2 6 1979

Docket No.: 70-687

Applicant: Union Carbide Corporation (UCC)

Facility: Corporation Research Laboratory

Subject: LICENSE AMENDMENT APPLICATION, DATED NOVEMBER 17, 1978

Background

The subject November 17, 1978, application requests license amendments which UCC states are for the purpose of making the license easier to administer and to provide a combined limit for SNM in the target plating process area. Four changes are requested.

Discussion

The four changes requested are:

1. UCC requests a change in its procedures for ordering and receiving SNM. A current restriction is that SNM to be delivered at any one time shall be limited to 650 grams (as UO_2 or U_3O_8). They wish to add a restriction that no single primary container may contain more than 350 grams of SNM.

2. UCC wishes to clarify storage mass limits for criticality control that are contained in three previous letters and further make them compatible with delivery and other limits. Criticality control limits permit 350 grams of U-235 in solution, doubly contained, or 650 grams of U-235 as oxide to be stored in a cabinet. Spacing between cabinets must be at least three feet.

3. UCC wishes to better define the SNM limits allowed in process in a laboratory. No more than 350 grams of U-235 in solution is permitted in a laboratory. U-235, as oxide, is limited to 650 grams. When both dry oxide and solution are present in a laboratory the total allowed U-235 mass shall satisfy the equation:

$$\frac{\text{grams U-235 (oxide)}}{650} + \frac{\text{grams U-235 (solution)}}{360} \leq 1.$$

4. U-235 states that the current license allows possession of 400 grams U-235 in a fuel assembly. They request that when such an assembly is not present they be allowed to increase the amount of other U-235 present by this 400 grams. Since we are increasing the total possession limit to 13 kgs of U-235 (see separate SER, same date as this SER) no further action is needed regarding this request.

Radiation and Nuclear Safety and Environmental

None of the above amendment requests, which are primarily administrative, affect the radiation safety or environmental considerations currently approved. Further the changes may improve criticality safety by more concisely and specifically listing the safe parameters to be used.

Recommendation

Based on the above I recommend approval of the amendment requests.

J. C. Delaney

Approved
W. T. Crow