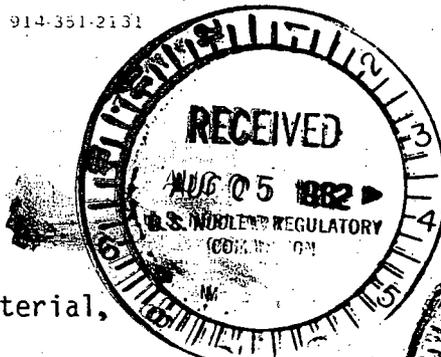




UNION CARBIDE CORPORATION
MEDICAL PRODUCTS DIVISION
P.O. BOX 324, TUXEDO, NEW YORK 10987
TELEPHONE: 914-351-2131



July 20, 1982



Director of Nuclear Material,
Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Leland C. Rouse

Reference: Union Carbide Corporation
Docket No. 70-687
License No. SNM-639

Dear Sir:

Application is hereby made to amend the above referenced license to increase the quantity of uranium-235 for targets from 13 to 23 kg. The increased license limits will allow continuation of activities already licensed; no new operations are anticipated nor are the limits of individual storage areas changed as a result of the requested amendment. The amendment will allow an increase in the decay time of uranium-bearing waste in storage and also allow operation of the Waste Form Process for returning unfissioned target material for offsite reprocessing. Both processes are part of our overall process for the production and separation of medical radioisotopes.

Wastes from the isotope production process are presently packaged for disposal and stored in the 100 drum capacity Waste Storage Facility for radioactive decay. Unrecovered uranium is entrained in the highly radioactive solidified waste stream. While the limit per 55 gallon drum is 350 grams, the average drum will contain only 40 to 50 grams. In the unlikely event that all storage locations are filled, the maximum quantity of material in this form will be 5 kg. This amount is in addition to material handled in other forms upon which the current 13 kg license limit is based.

Waste Form Process material is processed, packaged, and stored in a hot cell until a sufficient inventory is accumulated to fill a shipping cask. While the cell is licensed for 7.2 kg, a practical operating maximum in that cell is 6 kg, of which approximately 1 kg was included when the 13 kg limit was established, with up to 5 kg being added by the waste form process. **21033**

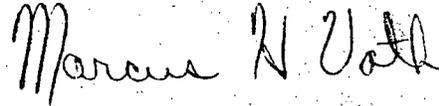
Applicant.....
Check No. 000694
Amount/Fee Category \$150.00
Type of Fee admin
Date Check Rec'd 8/2/82
Prepared By clem

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The addition of up to 5 kg due to each of the two new operations increases the total need for U-235 at our facility from 13 to 23 kg. The additional material will be in a highly radioactive form. Special nuclear material will be handled in the controlled access area protected in the manner described in our Security Plan on file with the NRC, the most recent submittal dated January 22, 1982.

Attached please find a check in the amount of \$150.00 for this administrative amendment pursuant to 10 CFR Part 170.31.D. We request that this amendment be processed by mid-August, 1982, at which time we expect to reach the current license limit.

Very truly yours,



Marcus H. Voth
Manager of Nuclear Operations