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LR:IB:GWK
 40-6857
 40-1751
 70-687
 70-238

Union Carbide Corporation
 Union Carbide Nuclear Company Division
 P. O. Box 324
 Tuxedo, New York

OCT 5 1962

Attention: Mr. D. B. Holzgraf

Gentlemen:

Transmitted herewith is Special Nuclear Material License No. SNM-639 and Source and Byproduct Material License No. 31-3334-4.

Pursuant to your letter dated September 21, 1962, Special Nuclear Material License No. SNM-639 hereby supersedes Special Nuclear Material License No. SNM-221 and Source Material License No. SMB-470.

In view of the cancellation of Special Nuclear Material License No. SNM-221, we require that the corporate data required in Section 70.22(a)(1) of 10 CFR 70 be submitted to this office within thirty (30) days from the date of this letter.

It is requested that you notify the Atomic Energy Commission when the pressure differentials stated in Items 4 and 5 of the supplemental information submitted on September 21, 1962, are obtained. At that time we will terminate Byproduct Material License Nos. 31-3334-2 and 31-3334-3.

Sincerely yours,

Original Signed by
Richard E. Cunningham

Richard E. Cunningham
 Acting Assistant Director
 for Materials Licensing
 Division of Licensing and Regulation

OFFICE ▶	Enclosures	DL&R	DL&R	DL&R		
		<i>see attached license</i>				
SURNAME ▶		Layfield:bar	CDLuke	DANussbaumer		
DATE ▶		10/5/62	10/ /62	10/ /62		

UNITED STATES
ATOMIC ENERGY COMMISSION

SPECIAL NUCLEAR MATERIAL LICENSE

OCT 5 1962

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations," a license is hereby issued authorizing the licensee to receive and possess the special nuclear material designated below; to use such special nuclear material for the purpose(s) and at the place(s) designated below; and to transfer such material to persons authorized to receive it in accordance with the regulations in said Part. This license shall be deemed to contain the conditions specified in Section 70.32(a) of said regulations, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

Licensee		3. License No. SNM-639
1. Name	Union Carbide Corporation	4. Expiration Date October 31, 1965
2. Address	Union Carbide Nuclear Company Division Tuxedo, New York	5. Docket No. 70-687
6. Special Nuclear Material As specified on Page 2.	7. Maximum quantity of special nuclear material which licensee may possess at any one time under this license As specified on Page 2.	
8. Authorized use For use in accordance with the procedures described in the licensee's application dated July 11, 1962, and supplement dated September 21, 1962.		
9. Quantity of special nuclear material allocated to licensee pursuant to Section 70.31(b) of said part -----		

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
11. This license does not authorize the insertion into, or removal from a reactor, the material held under this license.

(Conditions continued on Page 2.)

SPECIAL NUCLEAR BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number SNM-639

Item 6

Licensed material

- A. U-233
- B. U-235
- C. Pu-239
- D. Pu encapsulated as Pu-Be neutron sources
- E. The byproduct and special nuclear materials contained in four (4) spent fuel elements from the licensee's research reactor.
- F. Two hundred (200) pounds of source material, and the byproduct and special nuclear materials produced during the irradiation of this source material.

Item 7

Possession limit

OCT 5 1962

- A. 10 Grams
- B. 250 Grams
- C. 10 Grams
- D. 160 Grams

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- 12. The licensee shall comply with the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter I, "Standards for Protection Against Radiation".
 - 13. The licensee is hereby exempted from the requirements of Section 70.24, 10 CFR 70, insofar as this Section applies to the material held under this license.
 - 14. The licensee is hereby exempted from the requirements of Sections 20.203(e)(2) and 20.203(f)(2), 10 CFR 20, for areas and containers within the laboratory provided that all entrances to the laboratory are conspicuously posted in accordance with Section 20.203(e)(2) and with the words, "Any area or container within this laboratory may contain radioactive material".
 - 15. A. Each Pu-Be neutron source shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested.

SPECIAL NUCLEAR ~~ACTIVITY~~ MATERIAL LICENSE

Supplementary Sheet

License Number SNM-639

- B. The test shall be capable of detecting the presence of 0.005 microcurie of removable alpha contamination on the test sample. The test sample shall be taken from the neutron source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
 - C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated or to be returned to the manufacturer. A report shall be filed within five (5) days of the test with the Director, Division of Licensing and Regulation, U. S. Atomic Energy Commission, Washington 25, D. C., describing the equipment involved, the test results and the corrective action taken. A copy of such report shall be sent the Director of the nearest AEC Regional Compliance Office, listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.
16. The licensee shall determine the concentrations of alpha radioactivity in the air effluent from the Hot Lab facility whenever operations are performed with unencapsulated source and/or special nuclear materials.

RRR 10/2/62 OC
 10/3/62
 OK 10/3/62
 DW 10/3/62
 REC 10/5/62

Date OCT 5 1962

For the U. S. Atomic Energy Commission
Original Signed by
Richard E. Cunningham
by _____

Division of Licensing and Regulation
Washington 25, D. C.