

BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

License Number 34-6558-1
(P62)

Amendment Number 1

Marshall Chemical Company
1945 East 97th Street
Cleveland 6, Ohio

Attention: C. T. Schmidt
R. W. Carlson
W. W. Managan

In accordance with letter dated July 12, 1961, signed by W. W. Managan, License No. 34-6558-1 is amended as follows:

Subitems H, I and J are added:

6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radio- activity which licensee may possess at any one time
H. Americium 241	H. Sealed Sources (Oak Ridge National Laboratory)	H. 24 microcuries (4 sources of 1 microcurie each; 2 sources of 10 microcuri each)
I. Curium 244	I. Sealed Sources (Oak Ridge National Laboratory)	I. 20 microcuries (2 sources of 10 microcuries each)
J. Californium 252	J. Sealed Source (Oak Ridge National Laboratory)	J. 1 source of 10 microcurie

9. Additional use

H, I and J. Instrument calibration.

CONDITIONS

Condition 14 is amended to read:

14. A. Each sealed source shall be tested for leakage and/or contamination at intervals not to exceed six months, except that sealed sources designed as an alpha emitting source shall be tested at intervals not exceeding three months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of removable contamination on the test sample. The test sample shall be taken from

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U. S. ATOMIC ENERGY COMMISSION
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14. B. continued

the sealed 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.

- G. If the test reveals the presence of 0.005 microcuries or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five 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 to the manager of the nearest AEC operations office listed in Appendix D of Title 10, Code of Federal Regulations, Part 20.

- H. Tests for leakage and/or contamination shall be performed by the licensee or by persons specifically authorized by the Commission to perform such services.

Condition 16 is added:

16. Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations", you are further licensed to receive, possess and use the special nuclear material resulting from the decay of Curium 244 and Californium 252. This license shall be deemed to contain the conditions specified in Section 70.32(a) of said regulations.

Date July 26, 1961

DUPLICATED
FOR DIV. OF COMPLIANCE
CRB

For the U. S. Atomic Energy Commission

Original Signed By
James R. Masonby Chief, Isotopes BranchDivision of Licensing and Regulation
Washington 25, D. C.

1. *CRB / Kaufman*

Date Received JUL 17 1961	Expiration Date	Issue Date	Tech. Review CRB
Control No. 35876	Reference No.	License No. 34-6558-1	Amendment No. 1
Isotope H. Americium 241	Form Sealed Source ORNL Sealed Source	Possession Limit H. 24 microcuries; (4 sources - 1 microcurie each) (2 sources - 10 microcuries each)	
I. Curium 244	as above	I. 20 microcuries; (2 sources - 10 microcuries each)	
J. Californium 252	" "	J. 10 microcuries; (1 source)	
E.	E.		
F.	F.		
G.	G.		
H.	H.		

Authorized Use

H, I, J. Instrument Calibration.

REMARKS, Letters, Phone calls, Visits, Exemptions, Etc. (Use reverse side if necessary)
Condition 14 is amended to read;

9 B

A.

B.

C.

D.

Decay of Curium 244
and Californium 252
Special

Conditions			
1. A B C	6.	11.	16. 20
2. A B C	7.	12.	17.
3. A B C D	8. A B C	13.	18.
4. A B	9. A B C	14. A B C	19.
5.	10.	15.	20.
			21.

Approve

Void

Tech. Reviewer

Date

Chief

Date

Mail to:

Physics or Manager

Date Mailed

JUL 26 1961

CRB

7/26/61

CRB

7/26/61