

**MELPAR, INC.** 3000 ARLINGTON BOULEVARD, FALLS CHURCH, VIRGINIA · JEFFERSON 4-6000

28 February 1962

Atomic Energy Commission  
Washington 25, D. C.

Attn: Mr. J. R. Mason, Chief, Isotopes Branch,  
Division of Licensing & Regulation

Subject: Byproduct Material License No. 45-7548-1  
(G63). Supplementary Application

Gentlemen:

Melpar, Inc. is the holder of Byproduct Material License No. 45-7548-1(G63), as amended by Amendment No. 5, January 2, 1962.

Supplementary application is hereby submitted, in triplicate, to amend said license so as to increase the quantity of Hydrogen 3 in foil form and sealed source.

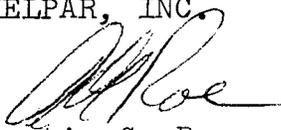
Early action on this matter would be greatly appreciated as we have government contracts on which we expect to be working.

Any further information you may desire, we will be pleased to furnish.

Thank you for your cooperation in this matter.

Very truly yours,

MELPAR, INC.

  
Austin G. Roe  
House Counsel

Encl.

41873

A-12

45-7548-  
#6

Form AEC-313  
(5-58)

SUPPLEMENTARY ATOMIC ENERGY COMMISSION  
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

Form approved.  
Budget Bureau No. 38-R027.3.

INSTRUCTIONS.—Complete Items 1 through 16 if this is an initial application. If application is for renewal of a license, complete only Items 1 through 7 and indicate new information or changes in the program as requested in Items 8 through 15. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail three copies to: U. S. Atomic Energy Commission, Washington 25, D. C. Attention: Isotopes Branch, Division of Licensing and Regulation. Upon approval of this application, the applicant will receive an AEC Byproduct Material License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30 and the Licensee is subject to Title 10, Code of Federal Regulations, Part 20.

<p>1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital, person, etc.)</p> <p>Melpar, Inc. 3000 Arlington Blvd. Falls Church, Virginia</p>	<p>(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1 (a).)</p>
---	--

<p>2. DEPARTMENT TO USE BYPRODUCT MATERIAL</p> <p>Research Division</p>	<p>3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)</p> <p>#45-7548-1(G63) - present license</p>
---	---

<p>4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of byproduct material. Give training and experience in Items 8 and 9.)</p> <p>Victor R. Huebner, Senior Scientist Mrs. Marie Tiner, Scientist</p>	<p>5. RADIATION PROTECTION OFFICER (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9.)</p> <p>Louis P. Glekas Research Division Safety Officer</p>
---	---

<p>6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)</p> <p>(1) Hydrogen 3 (2) Hydrogen 3</p>	<p>(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYSICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.)</p> <p>Increase quantity to 500 millicuries (foil form)</p> <p>Sealed source of 100 millicuries of Hydrogen 3, built into an Electron Affinity Ionization Detector, Model 26-755, as manufactured by Jarrell-Ash Company, Newtonville, Mass.</p>
--	---

7. DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED. (If byproduct material is for "human use," supplement A (Form AEC-313a) must be completed in lieu of this item. If byproduct material is in the form of a sealed source, include the make and model number of the storage container and/or device in which the source will be stored and/or used.)

(1) To be used in a gas chromatography device (electron capture detector)

(2) To be used for detecting certain organic compounds in the atmosphere.

DUPLICATED  
FOR DIV. OF COMPLIANCE

41073

**TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4** (Use supplemental sheets if necessary)

8. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection	See License No. 45-7548-1  (G63) (Amendment No. 5)		Yes No	Yes No
b. Radioactivity measurement standardization and monitoring techniques and instruments			Yes No	Yes No
c. Mathematics and calculations basic to the use and measurement of radioactivity			Yes No	Yes No
d. Biological effects of radiation			Yes No	Yes No

9. EXPERIENCE WITH RADIATION. (Actual use of radioisotopes or equivalent experience.)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
		See Item 8 above		

10. RADIATION DETECTION INSTRUMENTS. (Use supplemental sheets if necessary.)

TYPE OF INSTRUMENTS (Include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mr/hr)	WINDOW THICKNESS (mg/cm <sup>2</sup> )	USE (Monitoring, surveying, measuring)
See Item 8 above					

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE.

See Item 8 above

12. FILM BADGES, DOSIMETERS, AND BIO-ASSAY PROCEDURES USED. (For film badges, specify method of calibrating and processing, or name of supplier.)

See Item 8 above

**INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS**

13. FACILITIES AND EQUIPMENT. Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Explanatory sketch of facility is attached. (Circle answer) Yes No
- See Item 8 above
14. RADIATION PROTECTION PROGRAM. Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source.
- See Item 8 above
15. WASTE DISPOSAL. If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.
- See Item 8 above

**CERTIFICATE (This item must be completed by applicant)**

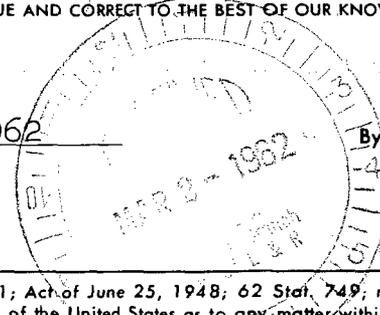
16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PART 30, AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

Date 28 February 1962

Applicant named in item 1 MELPAR, INC.

By: Dr. P. E. Ritt  
Director of Research

Title of certifying official



**WARNING.**—18 U. S. C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

FALLS CHURCH VA  
MAR-11-62  
PC-381206

FROM: A. G. Roe, House Counsel

**MELPAR**  **INC**

A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY

3000 ARLINGTON BLVD. • FALLS CHURCH, VA.

---

**TO:**

Atomic Energy Commission

Attn: Mr. J. R. Mason, Chief, Isotopes  
Branch, Div. of Licensing &  
Regulation

Washington 25, D. C.

**FIRST CLASS MAIL**

SH-10 6/59