

UNITED STATES ATOMIC ENERGY COMMISSION
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

INSTRUCTIONS.—Complete Items 1 through 16 if this is an initial application or an application for renewal of a license. Information contained in previous applications filed with the Commission with respect to Items 8 through 15 may be incorporated by reference provided *references are clear and specific*. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail two copies to: U.S. Atomic Energy Commission, Washington, D.C., 20545, Attention: Materials Branch, Directorate of Licensing. 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, and the license fee provisions of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 16 and the appropriate fee enclosed. (See Note in Instruction Sheet).

1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital person, etc. include ZIP Code and telephone number.)

Harry Agahigian
✓ Baron Consulting Company - Analytical Services
655 Plains Rd.
Milford, Ct. 06460

(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1(a). Include ZIP Code.)

Same as in 1A
Mail to: P.O. Box 663
Orange, Ct. 06477

L+H 17669
030-13146
03120

2. DEPARTMENT TO USE BYPRODUCT MATERIAL

Analytical Laboratory
G C Analysis

3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)

New Application

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.)

Dr. Harry Agahigian
Dr. John Fleming
Barbara Obert

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.)

Dr. Harry Agahigian

(a) BYPRODUCT MATERIAL. (Elements and mass number of each.)

Ni 63

(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.)

Deposited on gold or platinum foil, sealed in Detector cell, Perkin-Elmer Part No. 009-0282

RECEIVED BY LFMS
DATE: 7/14/77
By: S.E.P.
5:30 PM
Cy to:
Ac: P-1-77

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.)

The sealed detector cell containing Nickel 63 foil shall be used in P-E Model 900, 910, 990 and 3920 G.C. with temperature control mechanism which prevents foil temperature from exceeding 390 degrees centigrade.

Applicant.....
Check No. 6064.....
Amount. \$50-36.....
Date of Check. 7-26-77.....
Date Check Rec'd. 8-1-77.....
Received By. [Signature].....
(Continued on reverse side)

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July 77 P-A

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 ENCLOSED NOTE		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

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 ²)	USE (Monitoring, surveying, measuring)
No detection equipment - Should not be necessary with the levels in question.					

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

I think not applicable

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

Not applicable

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS IN DUPLICATE

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

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.

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.

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.

License Fee Category \$ _____

Fee Enclosed \$ _____

Date 7-1-77

RECEIVED
S. ATOMIC ENERGY COMM.

Applicant named in item 1

By: Harry Agabekian

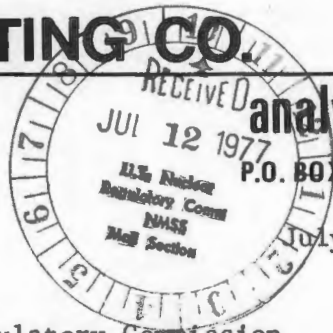
Owner
Title of certifying official

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.

BARON CONSULTING CO.

analytical services

P.O. BOX 663, ORANGE CT. 06477



July 7, 1977

U.S. Nuclear Regulatory Commission
Materials Branch
Division of Materials and Fuel
Cycle Facility Licensing
Washington, D. C. 20555

Dear Sir:

I am purchasing a Perkin-Elmer Gas Chromatograph #3920 and have been informed by them that I have to obtain a liscence. Please send along any pertinent information I need and also the cost of obtaining the license. If we have made an error please contact me as I wish to complete the transaction with the Perkin-Elmer Corporation in the near future.

I have enclosed the application form provided by Perkin-Elmer. If it is incorrectly completed please contact me.

HA/c

Harry Agahigian

Harry Agahigian, Ph. D.
Chief Consultant

BARON CONSULTING COMPANY

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INSPECTION AND ENFORCEMENT**

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NICKEL 63 LICENSE APPLICATION INFORMATION

License Applications should be made to:

U.S. Nuclear Regulatory Commission (NRC)
Materials Branch
Division of Materials and Fuel
Cycle Facility Licensing
Washington, D.C. 20555

or the appropriate State Agency in Agreement States.

LICENSE INFORMATION:

Federal Form: AEC-313 Application for Byproduct
Material License

Byproduct Material: Nickel 63

Chemical and/or Physical Form: Deposited on gold or platinum foil,
sealed in Detector Cell, Perkin-
Elmer Part No. 009-0282.

Foil manufactured by:

New England Nuclear Corporation
575 Albany St.
Boston, Mass.
Foil Model NER-002.

or

Nuclear Radiation Development Corp.
2937 Alt Blvd.
Grand Island, New York 14070
Foil Model N1001

Foil strength is 10 millicuries. No
single detector contains more than
15 millicuries.

DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED:

The sealed detector cell containing Nickel 63 foil shall be used
in Perkin-Elmer Model 900, 910, 990, and 3920 Gas Chromatographs
with Temperature Control mechanism which prevents foil temperature
from exceeding 390 degrees centigrade.

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RADIATION PROTECTION PROGRAM:

Detailed instructions for installing, operating and wipe testing detector cells are contained in the Electron Capture Detector section of the instruction manual supplied with the Model 900, 910, 990, and 3920 Gas Chromatographs.

Wipe tests for radioactivity are required at 6 month intervals. Instructions for conducting the wipe test are included in the manual and in the wipe test kit (P-E Part No. 009-1667) shipped with the detector cell. The wipe test is to be submitted to one of the following for a radiation survey.

Nuclear Sources and Services
5711 Ethridge St.
Houston, Texas 77017

or

Nuclear Radiation Dev. Corp.
2937 Alt Blvd.
Grand Island, New York 14070

Cell cleaning and foil replacement must be performed by one of the above mentioned companies.

WASTE DISPOSAL:

The detector cell (009-0282) ^{will} ~~should~~ be returned to one of the companies mentioned under RADIATION PROTECTION PROGRAM for foil disposal as described in the instrument manual.

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8. Training and Experience

Dr. Harry Agahigian - Tufts University - 1 Semester

Dr. John Fleming has had experience with ^{14}C -Carbon while at MIT in monitoring chemical reactions. He was in charge of the spectroscopy laboratory for 7 years.

13. Analytical Laboratory with the usual spectrometers, instrumentation and chemicals

15. There should not be a problem with waste disposal.

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RECEIVED
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 15 1970

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