

<b>NRC Form 313 I</b> <b>(12-81)</b> <b>10 CFR 30</b>		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	
<b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE</b> <b>INDUSTRIAL</b>		<b>1. APPLICATION FOR:</b> <i>(Check and/or complete as appropriate)</i>	
<i>See attached instructions for details.</i>  Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.		<input checked="" type="checkbox"/> <b>a. NEW LICENSE</b>  <input type="checkbox"/> <b>b. AMENDMENT TO:</b> LICENSE NUMBER <b>52-23041-01</b>  <input type="checkbox"/> <b>c. RENEWAL OF:</b> LICENSE NUMBER	
<b>2. APPLICANT'S NAME</b> <i>(Institution, firm, person, etc.)</i>  <b>Isomedix (Puerto Rico), Inc.</b> TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION <b>809-883-4520</b>		<b>3. NAME AND TITLE OF PERSON TO BE CONTACTED</b> <b>REGARDING THIS APPLICATION</b> <b>Executive</b> <b>George R. Dietz, Vice President</b> TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION <b>201-887-4700</b>	
<b>4. APPLICANT'S MAILING ADDRESS</b> <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> <b>Macco Industrial Park</b> <b>State Road 690 Km. 1.7</b> <b>Hoyos</b> <b>Vega Alta, PR 00762</b>		<b>5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED</b> <i>(Include Zip Code)</i> <b>Macco Industrial Park</b> <b>State Road 690 Km 1.7</b> <b>Hoyos</b> <b>Vega Alta, PR 00762</b>	
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)			
<b>6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL</b> <i>(See Items 16 and 17 for required training and experience of each individual named below)</i>			
FULL NAME		TITLE	
a.			
b.			
c.			
<b>7. RADIATION PROTECTION OFFICER</b>		Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.	
<b>8. LICENSED MATERIAL</b>			
L I N E  NO.	ELEMENT AND MASS NUMBER  A	CHEMICAL AND/OR PHYSICAL FORM  B	NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i>  C
			MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME  D
(1)			
(2)			
(3)			
(4)			
DESCRIBE USE OF LICENSED MATERIAL E			
(1)			
(2)	8609030168 860703 REG2 LIC30 52-23041-01 PDR		
(3)			
(4)			

License Fee Information  
 on letter of  
 submitted 5/12/86.

### 9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)			
(2)			
(3)			
(4)			

### 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)						
(2)						
(3)						
(4)						

### 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY	<input type="checkbox"/> b. CALIBRATED BY APPLICANT <i>Attach a separate sheet describing method, frequency and standards used for calibrating instruments.</i>
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### 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE  <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)  <input type="checkbox"/> (3) OTHER (Specify): _____ _____		<input type="checkbox"/> MONTHLY  <input type="checkbox"/> QUARTERLY  <input type="checkbox"/> OTHER (Specify): _____ _____

### 13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.  
☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.  
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.  
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC.

### 14. WASTE DISPOSAL

- a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED \_\_\_\_\_
- b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE \_\_\_\_\_

### INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
  
16. **FORMAL TRAINING IN RADIATION SAFETY.** Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
  - a. Principles and practices of radiation protection.
  - b. Radioactivity measurement standardization and monitoring techniques and instruments.
  - c. Mathematics and calculations basic to the use and measurement of radioactivity.
  - d. Biological effects of radiation.
  
17. **EXPERIENCE.** Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

### 18. CERTIFICATE

*(This item must be completed by applicant)*

*The applicant and any official executing this certificate on behalf of the applicant named in Item 2, 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.*

**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.

a. LICENSE FEE REQUIRED  
*(See Section 170.31, 10 CFR 170)*

b. CERTIFYING OFFICIAL *(Signature)*

c. NAME *(Type or print)*

George R. Dietz

(1) LICENSE FEE CATEGORY: 3G

d. TITLE  
Executive Vice President

(2) LICENSE FEE ENCLOSED: \$ 230

e. DATE  
May 12, 1986

P. Guinan  
DNSS



86 MAY 14 AM 10:44

**SUPPLEMENTAL INFORMATION TO REQUEST FOR  
LICENSE AMENDMENT**

**Submitted May 12, 1986**

**License No. 52-23041-01**

**ISOMEDIX (Puerto Rico), INC.**

RECEIVED  
86 MAY 19 AM 1:15  
U.S. AIR MAIL  
100 FEE NIGHT BRANCH

Log	May 5 <sup>th</sup>
Remitter	
Check No.	060339
Amount	\$230
Fee Category	36
Type of Fee	Amendment
Date Check Rec'd.	5/15/86
Date Completed	5/18/86
By:	Mission

51044

**ISOMEDIX INC.**

CORPORATE OFFICES • 11 APOLLO DRIVE, WHIPPANY, NEW JERSEY 07981 • (201) 887-4700 • TELEX 317361

**Official Copy**

## FACILITY DESCRIPTION

The subject unit has two source racks. When the "source up" keyswitch is activated, both source racks are brought into the irradiate position by two independent source hoist cylinders.

We intend to make a wiring change so that either one rack, or both, can be brought into the irradiate position. This is to request an appropriate license amendment.

The system will operate as follows:

A two-position keyswitch will be added to the control console. When keyed to one position, only one source rack hoist cylinder will be activated, and one source rack will be raised to the irradiate position. In the second key position, both racks will be raised, as is currently done.

The key position for "both racks up" will be the normal setting. The plant manager or the production manager are the only individuals who will retain a key to this switch, and are the only persons authorized to make a keyswitch change.

There are no changes to be made to the irradiator safety system. The system will operate normally with either one or both source racks exposed.

The electrical redesign was completed and approved by Atomic Energy of Canada, Ltd. (AECL), the supplier of the unit.

The wiring change will be completed by qualified Isomedix personnel, which has been agreed to by AECL.

The purpose of the change is to allow a lesser amount of cobalt-60 to be brought into the irradiate position, so that very low doses can be delivered to agricultural products for quarantine treatment, which now has Food & Drug Administration approval.