

| FORM NRC-313 I (3-80) 10 CFR 30 | | U.S. NUCLEAR REGULATORY COMMISSION | | |
|---|--|--|---|--|
| APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL | | 1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i> | | |
| <i>See attached instructions for details.</i> <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.</i> | | <input type="checkbox"/> a. NEW LICENSE | | |
| | | <input type="checkbox"/> b. AMENDMENT TO: LICENSE NUMBER | | |
| | | <input checked="" type="checkbox"/> c. RENEWAL OF: LICENSE NUMBER 29-13064-02 | | |
| 2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i> XID CORPORATION TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 201 773-9400 | | 3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION MR. JOSEPH DEWTON TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION 201 773-9400 | | |
| 4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> 338 DELAWANNA AVENUE P.O. BOX 908 CLIFTON, NJ 07014-1015 | | 5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i> same as item 4 | | |
| (IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.) | | | | |
| 6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL <i>(See Items 16 and 17 for required training and experience of each individual named below)</i> | | | | |
| FULL NAME | | TITLE | | |
| a. JOSEPH DEWTON | | RSO, TECHNICIAN | | |
| b. ALEX GABRIEL IONESCU | | TECHNICIAN | | |
| c. | | | | |
| 7. RADIATION PROTECTION OFFICER JOSEPH DEWTON | | Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15. | | |
| 8. LICENSED MATERIAL | | | | |
| LINE 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) | CESIUM 137 | SOLID | TECH/OPS 77302 | 165 IN SEALED SOURCE |
| (2) | CESIUM 137 | SOLID | DOSIMETER CORP OF AMERICA, MODEL 3060 | SEALED SOURCE NOT TO EXCEED 10 MICROCI. |
| (3) | | | OR VICTOREEN | |
| (4) | | | | |
| DESCRIBE USE OF LICENSED MATERIAL E | | | | |
| (1) | CALIBRATION OF SURVEY METERS AND POCKET DOSIMETERS | | | |
| (2) | | | | |
| (3) | 8506190188 850603 REG1 LIC30 29-13064-02 PDR | | | |
| (4) | | | | |

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) | SURVEY METER CALIBRATOR | TECH/OPS | 773 |
| (2) | DOSIMETER CALIBRATOR | DOSIMETER CORP OF AMERICA | 3060 |
| (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) | GEIGER | EBERLINE | E130G | 2 | GAMMA | 0 - 1000 mr |
| (2) | GEIGER | GE SMITH & ASS. | GS1000A | 2 | GAMMA | 0 - 1000 mr |
| (3) | IONIZATION CHAMBER | VICTOREEN | 491 RF | 1 | GAMMA, BETA | |
| (4) | | | | | | |

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

| | |
|---|--|
| <input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY | <input checked="" type="checkbox"/> b. CALIBRATED BY APPLICANT Attach a separate sheet describing method, frequency and standards used for calibrating instruments. SEE ATTACHED OPERATORS MANUAL FOR TECH OPS #773 |
|---|--|

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 checked="" type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD) <input type="checkbox"/> (3) OTHER (Specify): _____ | EBERLINE | <input checked="" type="checkbox"/> MONTHLY <input type="checkbox"/> QUARTERLY <input type="checkbox"/> OTHER (Specify): _____ |

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

| |
|---|
| <input type="checkbox"/> a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC. |
| <input checked="" type="checkbox"/> b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. |
| <input type="checkbox"/> c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. *NOTE: CALIBRATOR STORED IN RADIATION SHIELDED LOCKED FACILITY |
| <input type="checkbox"/> d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC. |

14. WASTE DISPOSAL

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|---|
| a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED RETURNED TO MANUFACTURER TECH/OPS |
| 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)

\$110.00

b. CERTIFYING OFFICIAL *(Signature)*

c. NAME *(Type or print)*

JOSEPH DEWTON

(1) LICENSE FEE CATEGORY: L- RENEWAL

d. TITLE

RSD, TECHNICIAN

(2) LICENSE FEE ENCLOSED: \$ 110.00

e. DATE

4/11/84