



STATE OF TENNESSEE  
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
 DIVISION OF RADIOLOGICAL HEALTH  
 3RD FLOOR, L & C ANNEX, 401 CHURCH STREET, NASHVILLE, TN 37243  
**APPLICATION FOR SOURCE MATERIAL LICENSE**

**INSTRUCTIONS:** Complete each item, 1 through 13, using supplemental sheets as necessary. Mail two (2) copies to: Tennessee Department of Environment and Conservation, Division of Radiological Health, 3<sup>rd</sup> Floor L & C Annex, 401 Church Street, Nashville, TN 37243. Persons receiving a license are subject to all applicable provisions of the "State Regulations for Protection Against Radiation."

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|---|--|
| 1. (check one)<br><input type="checkbox"/> (a) New license<br><input type="checkbox"/> (b) Amendment to License No. _____<br><input type="checkbox"/> (c) Renewal to License No. _____<br><input type="checkbox"/> (d) Previous License No. _____ | 2. Name of Applicant<br><br>3. Principal Business Address<br><br>County: |
|---|--|

4. Address(es) at which source material will be possessed or used

5. Describe purpose for which source material will be used

6. State the type or types, chemical form or forms, and quantities of source material you propose to receive, possess, use, or transfer under the license.

| (a) Type                              | (b) Chemical Form | (c) Physical Form<br>(including % U or Th) | (d) Maximum amount at any<br>one time (in pounds) |
|---------------------------------------|-------------------|--|---|
| Normal Uranium                        |                   |  |   |
| Uranium depleted in the U-235 Isotope |                   |  |   |
| Thorium                               |                   |  |   |

(e) Maximum total quantity of source material you will have on hand at any time (in pounds)

7. Describe the chemical, physical, metallurgical, or nuclear process or processes in which the source material will be used, indicating the maximum amount of source material involved in each process at any one time and providing a thorough evaluation of the potential hazards associated with each step of those operations.

8. Describe the minimum technical qualifications including training and experience that will be required of applicant's supervisory personnel, including person responsible for radiation safety program (or of applicant, if applicant is an individual).

9. Describe the equipment and facilities which will be used to protect health and minimize danger to life or property and relate use of the equipment and facilities to the operations listed in Item 7: include:

(a) radiation detection and related instruments (including film badges, dosimeters, counters, air-monitoring and other survey equipment, as appropriate. The description of radiation detection instruments should include the type of radiation detected and the range (s) of each instrument.)

(b) Method, frequency, and standards used in calibrating instruments listed in (a) above (for film badges, specify method of calibrating and processing, or name supplier.)

(c) Ventilation equipment which will be used in operations which produce dust, fumes, mists, gases, etc.

10. Describe proposed procedures to protect health and minimize danger to life and property and relate these procedures to the operations listed in Item 7, include:
- (a) Procedures for use of nuclear materials and safety features and procedures to avoid non-nuclear accidents, such as fire, explosion, etc., in source material storage and processing areas
  - (b) Emergency procedures in the event of accidents which might involve source material
  - (c) Detailed description of radiation survey program and procedures
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11. WASTE PRODUCTS: If none will be generated, state "None" opposite (a) below. If waste products will be generated, check here [ ] and explain on a supplement sheet:
- (a) Quantity and type of radioactive waste that will be generated
  - (b) Detailed procedures for waste disposal
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12. If products for distribution to the general public under an exemption contained in Chapter 10 are to be manufactured, use a supplemental sheet to furnish a detailed description of the product, including:
- (a) Percent source material in the product and its location in the product
  - (b) Physical description of the product including characteristics, if any, that will prevent inhalation or ingestion of source materials that might be separated from the product
  - (c) Beta and beta plus gamma radiation levels (specify instrument used, date of calibration, and calibration technique used) at the surface of the product and at 12 inches
  - (d) Method of assuring that source material cannot be disassociated from the manufactured product
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**CERTIFICATE**

(This item must be complete by the applicant)

13. 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 "Tennessee State Regulations for Protection Against Radiation," and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

\_\_\_\_\_  
Applicant named in Item 2

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Signature of certifying official

\_\_\_\_\_  
Typed/Printed name and title of certifying official