

FORM AEC-1
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UNITED STATES ATOMIC ENERGY COMMISSION

APPLICATION FOR SOURCE MATERIAL LICENSE File Copy

Pursuant to regulations in Title 10, Code of Federal Regulations, Chapter 1, Part 40, application is hereby made for a license to receive, possess, use, transfer, deliver or import into the United States, source material for the activity or activities described.

1. (Check one) <input type="checkbox"/> (a) New license <input type="checkbox"/> (b) Amendment to License No. _____ <input checked="" type="checkbox"/> (c) Renewal of License No. <u>SBT 467</u> <input type="checkbox"/> (d) Previous License No. _____		2. NAME OF APPLICANT Westinghouse Electric Corporation (Lamp Division)	
3. PRINCIPAL BUSINESS ADDRESS Bloomfield, New Jersey			
4. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED Bloomfield, New Jersey			
5. BUSINESS OR OCCUPATION Light Bulb Manufacture		6. (a) IF APPLICANT IS AN INDIVIDUAL, STATE CITIZENSHIP --	(b) AGE --
7. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED The source material is Thorium Oxide incorporated in a chemical mixture known as a Getter. This Getter is a source of Emission in the Electrodes of Mercury lamps. This Getter contains 66% Thorium Oxide.			
8. 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 (Including % U or Th.)	(d) MAXIMUM AMOUNT AT ANY ONE TIME (in pounds)
NATURAL URANIUM			
URANIUM DEPLETED IN THE U-235 ISOTOPE			
THORIUM (ISOTOPE)	Thorium Oxide (Th O ₂)	Powder (100% Th O ₂)	0.60 Lbs. in process
(e) MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME (in pounds) 150 Lbs. Th O ₂			
9. 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 RADIATION HAZARDS ASSOCIATED WITH EACH STEP OF THOSE PROCESSES 16 Mgs. of Th O ₂ is applied to each of two electrodes by metal applicator. Slight dust and radiation is produced. "Not a radiation hazard."			
10. 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). All personnel involved are instructed in safety requirements consistent with use of material involved and Standard Practices Procedures.			
11. DESCRIBE THE EQUIPMENT AND FACILITIES WHICH WILL BE USED TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE OR PROPERTY AND RELATE THE USE OF THE EQUIPMENT AND FACILITIES TO THE OPERATIONS LISTED IN ITEM 9. INCLUDE: (a) RADIATION DETECTION AND RELATED INSTRUMENTS (including film badges, dosimeters, counters, air sampling, and other survey equipment as appropriate. The description of radiation detection instruments should include the instrument characteristics such as type of radiation detected, window thickness, and the range(s) of each instrument). Area Radiation Monitoring: Alpha Beta Gamma Survey meter, Surface Smear tests, and Air sampling.			
(b) METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED IN (a) ABOVE, INCLUDING AIR SAMPLING EQUIPMENT (for film badges, specify method of calibrating and processing, or name supplier). See attachment			

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URANIUM DEPLETED IN THE U-235 ISOTOPE			
THORIUM (ISOTOPE)	Thorium Oxide (Th O ₂)	Powder (100% Th O ₂)	0.6 lbs. in process
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