



August 17, 2011

U.S. Nuclear Regulatory Commission
Licensing Branch
Attn: Shirley Xu
Division of Materials Safety & State Agreements
Office of Federal & State Materials and
Environmental Management Programs
Washington, DC 20555-0001

Ref: Control No: 575670
License No: 20-30024-02E
Your letter of: August 10, 2011

Dear Ms. Xu:

This is in response to the above referenced letter.

Re. Item #1: On May 5, 2011, pursuant our application for an amendment to our 'E' license regarding a change of our name, at your request, I sent you copies of the updated licenses of all of our Distribution Centers, except for our California facility, for which I sent you a timely renewal letter. If that letter is not available, I will resend it to you. Since the date of that letter, the license for our Versailles, Kentucky facility had been renewed through May 31, 2012. I have enclosed a copy of that license. If you wish me to resend the May 5, 2011 letter, please let me know.

Re. Item #2: Because the February 23, 2001 letter is very important and still valid for our licensed operations, a current date on that letter might preclude important changes that have been subsequently made to the license, such as adding new products and new facilities, etc. Please let me know how I can make the updated changes to that letter that you requested, without changing its date. Two possibilities are:

- Submit a new letter with a current date, referencing the February 23, 2001 letter, where I would only address the changes you mentioned in your letter concerning licenses and facility locations, or
- Make changes to the applicable pages of the February 23, 2001 letter by hand, lining out and initialing closed facilities and terminated licenses and adding the new and showing the date I made the changes.

Re. Item #3: I have enclosed a copy of the requested letter dated December 22, 2008.

If there are any questions on the above or enclosed or if you have any additional questions, or require additional information, I may be reached directly by mail at the address below or by telephone at (845) 635-8698 or fax at (845) 635-5016.

Very Truly Yours,

Alan H. Jones
Corporate Radiation Safety Officer

Enclosures:

KY License No. 201-423-91 (Versailles KY)
Letter dated December 22, 2008 to R. Struckmeyer of the USNRC

cc: Paul Feltri

OSRAM SYLVANIA
100 Endicott Street
Danvers, MA 01923
☎ (978) 777-1900
www.sylvania.com

CABINET FOR HEALTH SERVICES
COMMONWEALTH OF KENTUCKY
RADIOACTIVE MATERIAL LICENSE

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1. LICENSEE AND 2. ADDRESS

OSRAM SYLVANIA INC.
1100 TYRONE PIKE
VERSAILLES, KY 40383

ATTENTION: KATHLEEN ROY
TELEPHONE: 859-256-1076

PURSUANT TO KRS 211.842 ET SEQ., THE KENTUCKY CABINET FOR HUMAN
RESOURCES REGULATIONS, 902 KAR 100, AND IN RELIANCE ON STATEMENTS
AND REPRESENTATIONS HERETOFORE MADE BY THE LICENSEE, A LICENSE IS
HEREBY ISSUED TO RECEIVE, ACQUIRE, OWN, POSSESS AND TRANSFER
RADIOACTIVE MATERIAL LISTED BELOW; AND TO USE SUCH RADIOACTIVE
MATERIAL FOR THE PURPOSE(S) AND AT THE PLACE(S) DESIGNATED BELOW.
THIS LICENSE IS SUBJECT TO ALL APPLICABLE RULES, REGULATIONS, AND
ORDERS OF THE CABINET FOR HEALTH SERVICES, NOW OR HEREINAFTER IN
EFFECT AND TO ANY CONDITIONS SPECIFIED BELOW.

3. LICENSE NUMBER: 201-423-91
AMENDMENT NO. 39
4. EXPIRATION DATE: MAY 31, 2012
5. REVIEWER: 84

6. LICENSED MATERIAL 7. FORM 8. POSSESSION LIMIT
A. KRYPTON 85 A. GAS A. NOT TO EXCEED 100
MILLICURIES
B. PROMETHIUM 147 B. PLATED SOURCE B. 40 MILLICURIES

9. AUTHORIZED USE

A. AND B. FOR POSSESSION AND STORAGE ONLY INCIDENTAL TO
DISTRIBUTION OF EXEMPT PRODUCTS AS LICENSED BY THE U.S. NUCLEAR
REGULATORY COMMISSION.

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CONDITIONS:

10. THE LICENSEE SHALL COMPLY WITH THE PROVISIONS OF THE KENTUCKY CABINET FOR HEALTH SERVICES ADMINISTRATIVE RADIATION REGULATIONS, 902 KAR 100.
11. RADIOACTIVE MATERIAL SHALL BE USED AT:

1100 TYRONE PIKE
VERSAILLES, KENTUCKY 40383
12. RADIOACTIVE MATERIALS LISTED IN 6.A. & B. SHALL BE USED BY, OR UNDER THE SUPERVISION OF:
KATHLEEN ROY
13. THE RADIATION PROTECTION OFFICER FOR ACTIVITIES AUTHORIZED IN ITEM 9.A. & B. IS KATHLEEN ROY.
14. THIS LICENSEE IS AUTHORIZED TO COLLECT LEAK TEST SAMPLES IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE LICENSEE'S APPLICATION DATED NOVEMBER 28, 1995 FOR ANALYSIS BY GUY H. SIMMONS, PH.D. .
ALTERNATIVELY, LEAK TEST SAMPLES MAY BE COLLECTED AND/OR ANALYZED BY OTHER PERSONS SPECIFICALLY AUTHORIZED BY THE CABINET, U.S. NUCLEAR REGULATORY COMMISSION OR AN AGREEMENT STATE.
15. SEALED SOURCES CONTAINING RADIOACTIVE MATERIAL SHALL NOT BE OPENED.
16. THE FOLLOWING SERVICES SHALL NOT BE PERFORMED BY THE LICENSEE: INSTALLATION, INITIAL RADIATION SURVEYS, RELOCATION, REMOVAL FROM SERVICE, DISMANTLING, ALIGNMENT, REPLACEMENT, DISPOSAL OF THE SEALED SOURCES, AND NON-ROUTINE MAINTENANCE OR REPAIR OF COMPONENTS RELATED TO THE RADIOLOGICAL SAFETY OF THE GAUGE (I.E., THE SEALED SOURCE, THE SOURCE HOLDER, SOURCE DRIVE MECHANISM, ON-OFF MECHANISM (SHUTTER), SHUTTER CONTROL, SHIELDING). THESE SERVICES SHALL BE PERFORMED ONLY BY PERSONS SPECIFICALLY LICENSED BY THE CABINET, U.S. NUCLEAR REGULATORY COMMISSION OR AN AGREEMENT STATE TO PERFORM SUCH SERVICES.
17. THE LICENSEE SHALL CONDUCT A PHYSICAL INVENTORY EVERY SIX (6) MONTHS TO ACCOUNT FOR ALL SEALED SOURCES RECEIVED AND POSSESSED UNDER THE LICENSE. THE RECORDS OF THE INVENTORIES SHALL BE MAINTAINED FOR THREE (3) YEARS FROM THE DATE OF THE INVENTORY FOR INSPECTION BY THE CABINET, AND SHALL INCLUDE THE RADIONUCLIDES, QUANTITIES, MANUFACTURER'S NAME AND MODEL NUMBERS, LOCATION OF SEALED SOURCES, AND THE DATE OF THE INVENTORY.

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18. IN ADDITION TO THE POSSESSION LIMITS IN ITEM 8, THE LICENSEE SHALL FURTHER RESTRICT THE POSSESSION OF RADIOACTIVE MATERIAL TO QUANTITIES BELOW THE MINIMUM LIMIT SPECIFIED IN 902 KAR 100:042, SECTION 11, FOR ESTABLISHING DECOMMISSIONING FINANCIAL ASSURANCE.
19. EXCEPT AS SPECIFICALLY PROVIDED OTHERWISE IN THIS LICENSE, THE LICENSEE SHALL CONDUCT ITS PROGRAM IN ACCORDANCE WITH THE STATEMENTS, REPRESENTATIONS, AND PROCEDURES CONTAINED IN THE DOCUMENTS, INCLUDING ANY ENCLOSURES, LISTED BELOW. THE CABINET FOR HEALTH SERVICES REGULATIONS, 902 KAR 100, SHALL GOVERN UNLESS STATEMENTS, REPRESENTATIONS, AND PROCEDURES IN THE LICENSEE'S APPLICATION AND CORRESPONDENCE ARE MORE RESTRICTIVE THAN THE REGULATION.
- A. APPLICATION DATED NOVEMBER 28, 1995, SIGNED BY JOEL BEYERLE, PLANT MANAGER.
- B. LETTERS DATED:
1. MARCH 13, 1996, SIGNED BY H. DAVID THOMAS, SR. ENVIRONMENTAL ENGINEER.
 2. NOVEMBER 26, 1996, SIGNED BY EDDIE SALONE, ENVIRONMENTAL MANAGER.
 3. MARCH 26, 1997, SIGNED BY ALAN H. JONES, CORPORATE RADIATION SAFETY OFFICER.
 4. FEBRUARY 11, 1997, SIGNED BY EDDIE L. SALONE.
 5. MARCH 2, 1998, SIGNED BY ALAN H. JONES, CORPORATE RADIATION SAFETY OFFICER.
 6. JUNE 11, 1998, SIGNED BY ALAN H. JONES, CORPORATE RADIATION SAFETY OFFICER.
 7. JULY 2, 1998, SIGNED BY ALAN H. JONES, CORPORATE RSO.
 8. NOVEMBER 10, 2003, SIGNED BY ALAN H. JONES, CORPORATE RSO.

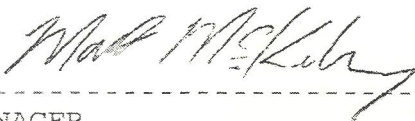
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9. DECEMBER 10, 2003, SIGNED BY LINDA S. DAY, ASSISTANT SECRETARY.
 10. DECEMBER 15, 2003, SIGNED BY ALAN H. JONES, CORPORATE RSO.
 11. APRIL 26, 2004, SIGNED BY ALAN H. JONES, CORPORATE RSO.
 12. MAY 5, 2004, SIGNED BY ALAN H. JONES, CORPORATE RSO.
 13. OCTOBER 31, 2006, SIGNED BY ALAN H. JONES, CORPORATE RADIATION SAFETY OFFICER.
 14. MAY 30, 2007, SIGNED BY KATHLEEN ROY, RSO AND PETER VAN BRED, DIRECTOR OF WAREHOUSING AND DISTRIBUTION.
 15. JUNE 5, 2007, SIGNED BY ALAN H. JONES, CORPORATE RADIATION SAFETY OFFICER.
 16. JANUARY 4, 2008, SIGNED BY KATHLEEN ROY, RSO.
 17. JANUARY 11, 2011, SIGNED BY KATHLEEN ROY, MANAGER MDC.



MANAGER
RADIATION HEALTH BRANCH

JANIE MILLER

SECRETARY
CABINET FOR HEALTH AND FAMILY
SERVICES

DATE ISSUED MAY 2, 2011

December 22, 2008

Mr. Richard Struckmeyer
Materials Licensing Branch
Division of Materials Safety & State Agreements
Office of Federal & State Materials &
Environmental Management Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Ref: License No. 20-30024-02E
Your letter dated December 2, 2008
Mail Control No. 022714

Dear Mr. Struckmeyer:

Before responding to the specific questions in your letter, I wish to call your attention to the change in the structure of our Distribution License that was made at the time of the most recent license renewal in 2001.

Prior to that renewal, every lamp model had been listed in the license at the time of the previous renewal and by many subsequent amendments. For the 2001 renewal it was proposed that rather than licensing each individual lamp model by number and having to amend the license each time there was a new lamp model number or a model number change, we requested the licensing of lamp families (types) instead. This would allow for new lamp models to be added to a family or changes to a lamp in a family requiring a new model number, without having to amend the license, provided that the lamp remained in the same family and met the license requirements of that family, such as radioactive material used and activity limit, QC testing, labeling, etc. This request was approved by the Commission with the issuance of the renewed license. Since then, the new license structure has reduced the number of required license amendments due to minor changes to lamp models within families or new lamps being added to existing lamp families. The license amendment request contained in my letter of October 6, 2008 is for a new lamp family.

Re. Your questions in the above referenced letter:

- #1 The requested information was provided in our October 6, 2008 license amendment request cover letter for the product we are asking to be added to our license, namely Tubular HID Sunlamps. Each lamp contains an Argon/Kr-85 gas mixture up to a maximum of 120 nanocuries. As stated in my letter, this product (lamp family) will be distributed under the brand names, Cosmedico and JK-RUSA.
- #2 10CFR32.14b(2) states that the required information is for each product, not necessarily every model of the product. Currently there are 14 models of the Tubular HID Sunlamp that we desire to distribute, with varying operating voltages that are all of essentially the same design and construction. The information on design and construction details of the product, shown in Enclosure #2 of our amendment request, are for the Kr-85 containing model with the highest Kr-85 content and operating voltage.
- #3 The Argon/Kr-85 gas mixture is sealed in the glass tube (burner) by pinching the glass as referenced in the Quality Control section in Enclosure #3 of our amendment request. In the same section, the test procedure is described that insures that the 'pinch' has taken. If the some of the gas has leaked out, the lamp will not perform properly and is discarded. (See also #4, below.)

#4 Our distribution license has never required prototype testing of glass lamps containing a small quantity of Kr-85. (Ref. Page 9 of 18 of Attachment #2, to our license renewal application, dated 2/23/01) Normal usage of these lamps consists of placement in a fixture by a user and removal when it no longer functions. The release of the small quantity of Kr-85 contained in these lamps would occur only in the event of the breakage of the quartz bulb. This would not be considered normal usage. The Testings Performed and Quality Control procedures, described in Enclosure #3 of our amendment request, would detect any leakers after filling.

#5 Because the amount of Kr-85 used in the subject lamps is too small to be accurately measured by radiation detection equipment, the only practical method of controlling the amount of the Kr-85 in the lamps is described in the Measurement section in Enclosure #3 of our amendment request. The Argon/Kr-85 gas mixture is certified by the manufacturer as to the concentration of Kr-85. The volume of glass tube to be filled depends on the inside diameter of the tube and the fill length as determined by the pinching distance.

Further information provided by the lamp manufacturer, Radium Lampenwerk GmbH:

- ▶ The pressure of the Argon/Kr-85 gas mixture in the supply tank is regulated to provide the desired quantity of the mixture in the glass tube for the lamp model being manufactured;
- ▶ If the gas pressure in the lamp tube were to be significantly out of specification, there would be a problem with the ignition of the finished lamp and Quality Control would reject the lamp;
- ▶ If the volume of the lamp pinch were to be out of specification, the lamp voltage would not be in the right range, and therefore the lamp would not operate properly and Quality Control would reject the lamp;
- ▶ No lamp is manufactured containing more than 0.12 microcuries of Kr-85.

#6 Radium's Quality Assurance practices for the manufacture of Tubular HID Sunlamps are described in Enclosure #3 of our amendment request. The subject lamps will only be sold by Osram Sylvania to customers for installation by them into fixtures. Osram Sylvania will not install the lamps into fixtures, nor will we sell lamps pre-installed in fixtures.

If there are any questions on the above or enclosed or if additional information is required please contact me. I may be reached directly by mail at Osram Sylvania Products, 171 Traver Road, Pleasant Valley, NY 12569, by telephone at (845) 635-8698 or fax at (845) 635-5016.

Sincerely,



Alan H. Jones
Corporate Radiation Safety Officer

cc: P. Feltri, Danvers, MA
Corporate Environmental & Safety Manager
100 Endicott Street
Danvers, MA 10923
Tel: (978) 750-2054