

Transportation Security Laboratory
Wm. J. Hughes Technical Center
Building 315
Atlantic City IAP, NJ 08405



Homeland
Security

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REGION 1

March 9, 2009

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United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406
Attn: Licensing Assistance Team

Re: License Number: 29-13141-06
Docket Number: 030-30808

Licensing Assistance Team,

The Department of Homeland Security Transportation Security Laboratory is requesting several updates to the existing Materials License.

- Increase Item 6A from 1000 to 2000 millicuries
- Change Item 7B from Foils to Sealed tube/neutron generator
- Change Item 8B from 1200 millicuries to 30 curies
- Add line C: ^{252}Cf Sealed Source 10 millicuries
- Item 11 B: Change the name of the Radiation Safety Officer to Dr. Curtis Bell.

Thank you for your consideration in this matter. If you have any questions, you may contact me at 609-813-2753 or by E-Mail at Curtis.Bell@dhs.gov.

Sincerely,

Curtis Bell, Ph.D.
Radiation Safety Officer

Encl: NRC Materials License

143536

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MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. U.S. Department of Homeland Security Science and Technology Directorate Transportation Security Laboratory</p> <p>2. William J. Hughes Technical Center, Bldg. 315 Atlantic City International Airport, NJ 08405</p>	<p>In accordance with the letter dated December 3, 2007,</p> <p>3. License number 29-13141-06 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date November 30, 2014</p> <hr/> <p>5. Docket No. 030-30808 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Nickel 63</p> <p>B. Hydrogen 3</p>	<p>7. Chemical and/or physical form</p> <p>A. Plated sources or foils</p> <p>B. Foils</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 1000 millicuries</p> <p>B. 1200 millicuries</p>
<p>9. Authorized use:</p> <p>A. In electron capture detector cells which are distributed under a specific license issued by the U.S. Nuclear Regulatory Commission or any Agreement State.</p> <p>B. For storage only.</p>		

CONDITIONS

- 10. Licensed material may be used only at the licensee's facilities located at Buildings 315 and 319, Atlantic City International Airport, Atlantic City, New Jersey and at temporary job sites of the licensee anywhere in the United States.
- 11. A. Licensed material shall be used by, or under the supervision of, Sheldon Brunk, Ph.D.
- B. The Radiation Safety Officer for this license is Peter Saraceni.
- 12. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.

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- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.
- C. Sealed sources need not be tested if they contain only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.
- D. Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transferred to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2); and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.
- F. Tests for leakage and/or contamination, limited to leak test sample collection, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is not authorized to perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- G. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
13. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
14. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
15. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
16. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in

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conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.

- B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
17. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
18. 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 U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated September 20, 2004 (ML042680392)
B. Letter dated December 3, 2007 (ML073460237)



For the U.S. Nuclear Regulatory Commission

Original signed by Jenny Johansen

Date December 18, 2007

By _____

Jenny Johansen
Materials Security and Industrial Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406
Tuesday, December 18, 2007 9:42:09 AM

This is to acknowledge the receipt of your letter/application dated

3/9/2009, and to inform you that the initial processing which includes an administrative review has been performed.

AMCWD. 29-1341-CL.
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 143536.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.