

U.S. NUCLEAR REGULATORY COMMISSION
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. *OC 03124 57654*

<p align="center">Licensee</p> <p>1. UL LLC</p> <p>2. 110 South Hill Street South Bend, IN 46617</p>	<p>In accordance with the letter dated December 7, 2012,</p> <p>3. License number 13-32402-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date June 30, 2012</p> <hr/> <p>5. Docket No. 030-36034 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Strontium-90</p> <p>B. Barium-133</p> <p>C. Americium-241</p> <p>D. Any byproduct material</p> <p>E. Hydrogen-3</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Any</p> <p>D. Any</p> <p>E. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 100 microcuries total</p> <p>B. 100 microcuries total</p> <p>C. 10 microcuries total</p> <p>D. 100 microcuries total</p> <p>E. 100 microcuries total</p>
<p>9. Authorized use:</p> <p>A. through E. Noncommercial calibration of analytical instruments, quality control in the analysis of samples for radionuclides, and analysis of drinking water and environmental samples.</p>		

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at 110 South Hill Street, South Bend, Indiana.
11. A. The Radiation Safety Officer for this license is Raymond A. Siery.
B. The Assistant Radiation Safety Officer for this license is Dale Piechocki.
12. Licensed material listed in Subitems 6.A. through 6.E. above is only authorized for use by, or under the supervision of Theresa M. Flores, Ojeta Oke, Tina Shepherd, or Jane Timm.
13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at other intervals as specified by 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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

13-32402-01

Docket or Reference Number

030-36034

Amendment No. 07

- B. Notwithstanding Paragraph A of this condition, sealed sources and detector cells designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made, within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Sealed sources need not be leak tested if:
- (i) **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 no more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or**
 - (ii) they are not designed to emit alpha particles, 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 or detector cell 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.
- G. **Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years.**
14. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed.
15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall not use licensed material in or on human beings.
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. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

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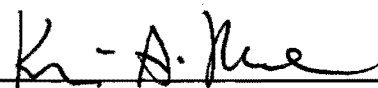
19. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated May 16, 2002; and
- B. Letters dated November 17, 2004 (excluding SOP for Radiochemistry), July 6, 1010, **December 7, 2011**, and **February 3, 2012**.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date

FEB 17 2012

By


Kevin G. Null
Materials Licensing Branch
Region III