

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. Pennsylvania Department of Department of Environmental Protection</p> <p>2. Bureau of Laboratories P.O. Box 1467 Harrisburg, Pennsylvania 17105-1467</p>	<p>In accordance with the letter dated April 11, 2007,</p> <p>3. License number SNM-719 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date February 29, 2016</p> <hr/> <p>5. Docket No. 070-00781 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p>	<p>7. Chemical and/or physical form</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p>
A. Uranium 235	A. Any	A. 1.2 grams
B. Plutonium 238	B. Any	B. 0.6 nanograms
C. Plutonium 239	C. Any	C. 2.5 micrograms
D. Plutonium 240	D. Any	D. 4.4 micrograms
E. Plutonium 241	E. Any	E. 9.7 nanograms
F. Plutonium 242	F. Any	F. 25 micrograms

9. Authorized use:

A. through F. For use as tracers and/or standards for the analysis of environmental samples of plutonium and uranium; and, for preparing reference and calibration standards for instrument calibration.

CONDITIONS

- 10. Licensed material may be used or stored at the licensee's facilities located at Bureau of Laboratories, 2575 Interstate Drive, Harrisburg, Pennsylvania.
- 11. Licensed material in items 6.A. through 6.F. shall be used by, or under the supervision of, Rory Kehler, Thomas J. Matukaitis, Rubeena Quazi, Christine Robbins, Richard Sheibley, Tarulatta Upadyhay or

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Michael Webb.

B. The Radiation Safety Officer for this license is Rosa Rangel.

12. The licensee shall not use licensed material in or on human beings.
13. The licensee shall not use licensed material in field applications where it is released except as provided otherwise by specific condition of this license.
14. 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.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to primarily 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 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.
- 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. 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.

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- F. 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.
- G. 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.
- H. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. 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 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 August 16, 2005 [ML052420607]
B. Letter received November 25, 2005 [ML053330487]
C. Letter dated April 11, 2007 with attached application (ML071150081)
D. Letter dated June 27, 2007

For the U.S. Nuclear Regulatory Commission

Original signed by Thomas K. ThompsonDate June 27, 2007

By

Thomas K. Thompson
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406