



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 23, 2007

Docket No. 03035695
Control No. 140499

License No. 41-08165-18

Beth A. Wetzel
Mgr., Corp Nuclear Licensing & Industry Affairs
Tennessee Valley Authority
PSC 1B-C
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: TENNESSEE VALLEY AUTHORITY, LICENSE AMENDMENT, CONTROL NO.
140499

Dear Ms. Wetzel:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Thank you for your cooperation.

Sincerely,

Original signed by Dennis R. Lawyer

Dennis R. Lawyer
Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 2

B. Wetzel
Tennessee Valley Authority

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cc:
James B. Colagross, Radiation Safety Officer

DOCUMENT NAME: C:\FileNet\ML072050294.wpd

SUNSI Review Complete: DLawyer

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NAME	DLawyer/ <i>DRL1/</i>						
DATE	7/23/07						

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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. Tennessee Valley Authority PSC 1B-C</p> <p>2. 1101 Market Street Chattanooga, Tennessee 37402-2801</p>	<p>In accordance with the letter dated May 8, 2007,</p> <p>3. License number 41-08165-18 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date May 31, 2011</p> <hr/> <p>5. Docket No. 030-35695 Reference No.</p>
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| <p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any radioactive material with atomic numbers 1 through 83</p> <p>B. Any radioactive material with atomic numbers above 83</p> | <p>7. Chemical and/or physical form</p> <p>A. Contamination on equipment or samples</p> <p>B. Contamination on equipment or samples</p> | <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 1 millicuries per radionuclide and 10 millicuries total</p> <p>B. 1 microcuries per radionuclide and 20 microcuries total</p> |
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9. Authorized use:
- A. and B. Possession, repair, inspection and testing of contaminated equipment and chemical analysis of liquid samples.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at TVA Central Laboratories Services Building, Chickamauga Power Service Center, N. Side Chickamauga Reservation, Chattanooga, Tennessee and TVA Norris Engineering Laboratory Building 129 Pine Road, Norris, Tennessee.
11. A. Licensed material shall be used by, or under the supervision of, Robert L. Crawford.
- B. The Radiation Safety Officer for this license is James B. Colagross.
12. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six months or at 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.

**MATERIALS LICENSE
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Amendment No. 2

- 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 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.
- E. 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.
- 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, including leak test sample collection and analysis, 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.
- H. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
13. 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.
14. The licensee is authorized to hold byproduct material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal without regard to its radioactivity if the licensee:
- A. Monitors byproduct material at the surface before disposal and determines that its radioactivity cannot be distinguished from the background radiation level with an appropriate radiation detection survey meter set on its most sensitive scale and with no interposed shielding; and

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- B. Removes or obliterates all radiation labels, except for radiation labels on materials that are within containers and that will be managed as biomedical waste after they have been released from the licensee; and
- C. Maintains records of the disposal of licensed materials for 3 years. The record must include the date of disposal, the survey instrument used, the background radiation level, the radiation level measured at the surface of each waste container, and the name of the individual who performed the disposal.
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. This license condition applies only to those procedures that are required to be submitted in accordance with the regulations. Additionally, this license condition does not limit the licensee's ability to make changes to the radiation protection program as provided for in 10 CFR 35.26. 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 June 12, 2000 (ML003725148)
- B. Letter dated August 3, 2000 (ML003738302)
- C. Letter dated March 26, 2001 (ML010870658)

For the U.S. Nuclear Regulatory Commission

Date July 23, 2007

By

Original signed by Dennis R. Lawyer

Dennis R. Lawyer
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406