U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 32

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, 37, 39, 40, 70 and 71, 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.

Licensee

1. Texas A&M University

2. 4472 TAMU
College Station, TX 77843-4472

In accordance with letter dated January 07, 2026,

3. License No.: 42-09082-09 is amended in its entirety to read as follows:

4. Expiration Date: October 31, 2033

5. Docket No.: 030-01066
Reference No.:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
A. Carbon-14	A. Any	A. 80 millicuries total	A. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
B. Sulfur-35	B. Any	B. 60 millicuries total	B. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
C. Calcium-45	C. Any	C. 100 millicuries total	C. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
D. Cesium-134	D. Any	D. 1 millicurie total	D. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.

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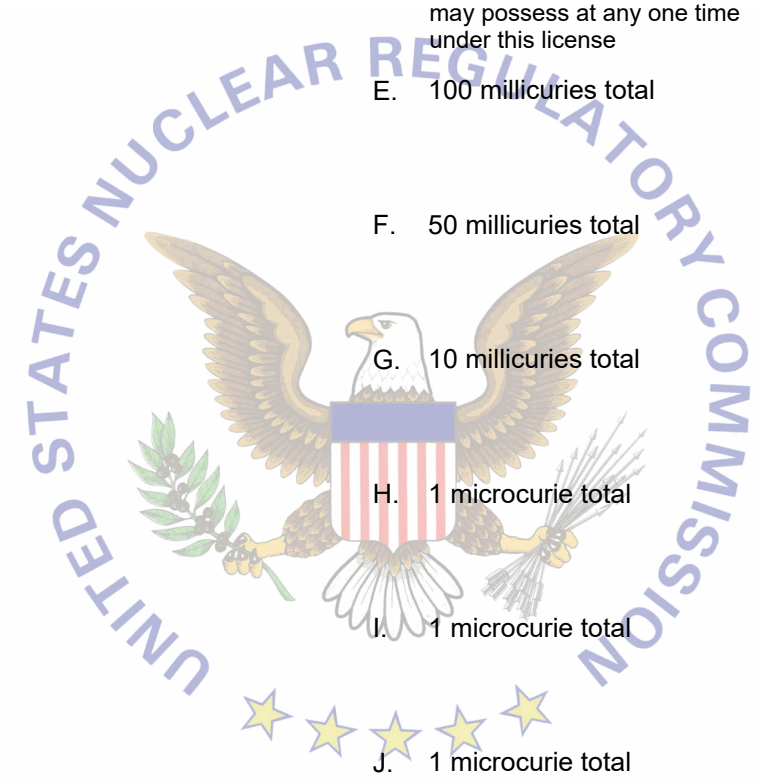
E. Hydrogen-3	E. Any	E. 100 millicuries total	E. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
F. Phosphorus-32	F. Any	F. 50 millicuries total	F. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
G. Phosphorus-33	G. Any	G. 10 millicuries total	G. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
H. Neptunium-237	H. Any	H. 1 microcurie total	H. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
I. Thorium-228	I. Any	I. 1 microcurie total	I. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
J. Thorium-232	J. Any	J. 1 microcurie total	J. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
K. Thorium-234	K. Any	K. 10 microcuries total	K. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.



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L. Plutonium-240	L. Any	L. 1 microcurie total	L. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
M. Plutonium-242	M. Any	M. 1 microcurie total	M. For research and development as defined in 10 CFR 30.4, in vitro studies, and educational purposes. Studies in animals are not authorized.
N. Cesium-137	N. Sealed Sources (Eckert & Ziegler Isotope Products, Model Cs7.P03; Isotope Products Laboratories, Model HEG-137; QSA Global, Model CDC.800 Series)	N. 10 millicuries per source and 40 millicuries total	N. For use in gamma ray attenuators and porosity evaluators to measure by transmission methods the density of ocean cores.
O. Europium-152	O. Sealed or plated sources (Isotope Products Laboratories, Model GF-XXX Type D or M)	O. 10 microcuries per source and 20 microcuries total	O. For energy calibrations of NaI(Tl) detectors used in core logging.
P. Thorium-228	P. Sealed, Plated, or Foil Sources (Eckert & Ziegler Isotope Products dba Isotope Products Laboratories, Model GF Type D or M Series (formerly GF-XXXD or GF-XXXM Series))	P. 0.1 microcuries per source and 0.1 microcuries total	P. For use as calibration and/or reference standards.
Q. Uranium-238	Q. Sealed, Plated, or Foil Sources (Eckert & Ziegler Isotope Products dba Isotope Products Laboratories, Model GF Type D or M Series (formerly GF-XXXD or GF-XXXM Series))	Q. 0.1 microcuries per source and 0.1 microcuries total	Q. For use as calibration and/or reference standards.

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CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at:
    A. Aboard any Texas A&M University research vessel, or aboard other ships under contract between Texas A&M University and the ship's owner, for in vitro tracer studies at temporary job sites of the licensee in offshore waters where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, and
    B. Temporary job sites anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States.

    If the jurisdiction status of a Federal facility within an Agreement state is unknown, the licensee should contact the federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

11. Licensed material shall only be used by, or under the supervision of, individuals designated in writing by the Radiological Safety Committee, Bryan Earl Tomlin, Ph.D., Chairperson.

12. The Radiation Safety Officer (RSO) for this license is T. Michael Martin, Ph.D., CHP.

13. A. Sealed sources and detector cells 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 by an Agreement State. In the absence of a registration certificate, sealed sources shall be tested for leakage and/or contamination at intervals not to exceed 6 months, or at such other intervals as specified.

    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.

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C. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.

D. 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 by 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.

E. Sealed sources and detector cells 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.

F. Sealed sources and detector cells 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.

G. The leak test shall be capable of detecting the presence of 185 becquerels (0.005 microcuries) of radioactive material on the test sample. If the test reveals the presence of 185 becquerels (0.005 microcuries) 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.

H. Tests for leakage and/or contamination, including leak test sample collection and analysis, shall be performed by the licensee or other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

I. Records of leak test results shall be kept in units of becquerels (microcuries) and shall be maintained for 3 years.

14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from the source holder by the licensee.

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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 Commission or an Agreement State to perform such services.

16. Sealed sources shall not be subjected to environmental or other conditions of use that exceed the statement of "Limitations and/or Other Considerations of Use," or the classification testing described in the corresponding sealed source and device registration certificate.

17. Licensed material shall not be used in or on human beings except as provided otherwise by specific condition of this license.

18. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperature from exceeding that specified in the certificate of registration issued by the NRC pursuant to 10 CFR 32.210 or equivalent regulations from an Agreement State.

    B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.

19. This license does not authorize disposal of licensed material at sea.

20. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.

21. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.

22. This license does not authorize commercial distribution of licensed material.

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23. The licensee shall conduct a physical inventory every 6 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 3 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.

24. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:

    A. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated, except for radiation labels on materials that are within containers and that will be managed as biohazard waste after they have been released from the licensee.

    B. A record of each such disposal permitted under this license condition shall be retained for 3 years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.

25. The licensee shall maintain records of information related to decommissioning as specified in 10 CFR 30.35(g) until this license is terminated by the Commission.

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26. 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. 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 March 30, 2018 (ML18099A360)

B. Email dated September 25, 2018 (ML18275A404)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: January 16, 2026

By: MICHELLE SIMMONS

Digitally signed by MICHELLE SIMMONS
Date: 2026.01.16 11:10:39 -06'00'

Alexus Willis
Region 4