U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 23

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	In accordance with the letter dated December 30, 2022,	4. Expiration Date: February 28, 2028
1. Agilent Technologies, Inc. 2. 2850 Centerville Road Wilmington, DE 19808	3. License No.: 07-28762-01 is amended in its entirety to read as follows:	5. Docket No.: 030-32792 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. Hydrogen-3	A. Foils (Safety Light Corporation (formerly U.S. Radium), Model LAB 508-3; U.S. Radium, Model LAB 508-1)	A. 4 curies per foil and 4 curies total	A. Receipt of returned devices for disposal.
B. Nickel-63	B. Foils (AEA Technology, Model custom plated sources; Bristol-Myers Squibb Medical Imaging/DuPont Merck Pharmaceutical Corporation, Model NER-004P; DuPont Merck Pharmaceutical, Model custom plated sources; Eckert & Ziegler Isotope Products Laboratories, Model NBCD; Isotope Products Laboratories, Model custom plated sources)	B. 100 curies and no single source to exceed the maximum activity specified in the certificate of registration issued by the U. S. Nuclear Regulatory Commission or an Agreement State	B. Research and development as defined in 10 CFR 30.4; testing, production and assembly of detector cells; demonstration of use of detector cells; and distribution in detector cells to persons authorized to receive the licensed material in accordance to the terms and conditions of specific licenses issued by the U.S. Nuclear Regulatory Commission or any Agreement State.

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CONDITIONS

10. Licensed material shall be used or stored at the licensee's facilities located at: Little Falls Center, 2850 Centerville Road, Wilmington, Delaware, 19808

11. Licensed material shall only be used by, or under the supervision of, individuals who have received the training described in the letters dated September 5, 2012; October 31, 2013, and December 30, 2022, and have been designated in writing by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.

12. The Radiation Safety Officer (RSO) for this license is David S Bennett.

13. The licensee shall not use the licensed material in or on humans.

14. This license does not authorize commercial distribution of licensed material pursuant to 10 CFR 32.72 or 10 CFR 32.74; to persons generally licensed pursuant to 10 CFR Part 31 or equivalent regulations of any Agreement State; or to persons exempt from licensing pursuant to 10 CFR 30.14 through 10 CFR 30.21 inclusive, or equivalent regulations of any Agreement State.

15. 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. 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.

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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 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.

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 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.

G. 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.

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

16. 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 sealed 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.

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17. 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 statements, representations, and 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 impose on the licensee requirements that are more restrictive than or in addition to the regulations.
    A. Letter dated September 5, 2012 (ML12271A213)
    B. Letter dated January 22, 2013 (ML12291A842)
    C. Letter dated October 31, 2013 (ML13324A143)
    D. Letter dated September 9, 2015 (ML15273A391)
    E. Letter dated September 9, 2015 (ML15273A389)
    F. Letter dated February 3, 2016 (ML16053A461)
    G. Letter dated December 30, 2022 (ML23023A023)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: March 6, 2023

By: Elizabeth Ullrich
Digitally signed by Elizabeth Ullrich
Date: 2023.03.06 10:27:30 -05'00'

Elizabeth Ullrich
Region 1