NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

Amendment No. 60

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.

Licensee	
1. E.I. DuPont	In accordance with the letter dated June 26, 2012, 3. License number 47-01876-01 is amended in its entirety to read as follows:
2. P.O. Box 1217 Washington, West Virginia 26181	4. Expiration date May 31, 2014 5. Docket No. 030-06660 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
Outside of Scope		

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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
C. Strontium 90	C. Sealed Sources (Amersham Model SIF.D2)	C. 300 millicuries total 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

Outside of Scope

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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
Outside of Scope		

9. Authorized use:

A. and C. In in Ohmart, TracerLab, Kay Ray, ICN, TN, Measurex and/or Ronan Engineering fixed gauging devices, for measuring properties of materials and/or controlling industrial processes.

B. For use in calibration of licensee's portable survey meters.

D. For use in electron capture detector cells in gas chromatography units and mass spectrometers that are distributed under a specific license issued by the U.S. Nuclear Regulatory Commission or any Agreement State.

E. and F. In CPN International, Inc. Model No. MCM-2, and MC Series Portaprobe portable gauging devices for measuring physical properties of materials.

G. through I. In Thermo NITRON Analyzers, LLC Model XLi-Series and XLp-Series or TN Technologies Model 9200 Series (9277 Source housing) X-Ray fluorescence devices for sample analysis.

J. To be used, for sample analysis, in Lagus Applied Technology Model EC-200 gas chromatography devices.

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CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located seven miles west of Parkersburg, West Virginia at 8480 State Route 892 (DuPont Road), Washington, West Virginia and at the Belle plant site located at 901 West DuPont Ave., Belle, West Virginia.

11. Licensed material shall be used by, or under the supervision of, R.F. Bonar, D.L. Bloomer, M. D. Boggs, S.A. Middleton, C.R. Plantz, or Brent Kincaid.

12. The Radiation Safety Officer for this license is Richard F. Bonar.

13. 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.

    B. 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.

    C. 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.

    D. 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.

    E. 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

    F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.

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14. Sealed sources or source rods containing licensed material shall not be opened or sources removed from source holders or detached from the source rods or gauges by the licensee, except as specifically authorized.

15. 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.

16. A. Each gauge shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed 6 months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State.

    B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested before use.

17. A. Installation, initial radiation surveys, relocation, or removal from service of devices containing sealed sources shall be performed only by, R.F. Bonar, D.L. Bloomer, S.A. Middleton, C.R. Plantz, M.D. Boggs and/or Brent Kincaid, in accordance with procedures specified in application dated December 21, 1993, or by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

    B. Maintenance and repair of devices and installation, replacement of sealed sources listed in sub items 6.A., 7.A., 8.A., and 9.A. for sources listed as 3M Models 4F6S and 4P6N and USRC Dwg. Lab-701 shall be performed only by, R.F. Bonar, D.L. Bloomer, S.A. Middleton, C.R. Plantz, M.D. Boggs and/or Brent Kincaid, in accordance with procedures specified in application dated December 21, 1993, or by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

    C. Maintenance and repair of devices and installation, replacement and disposal of the sealed sources shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

18. Prior to initial use and after installation, relocation, dismantling, alignment, or any other activity involving the source or removal of the shielding, the licensee shall assure that a radiological survey is performed to determine radiation levels in accessible areas around, above, and below the gauge with the shutter open. This survey shall be performed only by persons authorized to perform such services by the U.S. Nuclear Regulatory Commission or an Agreement State.

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19. The licensee shall operate each device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.

20. The licensee shall assure that the shutter mechanism, for each device containing licensed material, is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify, as appropriate, its "lock-out" procedures whenever a new device is obtained to incorporate the device manufacturer's recommendations.

21. Each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport or storage, or when not under the direct surveillance of an authorized user.

22. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

23. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

24. 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 December 21, 1993 (ML052200125)
    B. Application dated December 8, 2003 (ML033460307)
    C. Letter dated November 17, 2009 (ML093310469)

For the U.S. Nuclear Regulatory Commission

Original signed by Sattar Lodhi, Ph.D.

Date July 19, 2012

By

Sattar Lodhi, Ph.D.
Materials Security and Industrial Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406