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Duplicate ■ MATERIALS LICENSE ■ Duplicate ■ Duplicate

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	In accordance with the letter dated June 27, 2002,
1. Aluminum Company of America ALCOA Technical Center	3. License number 37-07653-02 is amended in its entirety to read as follows:
2. 100 Technical Drive Alcoa Center, Pennsylvania 15069	4. Expiration date December 31, 2004
	5. Docket No. 030-06172 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
A. Cesium 137	A. Sealed sources	A. Not to exceed 8 curies total
B. Nickel 63	B. Foil contained in Hewlett-Packard Model 18713-60520 or Perkin-Elmer Model 330-0119 detector cells	B. Not to exceed 15 millicuries per foil and 150 millicuries total
C. Hydrogen 3	C. Foil contained in AID Model 510-6007 detector cells	C. Not to exceed 200 millicuries per foil and 2 curies total
D. Promethium 147	D. Sealed sources (Amersham Model PHC.C1)	D. Not to exceed 500 millicuries per source or 1500 millicuries total
E. Strontium 90	E. Sealed sources (Accuray Model S-18)	E. Not to exceed 300 millicuries per source and 900 millicuries total
F. Thallium 204	F. Sealed Sources (Isotope Products, Inc. Model TCB-i and Helmut Fischer Models C07.XX.XX series)	F. Not to exceed 150 microcuries per source and 500 microcuries total

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9. Authorized use:

A. For use in Accuray Corporation (ABB Process Automation) devices which have been evaluated and approved for licensing purposes and authorized for distribution under a license issued by the U.S. Nuclear Regulatory Commission or an Agreement State.
B. and C. For use in gas chromatographs for sample analysis.
D. For use in FAG Bearing Corporation Series FH-46 gauge source holder series 9850 to measure material density.
E. For possession and use in Accuracy Corporation Model U-6 beta thickness gauge.
F. For use in Fischerscope Beta Model 2045 gauge for measuring material thickness.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at ALCOA Technical Center, 100 Technical Drive, Alcoa Center, Pennsylvania, and ALCOA Research Laboratory, New Kensington, Pennsylvania.

11. A. Licensed material shall be used by, or under the supervision of, Laura M. Rosato or Jim Szalanski.

B. The Radiation Safety Officer for this license is Laura M. Rosato.

12. 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. 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 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.

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.

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E. 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.

F. 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.

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

14. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.

15. 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.

16. Each gauge shall be tested for the proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such longer intervals as specified by the manufacturer and approved by the Commission or an Agreement State in a registration certificate referred to in 10 CFR 32.210.

17. Installation, initial radiation surveys, relocation, or removal from service of devices containing sealed sources shall be performed by Jim Szalanski or by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. Maintenance and repair of such devices and installation, replacement, and disposal of sealed sources shall be performed 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 device with the shutter open. This survey shall be performed only by persons authorized to perform such services by the 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 of each device 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. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

22. The licensee may initially mount a gauge if permitted by the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State and under the following conditions:

    A. The gauge must be mounted in accordance with written instructions provided by the manufacturer;

    B. The gauge must be mounted in a location compatible with the "Conditions of Normal Use" and "Limitations and/or Other Considerations of Use" in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State;

    C. The on-off mechanism (shutter) must be locked in the off position, if applicable, or the source must be otherwise fully shielded;

    D. The gauge must be received in good condition (i.e., package was not damaged); and

    E. The gauge must not require any modification to fit in the proposed location.

    Mounting does not include electrical connection, activation or operation of the gauge. The source must remain fully shielded and the gauge may not be used until it is installed and made operational by a person specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such operations.

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23. 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 29, 1990
B. Application dated July 13, 1994
C. Letter dated August 26, 1994
D. Letter dated September 19, 1994
E. Letter dated September 21, 1994

For the U.S. Nuclear Regulatory Commission

Date August 23, 2002

By ***Original signed by Sattar Lodhi, Ph.D.***

Sattar Lodhi, Ph.D.
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406