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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.

Licensee	In accordance with the application dated August 23, 2005,
1. United States Department of Agriculture Office of Procurement & Property Management Radiation Safety Staff	3. License number 19-00915-03 is amended in its entirety to read as follows:
2. 5601 Sunnyside Avenue, Mailstop 5510 Beltsville, Maryland 20705	4. Expiration date March 31, 2016
	5. Docket No. 030-04530 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. Any byproduct material with atomic numbers 1 through 83 and a half-life less than or equal to 120 days	A. Any, except sealed sources	A. 1 curie total
B. Any byproduct material with atomic numbers 1 through 83 and a half-life greater than 120 days	B. Any, except sealed sources	B. See Condition 13
C. Any byproduct material with atomic numbers 1 through 95	C. Sealed or plated sources as described in the letter dated March 7, 2006	C. 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
D. Any byproduct material identified in 10 CFR 35.100	D. Any radiopharmaceutical identified in 10 CFR 35.100	D. As needed

9. Authorized use:

A. through C. Research and development as defined in 10 CFR 30.4 including animal studies; in gauging and measuring devices, and in field studies.

D. Studies on human research subjects as approved by a Radioactive Drug Research Committee (RDRC) that has been approved by the Food and Drug Administration (FDA).

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CONDITIONS

10. Licensed material may be used at locations and facilities of the U.S. Department of Agriculture and at temporary job sites of the licensee anywhere in the United States, as authorized by the licensee's Radiation Safety Committee, except that licensed material for research studies in humans shall not be used on the premises of a medical institution licensed pursuant to Section 35.11 of 10 CFR Part 35 or equivalent regulations of an Agreement State.

11. Licensed material shall only be used by, or under the supervision of, individuals designated, in writing, by the Radiation Safety Committee. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual. The use of licensed material in or on humans shall be by a physician, dentist, or podiatrist as defined in 10 CFR 35.2.

12. The Radiation Safety Officer for this license is John T. Jensen.

13. If only one radionuclide is possessed, the possession limit is the quantity which is less than or equal to 10^5 times the applicable quantity specified for that radionuclide in Appendix B to 10 CFR Part 30. If two or more radionuclides are possessed, the possession limit is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to 10^5 times the applicable quantity specified for that radionuclide in Appendix B to 10 CFR Part 30. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material at a single location to quantities below the limits specified in 10 CFR 30.72 which require consideration of the need for an emergency plan for responding to a release of licensed material.

15. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.

16. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.

17. The licensee shall possess and use byproduct material for "medical use", as defined in 10 CFR 35.2, in accordance with the prescriptive and performance criteria in all sections of 10 CFR Part 35 applicable to human research subjects and the uses listed in 10 CFR 35.100.

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

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19. 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

    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.

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

21. 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. 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.

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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.

22. 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.

23. 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 U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.

24. 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 temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.

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

25. 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.

26. 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.

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27. A. If the licensee uses unshielded sealed sources extended more than 3 feet below the surface, the licensee shall use surface casing that extends from the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface. If it is not feasible to extend the casing 12 inches above the surface, the licensee shall implement procedures to ensure that the cased hole is free of obstruction before making measurements.

    B. If a sealed source or a probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U.S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent.

28. A. The licensee is authorized to initiate characterization activities at its radioactive waste burial site located at its facilities in Beltsville, Maryland.

    B. The characterization activities shall be conducted in accordance with the Characterization Survey Work Plan dated November 2004, that was submitted with letter dated December 3, 2004, and a subsequent addendum dated February 2, 2006, to the Characterization Survey Work Plan.

    C. On or before December 1, 2005, the licensee shall submit to the NRC a comprehensive plan for the decommissioning of the radioactive waste burial site, including the expected date of completion of decommissioning of the site.

29. The licensee shall maintain control of each site where it disposed of radioactive material by burial and shall continue to monitor the Beltsville burial site in accordance with letter dated July 2, 1992. No additional burials of radioactive material are authorized by this license.

30. Notwithstanding the requirements of 10 CFR 30.36(d), the licensee is not required to notify the NRC that the licensee has decided to cease principal activities at an entire site if:

    a. The licensed material used at the site was only in the form sealed sources; and

    b. The total activity used at the site did not, at any time, exceed one curie; and

    c. All sealed sources to be removed from the site have been leak tested within the six months prior to their removal date;

    d. No leak test of any source, performed while the source was possessed at the site, revealed the presence of 0.005 microcurie or more of removable contamination; and

    e. The licensee maintains documentation indicating the location and dates of licensed material usage.

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

32. 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 23, 2005 (ML052570550)
    B. Letter dated March 7, 2006

For the U.S. Nuclear Regulatory Commission

Date March 8, 2006

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

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

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