UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

May 14, 2007

University of South Dakota
ATTN: Bob S. Grindley
Radiation Safety Officer
414 East Clark Street
Vermillion, South Dakota 57069-2390

SUBJECT: LICENSE AMENDMENT

Please find enclosed copy of Amendment No. 13 to License No. 40-02331-19 **naming you Radiation Safety Officer. Please note that license condition 19 was updated to reflect a performance-based approach to dispose of decay in storage waste.** An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14)(v). You should review this license carefully and be sure that you understand all conditions. If you have any questions, please contact me at 817-860-8189.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public that can result from failure to comply with NRC requirements, you must conduct your radiation safety program according to the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate by NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.

2. Notify NRC in writing of any change in mailing address.

3. By 10 CFR 30.36(d) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:

   a. When you decide to terminate all activities involving materials authorized under the license whether at the entire site or any separate building or outdoor area;

   b. If you decide not to acquire or possess and use authorized material; or

   c. When no principal activities under the license have been conducted for a period of 24 months.

4. Request and obtain a license amendment before you:

   a. Change Radiation Safety Officers;

   b. Order byproduct material in excess of the amount, radionuclide or form authorized on the license;

c. Add or change the address(es) of use identified on the license; or

d. Change the name or ownership of your organization.

5. Submit a complete renewal application or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.

In addition, please note that NRC Form 313 requires the applicant, by signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant. Since the NRC also accepts a letter requesting amendment of an NRC license, the signatory for such a request should also be the licensee or certifying official rather than a consultant.

NRC will periodically inspect your radiation safety program. Failure to conduct your program according to NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC may result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the Enforcement Policy. The NRC Enforcement Policy is available on the following internet address: http://www.nrc.gov/what-we-do/regulatory/enforcement/enforc-pol.pdf.

The NRC no longer publishes the NRC Rules and Regulations loose leaf supplements. However, an electronic version of the NRC's regulations is available on the NRC Web site at www.nrc.gov. To view these regulations, highlight "Electronic Reading Room" and choose "Regulations" on the drop down menu. An electronic version of the NUREG-1556 Series publications is also available on the NRC Web site. To view these guidance documents, highlight "Electronic Reading Room"; choose "All Collections" on the drop down menu; choose "NUREGS (NRC Reports)"; and select "Publications Prepared by the NRC Staff". Then, choose "NUREG-1556" from the table and select the appropriate volume(s) for your license type.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html.

Thank you for your cooperation.

Sincerely,

/RA/

Roberto J. Torres, Senior Health Physicist
Nuclear Materials Licensing Branch

Docket: 030-15186
License: 40-02331-19
Control: 471332

Amendment No. 13

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 letter dated April 5, 2007
1. University of South Dakota	3. License number 40-02331-19 is amended in its entirety to read as follows:
2. 414 East Clark Street Vermillion, South Dakota 57069-2390	4. Expiration date September 30, 2014
	5. Docket No. 030-15186 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. As specified in Section 33.100, Schedule A, Column I of 10 CFR 33 (Type B Broad License)	A. Any, except sealed sources	A. See condition 11
B. As specified in Section 33.100, Schedule A, Column I of 10 CFR 33 (Type B Broad License)	B. Sealed sources, foils, wires, plated sources, seeds, plaques	B. 500 millicuries
C. Phosphorus-33	C. Any	C. 10 millicuries
D. Californium-252	D. Electrolytic deposition on a target disc obtained from Oak Ridge National Laboratory	D. 1 microgram
E. Plutonium	E. Encapsulated as Pu- Be neutron sources	E. 32 grams
F. Cesium-137	F. Sealed source [Industrial Reactor Lab (Series 2); 3M Co. (Models 193 & 225); Amersham (CDC.800 series); J.L. Shepherd & Associates (Model 6810); New England Nuclear/Du Pont Merck Pharmaceuticals (Models NER-570 Series & NER-580 Series).	F. 160 millicuries

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9. Authorized use:

A. through E. Research and development as defined in 10 CFR 30.4, animal studies and student training.

F. Calibration of licensee's survey instruments using a J.L. Shepherd & Associates Model 10 calibrator.

CONDITIONS

10. Licensed material may be used only at:

A. The University of South Dakota, Vermillion, South Dakota,

B. The University of South Dakota School of Medicine Health Science Center, 1400 West 22nd Street, Sioux Falls, South Dakota, and

C. The Seventh Floor of the Avera Doctors' Plaza 2, 1100 East 21st Street, Sioux Falls, South Dakota.

11. If only one radionuclide is possessed, the possession limit is the quantity specified for that radionuclide in 10 CFR 33.100, Schedule A, Column 1. 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 the applicable quantity specified in 10 CFR 33.100, Schedule A, Column 1, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

12. A. Licensed material shall be or under the supervision of individuals designated in writing by the Radiation Safety Officer.

B. The Radiation Safety Officer for this license is Bob S. Grindley.

13. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.

B. Notwithstanding Paragraph A of this Condition, sealed sources designed to 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 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

D. Sealed sources and detector cells need not be leak tested if:

(i) they contain only hydrogen-3; or

(ii) they contain only a radioactive gas; or

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(iii) the half-life of the isotope is 30 days or less; or

(iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or

(v) they are not designed to emit alpha particles, 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 or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

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. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, ATTN: Director, Division of Nuclear Materials Safety. The report shall specify the source involved, the test results, and corrective action taken.

F. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

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

15. 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 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.

16. The licensee shall conduct a physical inventory every 6 months to account for all sealed sources and/or devices received and possessed under the license.

17. Licensed material shall not be used in or on human beings.

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

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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 the 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. Pursuant to 10 CFR 20.1302(c) and 10 CFR 20.2002, the licensee is authorized to dispose of licensed material by incineration, provided the gaseous effluent from incineration does not exceed the limits specified for air in Appendix B, Table II, 10 CFR Part 20.

21. Pursuant to 10 CFR 20.2002, the licensee may dispose of incinerator ash containing hydrogen-3 and carbon-14 as ordinary waste in a landfill, provided the concentrations of the isotopes, expressed in µCi per gram of ash, at the time of disposal, do not exceed 10 percent of the values listed in Table II, Column 2, 10 CFR Part 20, Appendix B.

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

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

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

25. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of unsealed licensed material to quantities less than 10^4 times the applicable limits in Appendix B of 10 CFR Part 30 as specified in 10 CFR 30.35(d).

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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. 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 June 22, 2004 (ML041960106)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Date May 14, 2007

By _____

Roberto J. Torres, Senior Health Physicist
Nuclear Materials Licensing Branch
Region IV
Arlington, Texas 76011