

**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. Department of the Army Corps of Engineers  2. P.O. Box 631 Vicksburg, Mississippi 39180-6199	In accordance with application dated January 16, 2013  3. License number 23-01544-10 is amended in its entirety to read as follows:  4. Expiration date July 31, 2023  5. Docket No. 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. Hydrogen-3	A. Any	A. 50 millicuries
B. Carbon-14	B. Any	B. 100 millicuries
C. Phosphorus-32	C. Any	C. 20 millicuries
D. Phosphorus-33	D. Any	D. 25 millicuries
E. Sulfur-35	E. Any	E. 25 millicuries
F. Chromium-51	F. Any	F. 1 millicurie
G. Iron-59	G. Any	G. 1 millicurie
H. Nickel-63	H. Any	H. 40 millicuries
I. Zinc-65	I. Any	I. 1 millicurie
J. Cadmium-109	J. Any	J. 1 millicurie
K. Tin-113	K. Any	K. 1 millicurie
L. Depleted Uranium	L. Any	L. 31 millicuries

9. Authorized Use:

A. through K. Research and development as defined in 10 CFR 30.4; in laboratory tracer studies.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
23-01544-10Docket or Reference Number  
030-05062

Amendment No. 29

L. Research and development as defined in 10 CFR 30.4

**CONDITIONS**

10. Licensed material shall be stored or used only at the licensee's facilities located at 3909 Halls Ferry Road, Vicksburg, Mississippi.
11. A. Licensed material in items 6.A. through 6.K. shall be used by or under the supervision of John H. Ballard, Anthony Bednar, Ph.D., Sandra M. Brasfield, Ph.D., Mark A. Chappell, Ph.D., Deborah R. Felt, John S. Furey, Cynthia L. Price, and Jeffrey A. Steevens, Ph.D.
- B. Licensed material in item 6.L shall be used by or under the supervision of John H. Ballard, Anthony Bednar, Ph.D., Mark A. Chappell, Ph.D., Deborah R. Felt, John S. Furey, and Cynthia L. Price.
- C. The Radiation Safety Officer for this license is John A. Lindigrin.
12. 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.
13. Radioactive waste generated shall be stored in accordance with the statements, representations and procedures included with the waste storage plan described in the licensee's application dated January 16, 2013.
14. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific license condition.
15. 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."
16. The licensee shall maintain records of information related to decommissioning as specified in 10 CFR 30.35(g) until this license is terminated by the Commission.
17. The licensee shall not use licensed material in field applications where activity is released to the environment except as provided otherwise by specific condition of this license.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
23-01544-10Docket or Reference Number  
030-05062

Amendment No. 29

18. 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 January 16, 2013

[ML13112A769]



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Date: July 18, 2013By: \_\_\_\_\_  
Lizette Roldán-Otero, Ph.D., Health Physicist  
Nuclear Materials Safety Branch B  
Region IV  
Arlington, Texas 76011-4511