

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. DNA Polymerase Technology, Inc. 2. 11 Princeton Avenue University City, MO 63130	In accordance with application dated October 28, 2012, 3. License number 24-32214-01 is renewed in its entirety to read as follows: 4. Expiration date April 30, 2023 5. Docket No. 030-36107 Reference No.
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6. Byproduct, source, and/or special nuclear material A. Sulfur-35 B. Phosphorus-32 C. Phosphorus-33	7. Chemical and/or physical form A. Any non-volatile B. Any non-volatile C. Any non-volatile	8. Maximum amount that licensee may possess at any one time under this license A. Two millicuries B. Five millicuries C. Five millicuries
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9. Authorized Use:

- A. through C. To be used for research and development as defined in 10 CFR 30.4, including in vitro laboratory studies.

CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 1508 South Grand Boulevard, St. Louis, Missouri.
11. The Radiation Safety Officer for this license is Wayne M. Barnes, Ph.D.
12. Licensed material shall be used by, or under the supervision of the following individuals for the materials indicated:

Authorized Users**Material and Use**

Milko Kermekchiev, Ph.D.

Sulfur-35, phosphorus-32, and phosphorus-33.

David Taylor, Ph.D.

Sulfur-35, phosphorus-32, and phosphorus-33.

Zhian Zhang, Ph.D.

Sulfur-35, phosphorus-32, and phosphorus-33.

13. The licensee shall not use licensed material in or on human beings.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
24-32214-01Docket or Reference Number
030-36107**Amendment No. 01**

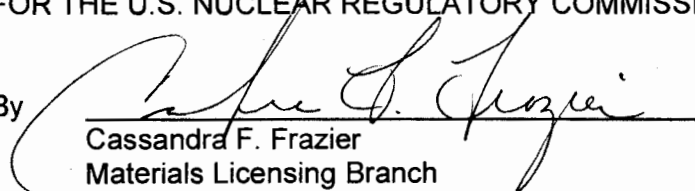
14. Experimental animals, or the products from experimental animals, that have been administered licensed material shall not be used for human consumption.
15. The licensee shall not use licensed material in field applications where activity is released except as otherwise provided by specific condition of this license.
16. 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."
17. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash provided:
- A. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- B. A record of each such disposal permitted under this license condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
18. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the NRC, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for five years from the date of each inventory, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sources and devices, and the date of the inventory.
19. 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 October 28, 2012 (excluding Attachment 3, Material Receipt and Accountability, and Attachment 4, Safe Use of Radionuclides and Emergency Procedures); and
- B. Letter dated April 24, 2013.

APR 26 2013

Date _____

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

By


Cassandra F. Frazier
Materials Licensing Branch
Region III