



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

December 30, 2004

Docket No. 030-32126
Control No. 136111

License No. 06-28624-01

Philip W. Miller, Ph.D.
Mystic Site Lead
DEKALB Genetics Corporation
62 Maritime Drive
Mystic, CT 06355-1958

SUBJECT: DEKALB GENETICS CORPORATION, ISSUANCE OF LICENSE AMENDMENT,
CONTROL NO. 136111

Dear Dr. Miller:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

In accordance with NRC Regulatory Issue Summary (RIS) 2004-17: Revised Decay-In-Storage Provisions for the Storage of Radioactive Waste Containing Byproduct Material (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2004/ri200417.pdf>), your license has been modified. Your license now contains a revised decay-in-storage (DIS) condition (see Condition 15). This revised condition permits greater flexibility for DIS of waste by eliminating a specific holding period prior to disposal. Please review the RIS 2004-17, and the revised condition carefully to ensure that you understand its requirements.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the NRC Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at 800-397-4209 or 301-415-4737 or pdr@nrc.gov.

P. Miller
DEKALB Genetics Corporation

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Thank you for your cooperation.

Sincerely,

Original signed by Bryan A. Parker

Bryan A. Parker
Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 09

cc:
Kristine J. Hardeman, Ph.D., Radiation Safety Officer

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| OFFICE | DNMS/RI | N | DNMS/RI | | DNMS/RI | | | |
| NAME | BParker/BAP | | | | | | | |
| DATE | 12/30/04 | | | | | | | |

OFFICIAL RECORD COPY

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.

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|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Licensee</p> <p>1. DEKALB Genetics Corporation Mystic Research Center</p> <p>2. 62 Maritime Drive Mystic, Connecticut 06355-1958</p> | <p>In accordance with the letter dated December 8, 2004,</p> <p>3. License No. 06-28624-01</p> <p>is amended in its entirety to read as follows:</p> <p>4. Expiration Date: May 31, 2012</p> <p>5. Docket No. 030-32126</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 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. 10 millicuries |
| B. Carbon 14 | B. Any | B. 10 millicuries |
| C. Phosphorus 32 | C. Any | C. 120 millicuries |
| D. Phosphorus 33 | D. Any | D. 90 millicuries |
| E. Sulfur 35 | E. Any | E. 25 millicuries |

9. Authorized use:

A. through E. Research and development as defined in 10 CFR 30.4.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at Mystic Research Center, 62 Maritime Drive, Mystic, Connecticut.

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11. A. Licensed material shall be used by, or under the supervision of, Thomas R. Adams, Robert Bensen, Paul S. Chomet, Jacqueline Heard, Brenda Lowe, Michael H. Luethy, Quiang Zhang or Kristine J. Hardeman, Ph.D.
- B. Licensed material identified in Item 6.C., may also be used by or under the supervision of Donald Nelson.
12. The Radiation Safety Officer (RSO) for this license is Kristine J. Hardeman, Ph.D.
13. Licensed material shall not be used in or on human beings.
14. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
15. 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 without regard to its radioactivity if it:
- 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 and 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 material for three 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.
16. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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17. 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 March 28, 2002
- B. Letter dated May 9, 2002
- C. Letter dated August 21, 2002



For the U. S. Nuclear Regulatory Commission

Date December 30, 2004
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Original signed by Bryan A. Parker

Bryan A. Parker
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406