



DONALD DANFORTH
PLANT SCIENCE CENTER

November 8, 2013

Materials Licensing Branch
U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Howard F. Beittenmiller
Radiation Safety Officer
Donald Danforth Plant Science Center

975 North Warson Road
St. Louis, Missouri 63132

Re: Request to Amend License Number 24-32339-01

Materials Licensing Branch

Enclosed, please find Form 313 and attached pages requesting amendment of the Materials License No. 24-32339-01 issued to the Donald Danforth Plant Science Center. The amendment request addresses the following areas:

1. Item 7: Individual(s) Responsible for Radiation Safety Program and Their Training Experience
 - a. Please see attached sheet: The Danforth Center wishes to add one (1) Principal Investigator as Authorized User:
Dr. Rebecca S. Bart as Authorized User for All Materials and Uses. Dr. Bart's *Curriculum vitae* with relevant information is attached.
 - b. Please see attached sheet: The Danforth Center wishes to delete two (2) Principal Investigators as Authorized Users.
Roger N. Beachy, Ph.D.
Claude Fauquet, Ph.D.

Thank you very much for your help in this matter.

Sincerely,

Howard F. Beittenmiller
Radiation Safety Officer
Donald Danforth Plant Science Center

RECEIVED NOV 12 2013



**APPLICATION FOR MATERIALS
LICENSE**

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Information Services Branch (7-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to InfoCollect.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN,
SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING,

SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER 24-32339-01
- C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

Donald Danforth Plant Science Center
975 North Warson Road
St. Louis, Missouri 63132

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Donald Danforth Plant Science Center
975 North Warson Road
St. Louis, Missouri 63132

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Howard F. Beittenmiller, Radiation Safety Officer

BUSINESS TELEPHONE NUMBER

(314) 587-1051

BUSINESS CELLULAR TELEPHONE NUMBER

(314) 614-7275

BUSINESS EMAIL ADDRESS

hbeittenmiller@danforthcenter.org

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number, b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*) (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

3M

AMOUNT ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

James C. Carrington, President

SIGNATURE

DATE

11-1-13

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

Item 7: INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE:

a. Please Add to License:

<u>Authorized User.....</u>	<u>Materials and Use</u>
Rebecca S. Bart, Ph.D.	All

b. It is the opinion of the Danforth Center that being named as Authorized User on the Materials License should be accompanied by authorization to use All Licensed Materials listed on the License. The reasons for this opinion are the following:

- 1) Although the Principal Investigator/Authorized User may not have direct experience with all Licensed Materials, all have gone through Radiation Safety Training at previous institutions and do so at the Danforth Center. Institutional Training programs are designed to train all potential users ALARA principles and safe use and handling of all licensed material. At Danforth Center, ALL laboratory personnel MUST successfully complete initial and annual refresher training whether they will or will not every use Licensed Materials.
- 2) The Danforth Center has many Authorized Users with significant and long-term experience with both direct use of and supervision of the use of Licensed Materials so Authorized Users with less experience have, in addition to the Training regimens, the experience of their peers and the Radiation Safety Department as mentors and as collaborators for both use of and supervision of the use of these research materials.
- 3) Experience with high energy beta (Phosphorous-32) and any of the low energy beta emitters will prepare users to work safely and in an ALARA manner with other beta-emitting isotopes. Safe and ALARA handling of Iodine-125 is simple to achieve and easily taught due to the isotope's low energy. Potential health effects are understood and are not difficult to prepare for and avoid through proper experimental design, a discipline common for users who employ large numbers of hazardous materials routinely in the laboratory.

b. Please Delete from License:

<u>Authorized User.....</u>	<u>Materials and Use</u>
Roger N. Beachy, Ph.D.	All
Claude Fauquet, Ph.D.	All

FedEx Express



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From: (314) 587-1051
Howard Balthemiller
Danforth Plant Science Center
975 N. Watson Rd.
Saint Louis, MO 63132

Origin ID: ZSVA



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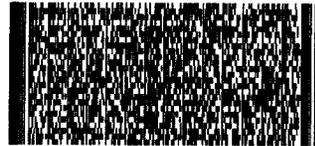


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LISLE, IL 60532

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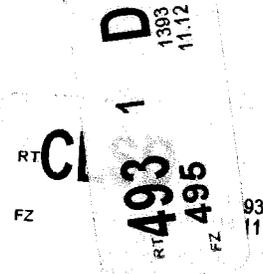


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After printing this label:

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic



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