

**Murnahan, Colleen**

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**From:** Cal Gillis [cgillis@boisestate.edu]  
**Sent:** Tuesday, April 12, 2011 11:03 AM  
**To:** Murnahan, Colleen  
**Subject:** Re: Boise State University Materials License Amendment  
**Attachments:** Boise State Acknowledgement Postcard from NRC.pdf

Colleen,

I am attaching a scan of the acknowledgement postcard we received from you with the mail control number. I thought this was for the amendment application sent Aug. 3, 2010.

Cal

On Tue, Apr 12, 2011 at 8:05 AM, Cal Gillis <cgillis@boisestate.edu> wrote:

Hello Colleen,

I am resending the original amendment email and the March 25, 2010 email regarding Boise State University's Materials License amendment.

Cal

----- Forwarded message -----

**From:** **Cal Gillis** <cgillis@boisestate.edu>  
**Date:** Fri, Mar 25, 2011 at 3:53 PM  
**Subject:** Fwd: Boise State University Materials License Amendment  
**To:** "Murnahan, Colleen" <colleen.murnahan@nrc.gov>  
**Cc:** "Lundgren, Matt" <MattLundgren@boisestate.edu>

Hello Colleen,

As per my phone inquiry earlier this week, I am forwarding the amendment submitted in August 2010. We received a post card from you indicating receipt August 23 with no administrative omissions. The mail control number was 573547. Normally when these amendments are completed we receive an updated copy of our Material License. Boise State has not received any word on this amendment, please advise as to the status. If this amendment has not been processed, we have additional items to amend. Please advise as to whether we should send the additional amendment items as an addendum to this amendment or a send a new amendment. Your help is appreciated.

Cal Gillis

Calvin W. Gillis, REHS  
Radiation Safety Officer  
Boise State University  
1910 University Drive, MS 1139  
Boise, ID 83725-1139

Phone: 208-426-5404  
Email: [cgillis@boisestate.edu](mailto:cgillis@boisestate.edu)

----- Forwarded message -----

**From:** **Cal Gillis** <cgillis@boisestate.edu>  
**Date:** Tue, Aug 3, 2010 at 3:01 PM

ADAMS # M-L 1149161  
Template \_\_\_\_\_  
Date 4/25/11 QC'd by RLG

h 5 7 4 9 0 0

Subject: Boise State University Materials License Amendment

To: "Murnahan, Colleen" <[colleen.murnahan@nrc.gov](mailto:colleen.murnahan@nrc.gov)>

Cc: "Lundgren, Matt" <[MattLundgren@boisestate.edu](mailto:MattLundgren@boisestate.edu)>

Hello Ms. Murnahan,

Attached is a cover letter, form 313, request for amendment and a statement of training and experience for amendments to Boise State University's Materials License (11-27388-01). Please let me know if you need additional information or if you want me to forward a hard copy by mail.

Calvin W. Gillis, REHS  
Radiation Safety Officer  
Boise State University  
1910 University Drive, MS 1826  
Boise, ID 83725-1826

Phone: (208) 426-3999  
email: [cgillis@boisestate.edu](mailto:cgillis@boisestate.edu)



Public Safety, Risk Management, & Transportation 1910 University Drive, MS 1826 Boise, Idaho 83725  
Environmental Health & Safety

Calvin W. Gillis, REHS  
Manager, Environmental Health & Safety  
Phone: 208-426-3999  
Email: cgillis@boisestate.edu

August 3, 2010

Colleen Murnahan, Licensing Assistant  
Nuclear Materials Licensing Branch  
U.S. Nuclear Regulatory Commission, Region IV  
612 E. Lamar Boulevard, Suite 400  
Arlington, TX 76011-4125

RE: Amendment to Boise State University – License # 11-27388-01

Dear Ms. Murnahan:

This cover letter is to request amendment to Boise State University's materials license number 11-27388-01. Attached is a Form 313 with additional pages detailing the specific amendments requested. In summary Boise State University is requesting the following changes to our NRC license:

- Remove Authorized Users
- Change of Radiation Safety Officer (Statement of Training & Experience attached)
- Authorization to perform leak tests and sample analysis of our Nickel-63 sources.

Sincerely,

A handwritten signature in black ink, appearing to read "Calvin W. Gillis". The signature is fluid and cursive, with a small "h" above the "i" in "Gillis".

Calvin Gillis  
Radiation Safety Officer

Enclosure

<b>NRC FORM 313</b> (3-2009) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <b>APPROVED BY OMB: NO. 3150-0120</b> <b>EXPIRES: 3/31/2012</b>  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 Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:infocollects.resource@nrc.gov">infocollects.resource@nrc.gov</a> , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-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.
<h2 style="margin: 0;">APPLICATION FOR MATERIALS LICENSE</h2>	

**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.**

<b>APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:</b>  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  <b>ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:</b>  <b>IF YOU ARE LOCATED IN:</b>  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 475 ALLENDALE ROAD KING OF PRUSSIA, PA 19406-1415	<b>IF YOU ARE LOCATED IN:</b>  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 612 E. LAMAR BOULEVARD, SUITE 400 ARLINGTON, TX 76011-4125
<b>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.</b>	

<b>1. THIS IS AN APPLICATION FOR (Check appropriate item)</b> <input type="checkbox"/> A. NEW LICENSE <input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>11-27388-01</u> <input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____	<b>2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)</b> <b>Boise State University</b> <b>1910 University Drive, MS 1826</b> <b>Boise, ID 83725-1826</b>		
<b>3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</b> <b>1910 University Drive</b> <b>Boise, ID 83725-1826</b>	<b>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</b> <b>Calvin W. Gillis</b>  <b>TELEPHONE NUMBER</b>  <b>(208) 426-3999</b>		
<b>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.</b>			
<b>5. RADIOACTIVE MATERIAL</b> a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.	<b>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.</b>		
<b>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.</b>	<b>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.</b>		
<b>9. FACILITIES AND EQUIPMENT.</b>	<b>10. RADIATION SAFETY PROGRAM.</b>		
<b>11. WASTE MANAGEMENT.</b>	<b>12. LICENSE FEES (See 10 CFR 170 and Section 170.31)</b> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">FEE CATEGORY</td> <td style="border: none; text-align: right;">AMOUNT ENCLOSED <b>5</b></td> </tr> </table>	FEE CATEGORY	AMOUNT ENCLOSED <b>5</b>
FEE CATEGORY	AMOUNT ENCLOSED <b>5</b>		
<b>13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.</b>  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, 1949 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.			
<b>CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE</b> <b>Calvin W. Gillis, Radiation Safety Officer</b>	<b>SIGNATURE</b> <b>DATE</b> <b>08/03/2010</b>		

FOR NRC USE ONLY					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			5		
APPROVED BY				DATE	6 574900

## Statement of Training & Experience in Radiation Work

1. Name Matthew R. Lundgren Mail Stop MS-1826

Title/Position Laboratory Safety Officer Telephone 208.426.3906

Research N/A

Authorized person who will supervise your work N/A

2. Education (List degrees, major subject, emphasis, date, and school)  
B.S. Chemical Engineering, 1999, University of Minnesota – Twin Cities

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Formal training in Radiation Safety

Provide a statement in the following areas. Include name of person or institution providing the training. Provide duration and date.

a) Principles and Practices of Radiation Protection. \_\_\_\_\_

Where Corixa Corporation – Radiation Safety Training

Duration 2 hours

When 2000

Where Engelhardt & Associates – 3 Day Radiation Safety Course

Duration 24 hours

When 2001

Where Fred Hutchinson Cancer Research Center – Radiation Safety Course

Duration 8 hours

When 2005

Where Boise State University – Radiation Safety Course

Duration 2 hours

When 2010

b) Characteristics of Ionizing Radiation \_\_\_\_\_

Where Corixa Corporation – Radiation Safety Training

Duration 2 hours

When 2000

Where \_Engelhardt & Associates – 3 Day Radiation Safety Course\_\_\_\_\_  
Duration \_24 hours\_\_\_\_\_  
When \_2001\_\_\_\_\_

Where \_Fred Hutchinson Cancer Research Center – Radiation Safety Course\_\_\_\_\_  
Duration \_8 hours\_\_\_\_\_  
When \_2005\_\_\_\_\_

Where \_Boise State University – Radiation Safety Course\_\_\_\_\_  
Duration \_2 hours\_\_\_\_\_  
When \_2010\_\_\_\_\_

c) Radioactivity Detection Instrumentation and Monitoring Techniques.

Where \_Corixa Corporation – Radiation Safety Training\_\_\_\_\_  
Duration \_2 hours\_\_\_\_\_  
When \_2000\_\_\_\_\_

Where \_Engelhardt & Associates – 3 Day Radiation Safety Course\_\_\_\_\_  
Duration \_24 hours\_\_\_\_\_  
When \_2001\_\_\_\_\_

Where \_Fred Hutchinson Cancer Research Center – Radiation Safety Course\_\_\_\_\_  
Duration \_8 hours\_\_\_\_\_  
When \_2005\_\_\_\_\_

Where \_Boise State University – Radiation Safety Course\_\_\_\_\_  
Duration \_2 hours\_\_\_\_\_  
When \_2010\_\_\_\_\_

d) Units of Radiation Dose and Quantities\_\_\_\_\_

Where \_Corixa Corporation – Radiation Safety Training\_\_\_\_\_  
Duration \_2 hours\_\_\_\_\_  
When \_2000\_\_\_\_\_

Where \_Engelhardt & Associates – 3 Day Radiation Safety Course\_\_\_\_\_  
Duration \_24 hours\_\_\_\_\_  
When \_2001\_\_\_\_\_

Where \_Fred Hutchinson Cancer Research Center – Radiation Safety Course\_\_\_\_\_  
Duration \_8 hours\_\_\_\_\_  
When \_2005\_\_\_\_\_

Where Boise State University – Radiation Safety Course  
Duration 2 hours  
When 2010

3. Formal training in Radiation Safety (continued)

Provide a statement in the following areas. Include name of person or institution providing the training. Provide duration and date.

- e) Biological Hazards of Exposure to Radiation (appropriate to the types and forms of radioactive material to be used) \_\_\_\_\_

Where Corixa Corporation – Radiation Safety Training  
Duration 2 hours  
When 2000

Where Engelhardt & Associates – 3 Day Radiation Safety Course  
Duration 24 hours  
When 2001

Where Fred Hutchinson Cancer Research Center – Radiation Safety Course  
Duration 8 hours  
When 2005

Where Boise State University – Radiation Safety Course  
Duration 2 hours  
When 2010

4. Radiation work (Describe briefly your anticipated work and list the types and quantities of licensed material to be used at Boise State University)


Take on Radiation Safety Officer duties which will include: receiving and surveying shipments, taking inventory of University materials, performing radiation safety surveys, performing/assessing spill clean up, and handling waste materials.

5. Describe your Hands-on Use of Radioactive Materials

Since 1999, I have been handling radioactive material vials for inventory, conducting contamination surveys, performing spill cleanup, decontaminating equipment and surfaces, and handling radioactive waste. My experience involves small scale laboratory quantities mostly with the following isotopes: 3-Hydrogen, 32-Phosphorus, 51-Chromium, 63-Nickel, 125-Iodine, 131-Iodine and depleted uranium. In addition while at the Corixa Corporation, I presented the radiation safety training for new users and coordinated the dosimetry program and survey instrument calibration.

6. Statement

This information is correct to the best of my knowledge. I agree to comply with the Radioactive Materials Management Manual and Radiation Safety Policies of Boise State University.

Signature  Date 08.02.10

Print Name Matthew R Lundgren

## **Request for Amendment to Materials License # 11-27388-01**

Amend 11.B. Please remove James Long, Ph.D. (retired); James Munger, Ph.D. (no use); Susan Shadle, Ph.D. (no use).

Amend 12. Please remove Calvin W. Gillis as the RSO and replace with Matthew R. Lundgren. A statement of training and experience for Matthew R. Lundgren is attached.

Amend 14. Boise State University is seeking authorization to perform leak tests and sample analysis of our Nickel-63 foils (6.J). We will implement the model leak test program published in Appendix M to NUREG-1556, Vol. 4, 'Consolidated Guidance about Materials Licenses: Program-Specific Guidance about Fixed Gauge Licenses,' dated October 1998. Leak test sample analysis of the sealed neutron source (6.T) will be conducted by persons specifically licensed by NRC to perform those services.

Boise State University has a Beckmann Coulter LS6500 liquid scintillation counter capable of detecting 0.005 microcurie (185 Becquerels) of Nickel-63.

APR 26 2011

This is to acknowledge the receipt of your letter/application dated 4/12/11, and to inform you that the initial processing, which includes an administrative review, has been performed.

DATE

☒ There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify other omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed within 90 days.

☐ A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 574900.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at (817) 860-8103.

Sincerely,

*Carl R. Hice*

Licensing Assistant

BETWEEN:

Accounts Receivable/Payable  
and  
Regional Licensing Branches

[ FOR ARPB USE ]  
INFORMATION FROM LTS

Program Code: 03620  
Status Code: Pending Amendment  
Fee Category: 3M 3P  
Exp. Date:  
Fee Comments:  
Decom Fin Assur Req: Y

## License Fee Worksheet - License Fee Transmittal

### A. REGION

#### 1. APPLICATION ATTACHED

Applicant/Licensee: BOISE STATE UNIVERSITY  
Received Date: 04/12/2011  
Docket Number: 3032218  
Mail Control Number: 574900  
License Number: 11-27388-01  
Action Type: Amendment

#### 2. FEE ATTACHED

Amount: \_\_\_\_\_  
Check No.: \_\_\_\_\_

#### 3. COMMENTS

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

### B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / / )

1. Fee Category and Amount: \_\_\_\_\_

2. Correct Fee Paid. Application may be processed for:

Amendment: \_\_\_\_\_  
Renewal: \_\_\_\_\_  
License: \_\_\_\_\_

3. OTHER \_\_\_\_\_  
\_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_