



**Eva J. Pell**  
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The Pennsylvania State University  
 304 Old Main  
 University Park, PA 16802-1504

May 25, 2005

RECEIVED  
 REGION 1  
 2005 JUN -6 PM 1:08

Thomas Thompson  
 U. S. Nuclear Regulatory Commission  
 Region I  
 475 Allendale Road  
 King of Prussia, PA 19406-1415

License 37-00185-04  
 Docket: 030-00952

Dear Mr. Thompson:

The Pennsylvania State University (PSU) requests an amendment to byproduct material license number 37-00185-04 for following three items.

1. To remove solid mercury-197 and mercury-198 from the list of radionuclides that have specific limits beyond the "1 curie per radionuclide and 20 curies total"
2. To eliminate the specific possession limit for solid selenium-75 **and** to allow acquisition of selenium-75 in any form for research and development purposes.
3. To request modification of Condition 20 for Penn State's decay-in-storage program to conform with NRC Regulatory Issue Summary 2004-17.

**Remove Mercury from Specifically Allowed Radionuclides**

In 1998, Penn State was granted a license amendment to allow for possession of 1 curie each of mercury-203 and mercury-197, a total activity of up to 4 curies total. The project for the development of a pipe-wall thinning measuring device has been completed and this material is no longer needed on our license. Thus, current Items 6T and 6U may be removed from the license at this time. Penn State wishes to continue to be authorized for these items under the Item 6A for up to 1 curie per radionuclide.

**Remove Selenium from Specifically Allowed Radionuclides**

In January 2002, Penn State was granted an amendment (# 71) to allow 1 curie of solid selenium-75 for use in the above mentioned pipe-wall thinning gauge. Again, that project is completed and this solid material is no longer needed on our license. Thus, current Items 6AA may be removed from the license at this time.

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At the same time as this amendment for solid selenium-75 was approved, the authorization to use selenium-75 in any form was removed from Item 6A of this license. I think it was removed so that there would not be a conflict with the 20 curie limitation for the "Any byproduct material with atomic numbers 3 – 83." Although there are no plans for using this material at the moment, it would save trouble if that option remained open. Please remove the prohibition in item 6A so Penn State may once again possess Se-75 in any form up to the 1 curie limit.

**Modify Condition 20, Decay-in-storage**

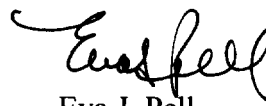
Please update the NRC's standard decay-in-storage condition (number 20) in our current license to comply with the NRC's Regulatory Issue Summary 2004-17 dated November 23, 2004.

Environmental Health and Safety (EHS) staff will revise their procedures as necessary to incorporate the following requirements:

- The waste may only contain radionuclides having a physical half-life of less than 120 days
- The waste must be held in storage until the radiation exposure rate cannot be distinguished from background radiation levels
- The waste must be monitored at the container's surface and with no interposed shielding
- The waste must be monitored with an appropriate radiation detection instrument set at its most sensitive scale
- All radiation labels must be obliterated or removed unless the labels are on materials that are within containers and the waste will be managed as biomedical waste
- Records of waste disposal must be maintained

Thank you for your time and consideration in review of this amendment request. Please contact the Penn State's Radiation Safety Officer, Eric J. Boeldt, (6 Eisenhower Parking Deck, 814-865-6391, ejb6@psu.edu) if you need any additional information.

Sincerely,

  
Eva J. Pell

cc: Craig Baumrucker, Chair, University Isotopes Committee  
Eric Boeldt, Radiation Safety Officer

This is to acknowledge the receipt of your letter/application dated

5/25/2005, and to inform you that the initial processing which includes an administrative review has been performed.

☒ Amendment 37-00185-04 There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

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

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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** 137163.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

BETWEEN: : (FOR LFMS USE)  
 : INFORMATION FROM LTS  
 : -----  
 :  
 License Fee Management Branch, ARM : Program Code: 01100  
 and : Status Code: 0  
 Regional Licensing Sections : Fee Category: EX 3L 3E 3P 2C  
 : Exp. Date: 20080930  
 : Fee Comments: 170.11(A) (4)  
 : Decom Fin Assur Req'd: Y  
 : ::::::::::::::::::::::::::::::::::::::

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED  
Applicant/Licensee: PENNSYLVANIA STATE UNIVERSITY (THE)  
Received Date: 20050606  
Docket No: 3000952  
Control No.: 137163  
License No.: 37-00185-04  
Action Type: Amendment

2. FEE ATTACHED  
Amount: /  
Check No.: /

3. COMMENTS

Signed *Robert J. Jurek*  
Date 6/15/2005

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 \_\_\_\_\_