NRC FORM 374 (7-94)

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Amendment No. 32

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. Allegheny University of the Health Sciences - Center City Campus 2. Radiation Physics and Safety Office Broad and Vine Streets Philadelphia, Pennsylvania 19102-1192	In accordance with the letter dated August 19,1996, 3. License Number 37-00467-34 is amended in its entirety to read as follows:
	4. Expiration Date November 30, 2001
	5. Docket or Reference No. 030-02959

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. Any byproduct material with atomic number 3 through 83 with half-life less than or equal to 120 days	A. Any	A. Not to exceed 200 millicuries per radionuclide and 3 curies total
B. Hydrogen 3	B. Any	B. 350 millicuries
C. Carbon 14	C. Any	C. 25 millicuries
D. Phosphorus 32	D. Any	D. 750 millicuries
E. Sulfur 35	E. Any	E. 750 millicuries
F. Chlorine 36	F. Any	F. 1 millicurie
G. Calcium 45	G. Any	G. 3 millicuries
H. Chromium 51	H. Any	H. 500 millicuries
I. Iodine 125	I. Any	I. 750 millicuries
J. Nickel 63	J. Plated sources or foils	J. Not to exceed 20 millicuries per source and 200 millicuries total
K. Strontium 90	K. Sealed source	K. 200 millicuries

9. Authorized use

A. through I. Research and development as defined in 10 CFR 30.4; animal studies; teaching and training of students.

J. and K. In electron capture detector cells which are distributed under a specific license issued by the U.S. Nuclear Regulatory Commission or any Agreement State.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at Broad and Vine Streets, Philadelphia, Pennsylvania; and at 500 S. Ridgeway Avenue (first floor), Glenolden, Pennsylvania.

11. Licensed material shall be used by, or under the supervision of, individuals designated in writing by the Radiation Safety Committee, William VanDecker, M.D., Chairperson.

12. The Radiation Safety Officer for this license is Theodore Villafana, 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 shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.

16. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

17. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.

B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.

C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.

E. Sealed sources and detector cells need not be leak tested if:

(i) they contain only hydrogen-3; or

(ii) they contain only a radioactive gas; or

(iii) the half-life of the isotope is 30 days or less; or

(iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or

(v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell involved, the test results, and corrective action taken.

G. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

18. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.

19. 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. Waste to be disposed of in this manner shall be held for decay a minimum of ten half-lives.

B. 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.

C. 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.

20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number: 37-00467-34

Docket or Reference Number: 030-02959

Amendment No. 32

21. 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 February 2, 1996
B. Letter dated June 6, 1996
C. Letter dated August 19, 1996
D. Letter dated October 11, 1996

Date DEC 19 1996

For the U.S. Nuclear Regulatory Commission

By Original Signed By:
John D. Kinneman

Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

DEC 19 1996

Christine Nezu, Ph.D.
Associate Provost for Research
Allegheny University of the
Health Sciences - Center City Campus
Radiation Physics and Safety Office
Broad and Vine Streets
Philadelphia, Pennsylvania 19102-1192

Dear Dr. Nezu:

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

An error was identified in item 8.B. of your license (Amendment No. 31), namely, the possession limit for hydrogen 3 was listed as 400 millicuries instead of 350 millicuries. This error is corrected. We apologize for any inconvenience the error may have caused. 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) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original Signed By:
John D. Kinneman

John D. Kinneman, Chief
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

License No. 37-00467-34
Docket No. 030-02959
Control No. 123654

Enclosure:
Amendment No. 32

OFFICIAL RECORD COPY ML 10

cc:
Theodore Villafana, Ph.D.
Radiation Safety Officer
Allegheny University of Health Sciences
2900 Queen Lane
Philadelphia, PA 19129

DOCUMENT NAME: R:\WPS\MLTR\L3700467.34
To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI	N				
NAME	SLodhi		JKinneman					
DATE	12/19/96		12/19/96		12/ /96		12/ /96	

OFFICIAL RECORD COPY

MS16
Q-2

DEC 19 1996

License No. 37-28764-02
Control No. 123948

Docket No. 030-32921

Frieda Fisher-Tyler
Director, Environmental Health & Safety
DuPont Merck Pharmaceutical Company
Experimental Station E400/2504
P.O. Box 80400
Wilmington, DE 19880-0400

Dear Ms. Fisher-Tyler:

This refers to your license amendment request. Enclosed with this letter is the amended license. The facilities in Main Building located at 500 S. Ridgeway Avenue, Glenolden, Pennsylvania may be released for unrestricted use. Please note that as part of this amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. The new expiration date is stated in Item 4 of the license.

Please note that pursuant to the telephone conversation of December 11, 1996, between Mr. John Nicholson of your staff and Dr. Sattar Lodhi of this office, the authorized use of licensed material (Condition No. 9) is limited to storage of the radioactive waste that is being held for decay, and repackaging of the remaining radioactive waste for disposal.

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) 337-5093 or 5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original Signed By:
John D. Kinneman
John D. Kinneman, Chief
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

OFFICIAL RECORD COPY

ML 10

123654

License No. 37-28764-02
Docket No. 030-32921
Control No. 123948

Enclosure:
Amendment No. 05

cc:
John J. Nicholson, Radiation Safety Officer
DuPont Merck Pharmaceutical Company
Experimental Station E400/2504
P. O. Box 80400
Wilmington, DE 19880-0400

DUPONT
MERCK

RESEARCH & DEVELOPMENT

Experimental Station
P.O. Box 80400
Wilmington, DE 19880-0400

November 20, 1996

U.S. Nuclear Regulatory Commission
Licensing Assistant Section
Nuclear Materials Safety Branch
475 Allendale Road
King Of Prussia, PA 19406-1415
Atten: Sattar Lodhi

RE: USNRC License 37-28764-02
Docket Number 3032921

Dear Mr. Lodhi:

The enclosed application is an amendment to USNRC license number 37-28764-02. The changes to the license are detailed in the enclosed supporting documentation for NRC Form 313.

The current address for USNRC license 37-28764-02 issued to the DuPont Merck Pharmaceutical Company (DMPC) is listed in section 1 and 2 on the license as:

DuPont Merck Pharmaceutical Company
500 S. Ridgeway Avenue
Glenolden, PA. 19036

DMPC has transfered the pharmaceutical laboratory research work previously conducted at the Glenolden facility to the Experimental Station in Wilmington Delaware. DMPC currently operates under the DuPont USNRC license at the Experimental Station. With this amendment application DMPC is seeking to amend the address in section 1 and 2 of license 37-28764-02 to specify:

DuPont Merck Pharmaceutical Company
500 S. Ridgeway Avenue
Waste Management Building
Glenolden, PA 19036

DMPC NRC licensed activities will take place only in the Waste Management Building. The activities in the Waste Management Building will involve the handling, repackaging, labeling, analyzing and decay-in-storage of radioactive waste remaining after the research work was transfered to the Experimental Station.

DMPC is requesting that the USNRC expedite the review of this amendment. The Main Laboratory Building has been thoroughly surveyed and is in the process

of being leased to bio-medical research companies who will be amending their USNRC licenses to add this building.

Please note that Penny Lanzisera, Health Physicist USNRC Region I, conducted an inspection of the Glenolden facility on August 15, 1996. Ms. Lanzisera took numerous wipe test samples and portable survey meter readings. The inspection report DuPont Merck received from the USNRC reported no contamination was detected and no violations or defeciencies were noted.

Two copies of NRC Form 313, supporting documentation, two copies of the three volume final survey results performed by Teledyne Brown Engineering on the Main Laboratory Building and site drawings showing the various buildings locations are enclosed. There is also a check enclosed for $660 for the license amendment fee for category 3L, as specified in 10 CFR Part 170.

Please contact me if you require additional information.

Sincerely,

Frieda Fisher-Tyler
Director, Environment, Health and Safety

DNMS TELEPHONE CONVERSATION RECORD

Person Called:	John Nicholson, RSO	**Phone No.:** (302) 695 7211
Person Calling:	Sattar Lodhi	**Date:** 11/19/96
Facility Name:	Du Pont Merck Pharmaceuticals Glenolden, PA	**Time:** 8:30 a.m.
License No.	37-00467-34	**Docket No.** 030-02959

Subject: Amendment to remove a facility from the license

Summary: This call was made in connnection with an amendment request by Allegheny University to add a building in Glenolden, PA to their license. However, this building is currently listed as a location of authorized use in Du Pont Merck's license. Kent Lambert had informed me that this facility is being decommissioned by Du Pont Merck and they (Du Pont) are going to request amendment to delete this facility from their license. He also stated that they would prefer that their amendment request be processed after the building is deleted from Du Pont's license. I called Mr. Nicholson to inquire if and when they plan to request deletion of this site from their license.

He stated that the decommissioning process has been completed by Teledyne, and they would send an amendment request in about a week to ten days.

Action Required/Taken: Document/wait for response

Signature: Sattar Lodhi

Mail Control No. 123654

OFFICIAL RECORD COPY

ML 10

MASB TELEPHONE CONVERSATION RECORD

Person Called: Kent Lambert, Asst. RSO **Phone No.:** (215) 762 8768

Person Calling: Sattar Lodhi **Date:** 9/24/96

Facility Name: Alleghany University, Philadelphia, PA **Time:** 1:45 p.m.

License No. 37-00467-34 **Docket No.** 030-02959

Subject: Information to add a new facility

Summary: Because the facility that they want to add to their license is already an authorized location of use on an other NRC license (Du Pont Merck). I called Mr. Lambert to inquire if the new facility in Glenolder has been taken off from Dupont Merck's license. He stated that they have vacated the facility and all decommission surveys have been performed by Teledyne, but they have not yet requested to remove it from their license. He expected such a request to be made during this week.

I informed him that if there are to be activities under two different NRC licenses at one location, they will have to describe a mechanism that will keep the two activities separated. He understood the problem and stated that they have already moved in the facility, but that no licensed material has been moved to that location, and no material will be used or stored at this location until they receive the amendment. He stated that they can wait until Dupont Merck formally requests deletion of this facility from their license.

Action Required/Taken: Document/wait for response

Signature: Sattar Lodhi Mail Control No. 123654

OFFICIAL RECORD COPY ML 10

Radiation Physics and Safety
Center City - 762-4050
Queen Lane - 842-6588

ALLEGHENY
UNIVERSITY
OF THE HEALTH SCIENCES

Broad & Vine
Philadelphia, PA 19102-1192
215-762-7000

2900 Queen Lane
Philadelphia, PA 19129
215-991-8100

August 19, 1996

Sattar Lodhi
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

030-02959

re: License No. 37-00467-34

Dear Dr. Lodhi;

This is a request to amend the above referenced license to add Glenolden Laboratory Building, 500 S. Ridgeway Avenue, Glenolden, PA, as a licensed use location. Only the first floor of this facility will be used by Allegheny University. A floor plan is enclosed.

The first floor laboratories are inaccessible to other building occupants and the other areas in the building are inaccessible to Allegheny University. The only exception to this rule is that Allegheny University will have access to the laboratory animal facility. However, no *in vivo* experiments with radioactive material are planned, and we are not requesting to add the laboratory animal facility as a licensed use location.

The Allegheny University of the Health Sciences, Center City Campus radiation safety program extends to this facility.

A license amendment fee of $560 is enclosed. Your prompt review of this request is appreciated. If you have any questions or need any additional information you can contact me at Queen Lane or Kent Lambert at Center City.

Sincerely,

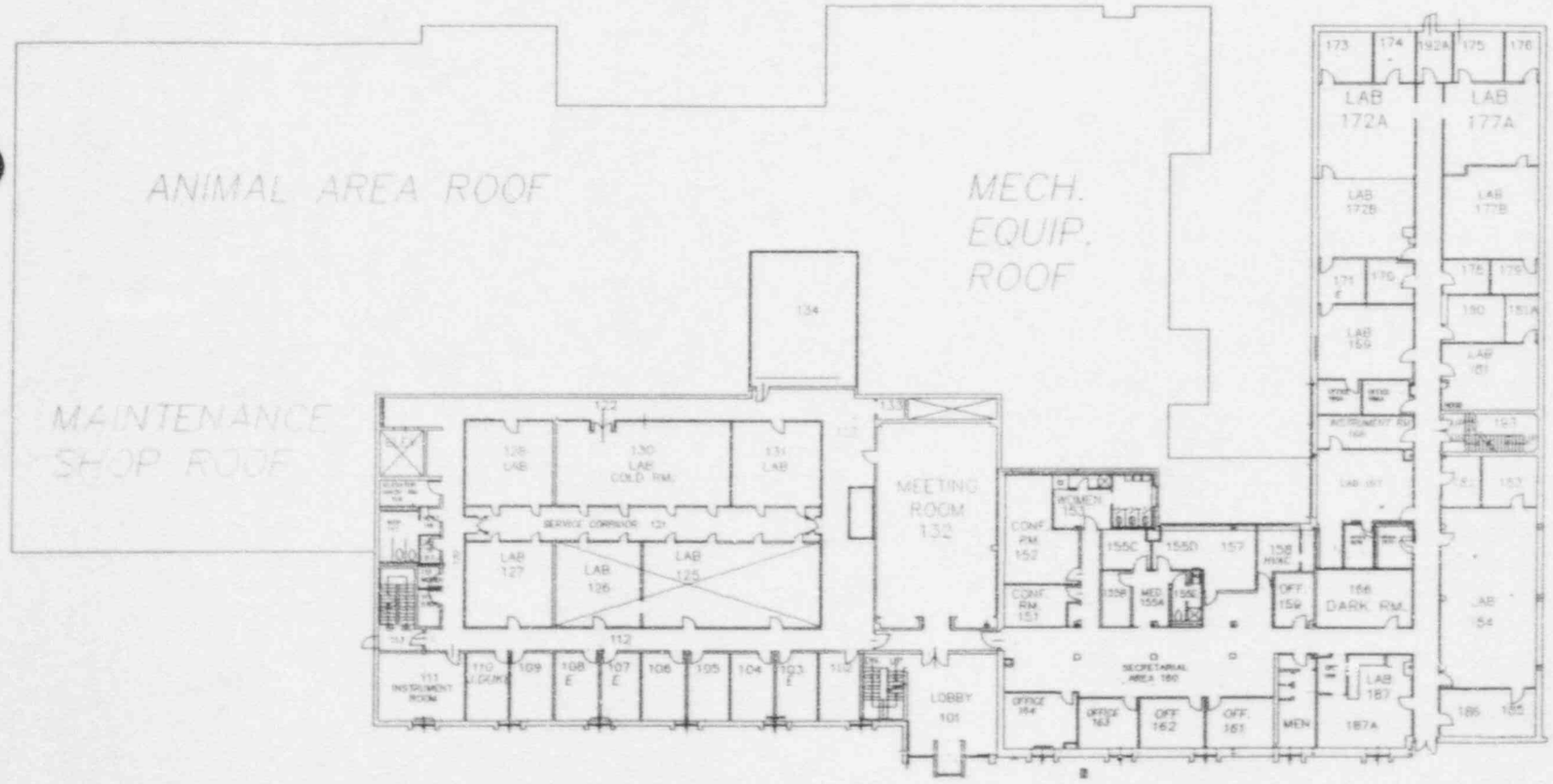
Theodore Villafana, Ph.D.
Director, Radiation Physics and Safety
Radiation Safety Officer

cc: Christine Nezu, Ph.D., Associate Provost for Research
William VanDecker, M.D., Chairman, Radiation Safety Committee
Ken Blank, M.D., Associate Dean for Research
Kent Lambert, Site Radiation Safety Officer

123654

OFFICIAL RECORD COPY ML 10

SEP - 9 1996



GLENOLDEN 1ST FLOOR PLAN

SCALE 1" = 30'

25, 544 SQ. FT.

ACAD FILE = 1FLR.E

REVISED 9/14/95 LAE

DUPONT MERCK

DRAWING NO. GN-ACAD-2

NRC FORM 577 (1-95)

U.S. NUCLEAR REGULATORY COMMISSION

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALLEGHENY UNIVERSITY OF THE HEALTH
ATTN: JAMES CAIRNES
3900 HENRY AVENUE
PHILADELPHIA, PA 19129

TYPE OF ACTION

- ☐ NEW LICENSE
- ☐ RENEWAL OF LICENSE
- ☒ AMENDMENT TO LICENSE

REQUESTED DATE: 8-19-96

LICENSE NUMBER: 37-00467-34

CONTROL NUMBER: 123654

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
7B	$	$	$ 580.00
	$	$	$
	$	$	$
	$	$	$
	$	$	$
	$	$	$
	$	$	$
	$	$	$
	$	$	$
	$	$	$

FEE(s) DUE	$ 580.00
PAYMENT RECEIVED	$ 560.00
AMOUNT DUE	$ 20.00

☒ Your request was received without the prescribed application fee.

☒ We received your Check No. 2050073221 in the amount of $ 560.00. Payment of the additional fee noted above is required.

☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

II. FEE NOT REQUIRED

☐ Enclosed is Check No. _____ which accompanied your request. The fee is not required because:

- ☐ We received your Check No. _____ in payment of the fee.
- ☐ The Licensing staff has informed us that your request is to be considered as a continuation of your request dated _____, Control No. _____
- ☐ Your request was combined, prior to review, with your request, Control No. _____

III. CHECK RETURNED

☐ Enclosed is Check No. _____ which was returned to us by the bank for:

- ☐ INSUFFICIENT FUNDS
- ☐ ACCOUNT CLOSED
- ☐ OTHER

MAIL THE REPLACEMENT CHECK TO THE ADDRESS LISTED AT THE TOP OF THIS FORM AND REFERENCE THE ABOVE CONTROL NUMBER.

IV. LICENSE ISSUED WITHOUT THE REQUIRED FEE

☐ License No. _____, Amendment No. _____, issued on _____ was issued without the required fee being collected. The fee required is noted in Section I of this form.

☐ The scope of your licensed program was increased. Therefore, your request is subject to the application fee(s) noted in Section 1 of this form. Refer to Section 170.31 and Footnote 1(d)(2).

☐ Because of the urgency of your request, the license was issued without remittance of the prescribed fee noted in Section 1 of this form.

SIGNATURE – LICENSE FEE ANALYST	LFDCB	LFDCB
BRENDA BROWN	BB	
	9/16/96	

Distribution:
Region I Pending
BBrown LFARB RF
OC/DAF/SP (LF-3.2.7)

DATE: 9-16-96

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 02110
STATUS CODE: 2
FEE CATEGORY: 7B
EXP. DATE: 19920630
FEE COMMENTS: ____________
DECOM FIN ASSUR REQD: N

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   APPLICANT/LICENSEE: ALLEGHENY UNIVERSITY OF THE HEALTH
   RECEIVED DATE: 960909
   DOCKET NO: 3002959
   CONTROL NO.: 123654
   LICENSE NO.: 37-00467-34
   ACTION TYPE: AMENDMENT

2. FEE ATTACHED
   AMOUNT: $560.00
   CHECK NO.: 2050073221

3. COMMENTS

SIGNED M. A. Perkins
DATE 9/10/96

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /✓/)

1. FEE CATEGORY AND AMOUNT: 7B $580

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR:
   AMENDMENT ✓
   RENEWAL ____________
   LICENSE ____________

3. OTHER ____________

SIGNED ____________
DATE ____________

Note: this amdt fee is OK. License changed to EX32 eff. 11/27/97 - 1B when this fee was done.

I (96) Aug 17

Check No.	2050073221	2050078[illegible]
Amount	$560+	$20 N/C
Fee Category	7B	
Type of Fee	AMD	
Date Check Rec'd	9/16/96	
Date Completed	12/3/96	
By:	GA	

10100 65410 $10 → See Aug 15 I (96)

I called since request expedite to request add'l $20, Advised to send this. Send add'l fee request to:
ATTN: James Cairnes
3900 Henry Ave
Phila., PA 19129
9/16/96

9/26/96
James Cairnes called regarding $20 due - why? I told him increase effective 6/1/96 sending today $20