

MATERIALS LICENSE

Amendment No. 04

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.

OFFICIAL RECORD COPY

Licensee		In accordance with the application dated February 10, 1997,	
1. Pennsylvania State Police Bureau of Laboratory and Communication Services 1800 Elmerton Avenue		3. License Number 37-28479-01 is amended in its entirety to read as follows:	
2. Harrisburg, Pennsylvania 17110		4. Expiration Date January 31, 2006	
		5. Docket or Reference No. 030-31501	
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. Phosphorus 32	A. Any	A. 40 millicuries	
B. Sulfur 35	B. Any	B. 40 millicuries	
9. Authorized use			
A. and B. <u>In vitro</u> clinical or laboratory testing.			

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at Greensburg Regional Laboratory, 100 North Westmoreland Avenue, Greensburg, Pennsylvania and at the Bethlehem Regional Laboratory, 2932 Airport Road, Bethlehem, Pennsylvania.
11. A. Licensed material shall be used by, or under the supervision of,
Christine S. Tomsey, Scott F. Ermlick, Casimir Ryzewski, or Michael J. Kurtz.
B. The Radiation Safety Officer for this license is Michael J. Kurtz.
12. Licensed material shall not be used in or on human beings.
13. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
14. 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.

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MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

37-28479-01

Docket or Reference Number

030-31501

Amendment No. 04

- 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.
15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. 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 April 19, 1995
B. Letter dated September 5, 1995
C. Application dated February 10, 1997
D. Letter dated March 17, 1997

Date

APR 29 1997

For the U.S. Nuclear Regulatory Commission

ORIGINAL SIGNED BY:
JAMES M. BONDICK

By

Nuclear Materials Safety Branch
Region I

King of Prussia, Pennsylvania 19406

APR 29 1997

License No. 37-28479-01
Docket No. 030-31501
Control No. 124344

Captain George Sauers
Director, Laboratory Services
Pennsylvania State Police
1800 Elmerton Avenue
Harrisburgh, PA 17110

Dear Captain Sauers:

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

Please notify the NRC in advance when you expect the new facility to be completed, so the new location can be added to the license. As of this date, we understand that the new facility at 80 North Westmoreland Avenue is not expected to be completed until September or October 1997. Since you have submitted a drawing of the new facility and information regarding licensing commitments in anticipation of the move to the new facility, both addresses on North Westmoreland Avenue will be listed on the license during the transition period.

Prior to release of the facility at 100 North Westmoreland Avenue for unrestricted use, you need to submit a close-out survey for our review. A copy of the Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material is enclosed.

We will continue the review of your application after we receive the notification of the completion of the new facility, and after we have reviewed the results of your close-out survey of the facility at 100 North Westmoreland Avenue, Greensburg, Pennsylvania.

Thank you for your cooperation.

Sincerely,

ORIGINAL SIGNED BY:
JAMES M. BONDICK

James M. Bondick
Health Physicist
Division of Nuclear Materials Safety

License No. 37-28479-01
Docket No. 030-31501
Control No. 124344

Enclosures:

1. Amendment No. 04
2. Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material

DOCUMENT NAME: R:\WPS\MLTR\L3728479.01

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				
NAME	JBondick/jmb <i>JB</i>						
DATE	04/07/97	04/ /97	04/ /97	04/ /97	04/ /97		

OFFICIAL RECORD COPY

TELEPHONE CONVERSATION RECORD		Date: 4/2/97	Time: 10am
Mail Control No.: 124344		License No.: 37-28479-01	Docket No.: 030-31501
Person Called: Christine Tomsey		Organization: Pa. State Police	Telephone Number: 412-830-2054
Person Calling: J. Bondick		Organization: NRC	Telephone Number: 6951
Subject: Items on this action			
<p>Summary: Discussed the actions requested in this amendment (change of RSO, add a new user, closeout of the old facility and pending move to the new facility) Ms. Tomsey stated that they do not expect to have the new facility completed until September or October this year. Discussed the multiple actions of this amendment with LAT, who suggested that the action be continued when the results of the closeout survey were received.</p>			
<p>Action Required/Taken: Note to file; completed licensing action with paragraph in cover letter requesting the licensee to notify NRC when the new facility is complete and the requirement to submit a close-out survey of the old facility for review before the old facility can be released for unrestricted use.</p>			
Signature: <i>J. Bondick</i>		Date: 4/2/97	

Also, Delete A.J. Onorato per May 23, 1996 letter.



PENNSYLVANIA STATE POLICE
BUREAU OF FORENSIC SERVICE
DNA SECTION
100 NORTH WESTMORELAND AVENUE
GREENSBURG, PA 15601
(412) 832-3299 Phone
(412) 330-2057 Fax



MS 16
Q-6

March 17, 1997

Mr. James Bondick
Division of Nuclear Materials Safety
NUCLEAR REGULATORY COMMISSION
475 Allendale Road
King of Prussia, PA 19406-1415

Re: License No. 37-28479-01
Docket No. 030-31501
Control No 124344

Dear Mr. Bondick:

This letter is in response to your letter dated March 5, 1997, regarding the amendment to our license. The following information is provided as requested:

1. Our wipe test to determine removable contamination will be of ~ 100 centimeter square area, not 100 inch square, for our decommissioning procedure.
2. The manufacturer of the survey meter is Ludlum, Model 3 with a pancake detector model 44-9 with a window thickness of 1.7 mg/cm² mica and wipe test holder 180-2. The scale reads four linear range multiples of x 0.1, x 1, x 10, and x 100; used in combination with the 0-2 mR/hr meter dial -0-200 mR/hr is achieved with a range multiplier; for the 0-5k CPM meter dial -0-500,000 CPM.
3. We have never used S-35 at our facility and averaged 250uCi/week of P-32. The values of this meter are checked quarterly against a Bioscan QC200 benchtop counter. The benchtop counter efficiency is checked quarterly against P-32.
4. Survey readings for ambient area will be recorded in millirem per hour and the calibrated survey meter is a Ludlum Model 3 with a pancake detector Model 44-9.
5. Copies of the close out surveys will be sent to you for your review.

OFFICIAL RECORD COPY

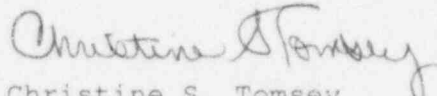
ML 10

124344
MAR 19 1997

There was a misunderstanding concerning Casimir Ryzewski. I am only listing him as the delegated person in charge in the Bethlehem Laboratory, not the radiation safety officer. We are requesting Michael Kurtz be named as the radiation safety officer. Mr. Kurtz understands that he will be responsible for the radiation safety of both facilities, as well as the review of the procedures and safety surveys. He is in weekly contact with the Bethlehem Lab and will make quarterly visits to that facility. The surveys and forms will be faxed to our facility when completed. These are the same arrangements that are listed on our license and previously approved. The Bethlehem facility is 5.5 hours from the Greensburg facility. We have not used radiation in the Bethlehem Lab and were requested by our previous reviewers to contact the NRC when we began usage in Bethlehem. However, due to new technology, we may never use radiation there. If we do not, do we need to amend our license now or wait until a final decision is made.

Thank you for your time and consideration. If there are any further questions, please call me at (412) 830-2054.

Sincerely,



Christine S. Tomsey
Radiation Safety Officer

CST/lbg

MAR - 5 1997

License No. 37-28479-01
Docket No. 030-31501
Control No. 124344

Captain George Sauers
Director, Laboratory Division
Pennsylvania State Police
1800 Elmerton Avenue
Harrisburg, PA 17110

Dear Captain Sauers:

This is in reference to your application dated February 10, 1997 requesting an amendment to Nuclear Regulatory Commission License No. 37-28479-01. In order to continue our review, we need the following additional information:

1. The following is in regard to your move to the new facility to be located at 80 North Westmoreland Avenue, and the close-out survey of the facility at 100 North Westmoreland Avenue. Please be aware that before the facility at 100 Westmoreland Avenue can be released for unrestricted use, the facility must meet certain criteria. Enclosed for your use is a copy of Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material.
 - a. Your Decommissioning Procedure states: "Each wipe test will be of a one hundred (100) square inch area and then checked for radiation levels." A 100 square inch area is too large for a standard wipe test for removable contamination. The guideline referenced above recommends that wipe tests should be taken over a 100 centimeter square area, not 100 square inches. Confirm that wipe tests to determine removable contamination will be taken of a 100 centimeter square area, and that the results of these wipe tests will be reported in dpm/100cm².
 - b. Provide the name of the manufacturer, model number and Minimum Detectable Activity (MDA) of the instrument used to assay the wipe tests for each of the radionuclides (P-23 and S-35) authorized for use on your license.

Captain G. Sauers
Pennsylvania State Police

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- c. Ensure that ambient area survey readings are recorded in millirem per hour on the close-out survey, and provide the name of the manufacturer and model number of the calibrated survey meter used to determine the ambient area survey readings.
- d. Submit copies of the close-out surveys performed at the facility at 100 Westmoreland Avenue for our review.

Since you requested that Casimer Ryzewski be named as the Radiation Safety Officer (RSO) at the Bethlehem Regional Laboratory, it appears that you have a concern in regard to the division of radiation protection responsibilities at the two locations of authorized use listed on your license. Current NRC licensing policy is to name one person as the Radiation Safety Officer on a license. This individual is responsible for the radiation protection program for the license. However, the RSO may delegate certain duties to a qualified individual who is named as an alternate RSO within your organization, however, the individual named as RSO on the license is responsible for, must review, and must sign any work performed by an assigned individual. You do not need to respond to this item.

Note that the Bethlehem Laboratory is already listed as an authorized location of use on your license, therefore, you do not need to notify the NRC when you begin work at this site. However, to assist you with your decision to begin full operations with radioactive material at the Bethlehem Laboratory, these are some of the items to consider when two or more sites are authorized on a license: 1) the amount of hours the RSO will be present at each of the sites per week, 2) the maximum amount of time it will take the RSO to arrive at the second facility in the event of an emergency that requires his presence, 3) the amount of authority given to the individual at the second site to act in behalf of the RSO. This item needs no response.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I Office and refer to Mail Control No. 124344. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-6951.

If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

ORIGINAL SIGNED BY:
JAMES M. BONDICK

James M. Bondick
Health Physicist
Division of Nuclear Materials Safety

OFFICIAL RECORD COPY

Captain G. Sauers
Pennsylvania State Police

-3-

License No. 37-28479-01
Docket No. 030-31501
Control No. 124344

Enclosures:

1. 10 CFR Parts 20 and 30
2. Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material

DOCUMENT NAME: R:\WPS\DLTR\D3728479.01

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				
NAME	JBondick/jmb <i>B</i>						
DATE	03/05/97	03/ /97	03/ /97	03/ /97	03/ /97		

OFFICIAL RECORD COPY

(10-94)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

APPLICATION FOR MATERIAL LICENSE

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 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. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,
SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION II
101 MARIETTA STREET, NW, SUITE 2900
ATLANTA, GA 30323-0199

IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, 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 SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

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)		2 NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)	
<input type="checkbox"/> A NEW LICENSE		Pennsylvania State Police	
<input checked="" type="checkbox"/> B AMENDMENT TO LICENSE NUMBER 37-28479-01		Bureau of Forensic Services (formerly Bureau of Laboratory and Communication Services)	
<input type="checkbox"/> C RENEWAL OF LICENSE NUMBER		1800 Elmerton Avenue	
		Harrisburg, PA 17110	
3 ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED		4 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION	
Greensburg Regional Laboratory Bethlehem Regional Laboratory		Christine S. Tomsey	
80 N. Westmoreland Avenue 2932 Airport Road		TELEPHONE NUMBER	
Greensburg, PA 15601 Bethlehem, PA 18017-2106		(412) 830-2054	
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		6 PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED	
a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time			
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 LICENSEE FEES (See 10 CFR 170 and Section 170.31)	
		FEE CATEGORY 3 P AMOUNT ENCLOSED \$300.00	
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 Captain George Sauers, Laboratory Division		SIGNATURE DATE 2/10/97	
FOR NRC USE ONLY			
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED
			\$
APPROVED BY		DATE	COMMENTS
			124344
			MAR - 4 1997
			ML 10

OFFICIAL RECORD COPY



PENNSYLVANIA STATE POLICE
BUREAU OF FORENSIC SERVICES
GREENSBURG REGIONAL LABORATORY
100 NORTH WESTMORELAND AVENUE
GREENSBURG, PA 15601
PH. (412) 832-3299
FAX (412) 830-2057



January 31, 1997

Michelle Beardsley
NUCLEAR REGULATORY COMMISSION
Nuclear Material Safety Branch
Region I
King of Prussia, PA 19406

Re: NRC License No. 37-28470-01
Docket No. 030-31501

Dear Ms. Beardsley:

Our laboratory is seeking an amendment to our current license due to recent changes in personnel and the construction of a new laboratory facility in Greensburg.

The Greensburg laboratory site, currently located at 100 North Westmoreland Avenue, will be moving across the street to a new facility located at 80 North Westmoreland Avenue. This new facility will be of the same construction as the current facility, but with increased floorspace. The laboratory floorplan is attached. The room that will contain the radioactive analytical procedures and the storage of the radioactive material is of the same design and approximate size as our currently existing facility. It is marked on the floorplans as the "Hot Lab." The timetable for moving into the new facility is June of 1997.

The radioactive material will be stored in beta acrylic containers approximately 3/4 inches thick and these will be stored in a locked freezer. We currently receive weekly shipments of 250 microcuries of 32 P per week and will continue at this schedule. The locked freezer is located in the room marked "Hot Lab." This room has only one entrance that is kept locked and used only by those authorized to use our licensed radioactive material. The new facility, due to the nature of our police security policies, will be alarmed for motion, entry, and fire. The alarm is maintained by a twenty-four hour state police monitored computerized security system.

All currently employed radiation procedures, safety precautions, waste storage and disposal, wipe tests, monitoring, surveys and posting of radiation signs will be employed at this new site according to the outlined procedures in our current license.

We are also requesting a change in our Radiation Safety Officer from Christine S. TOMSEY to Michael J. KURTZ. Mr. KURTZ has had extensive training in radiation safety and five years of experience using 32 P in our laboratory. Mr. KURTZ's curriculum vitae is attached. Ms. TOMSEY will still be employed at this laboratory, but due to increased responsibilities it will be difficult for her to continue as the Radiation Safety Officer.

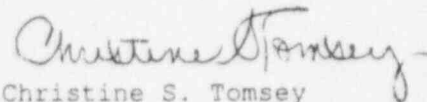
I ask that you review the decommissioning procedures of our current facility that accompany this letter and advise us if they are appropriate so that we may proceed to decommission once construction is completed and the move made. The current radiation room will ultimately be used by other laboratory personnel that perform non-radioactive serology analysis. No unauthorized personnel will enter this room until we receive word from the NRC on approving our decommissioning procedure.

January 31, 1997

We would also like to name Casimer RYZEWSKI, Ph.D. as the individual responsible for radiation safety at our Bethlehem Regional Laboratory. Dr. RYZEWSKI has experience using the same isotopes and is experienced in radiation safety. His curriculum vitae is attached. The Bethlehem Laboratory has not yet used any radioactive material and will not use radioactive material before we inform you in writing. New technology advances currently in validation stages suggest that we may not use radioactive material at this site. Due to our continued turnover at this site, we have been unable to begin any of our DNA testing here. If the new procedures suggest that we will never be using radiation at this facility, I will inform you at the earliest possible time.

I appreciate all of your help over the years and the rapid response to any of my questions. Please call me if you have any questions regarding this letter at (412) 830-2054. Thank you for your consideration in this matter.

Sincerely,



Christine S. Tomsey
DNA Laboratory Manager

CST/lbg

Enclosures: Floorplans
C.V. for Michael Kurtz
C.V. for Casimer Ryzewski
Decommissioning Procedures

MICHAEL J. KURTZ
PENNSYLVANIA STATE POLICE LABORATORY
100 NORTH WESTMORELAND AVENUE
GREENSBURG, PA 15601

EDUCATION: Degree: B.S. in Biology from
Saint Francis College 1979

MBA
Saint Francis College 1996

Subsequent: Courses in Molecular Biology
from University of Virginia at
FBI FSRTC (JUL 93)

DNA EXPERIENCE: Jan 92-Nov 93

Chemistry Technician

Greensburg Regional Laboratory
75% of time dedicated to preparation of
DNA critical chemicals, analysis of
DNA controls, probe labeling and
hybridization of DNA samples.
Also performed DNA analysis protocol on
training samples and Quality Control
standards.
Remaining 25% of time involved with
preparation of reagents and gels in
serology and drug unit.

Nov 93-May 94
Forensic Scientist Trainee
DNA Unit

May 94-June 95
Forensic Scientist I
DNA Unit

June 95-Present
Forensic Scientist II
DNA Unit

QUALIFIED AS EXPERT: WASHINGTON COUNTY BERKS COUNTY
PIKE COUNTY
ALLEGHENY COUNTY
WESTMORELAND COUNTY
BEAVER COUNTY

PROFESSIONAL ASSOCIATIONS: AMERICAN SOCIETY OF HUMAN GENETICS

CONTINUING EDUCATION: Attended International Symposium on Human Identification September 19-21, 1996

Attended Statistics Workshop as part International Symposium on Human Identification September 16-18, 1996

Attended Mid Atlantic Association of Forensic Scientists Conference May 10 May 12 1996

Attended Bloodstain Pattern Interpretation Workshop June 5 - 9, 1995

Attended Mid Atlantic Association of Forensic Scientists Conference May 8 - 10, 1995

OTHER EXPERIENCE: July 80-Sep 90 Served in U.S.Navy

Duty Stations and Assignments:

July 80-Nov 90 NETC Newport RI-Student

Nov 80-Mar 81 USS Shasta (AE-33) Indoctrination Cruise

Mar 81-Nov 81 NETC San Diego-Student

Nov 81-May 84 USS Joseph Strauss (DDG-16) Fire Control/Missile Officer, Navigator

May 84-Jan 86 USS William H. Standley (CG-32) Repair Officer

Jan 86-Mar 88 NROTC Cornell University Class Advisor, Junior Class Instructor

Mar 88-Jul 88 NETC Newport RI-Student

Jul 88-Mar 90 USS Rathburne (FF-1057) Weapons Officer (Department Head)

Mar 90-Jul 90 NETC San Diego-Student

Jul 90-Sep 90 USS Worden(CG-18)
Combat Systems Officer (Dept Head)

Michael J. Kurtz

Summary of Radiation Related Training

TRAINING COURSES FROM NUCLEAR WEAPONS TRAINING GROUP PACIFIC:

- Nuclear Weapons Orientation
- CINCPACFLT/EAP/SAS (Control and Authorization to use Weapons Policies (August, 1982 (1 day)
- Nuclear Safety Officer (March, 1983 -- 3 days)
- Nuclear Weapons Security Officer (May, 1983 -- 2 days)

SHIPBOARD DUTIES:

- Assistant Security Officer for nuclear weapons (November, 1982 -- February, 1984)
- Participated in Nuclear Accident and Incident Training

F.B.I. TRAINING:

- Radiation Safety, FBI Academy (June, 1993)

PA STATE POLICE TRAINING IN USE OF ³²P:

- | | |
|--------------------|------------------|
| • February 7, 1992 | Initial Training |
| • June 6, 1992 | Annual Review |
| • July 23, 1994 | Annual Review |
| • June 10, 1994 | Annual Review |
| • June 12, 1995 | Annual Review |
| • June 27, 1996 | Annual Review |

Routinely performs all radiation procedures in the Pennsylvania State Police Laboratory involving ³²P license material for the past five (5) years.

CASIMIR RYZEWSKI

4209 Gloria Lane - Bethlehem, PA 18017 - Home (610) 867-5836 - Work (610) 861-2103

FORENSIC SCIENTIST - DRUG IDENTIFICATION/SEROLOGY

Oct 1993 - Present **State Police Crime Laboratory, Bethlehem, PA**

Identify controlled drugs using color tests, selective solvent extraction, UV spectrophotometry, FTIR, TLC, GC-MS, and GC-IR. Detect and identify stains and characterize genetic markers in evidence from homicide and rape cases using enzyme assays, Ouchterlony double diffusion, microscopy, antibody absorption-inhibition, antibody absorption-elution, agarose electrophoresis, and isoelectric focusing. Provide expert testimony in court.

RESEARCH SCIENTIST - SEPARATION METHODS DEVELOPMENT

Jun 1992 - Oct 1993 **Biphasics, Inc., Bethlehem, PA (Grant Funds Depleted)**

Developed purification methods for human plasma protein C and lipoproteins by aqueous two-phase partitioning, affinity chromatography, and ion exchange chromatography. Prepared polymer-derivatized monoclonal antibodies and constructed/adapted enzyme-labeled immunoassays (ELISA) and plasma protein functional assays.

TECHNICAL SALES - FT-IR AND C13-NMR DATABASES AND SEARCH SOFTWARE

May 1990 - Jan 1991 **Bio-Rad/Sadtler Division, Philadelphia, PA**

Promoted spectral databases and search software running on IBM personal computers and VAX network systems by demonstrating software, assessing database requirements, and recommending appropriate system choices.

PRODUCT MANAGER - ANALYTICAL APPLICATIONS-ORIENTED SOLVENTS

Jun 1988 - Apr 1990 **J.T. Baker Inc., Phillipsburg, NJ (Position Eliminated)**

Proved the technical and administrative feasibility for packaging high purity solvents in re-usable/recyclable drums. Re-evaluated and modified manufacturing processes and quality control procedures for high purity solvents used for environmental and pharmaceutical trace analyte extraction and high performance liquid chromatography (HPLC). Conducted technical training programs and solved product application problems. Achieved 13% growth in the \$9MM product line.

PRODUCT MANAGER - HPLC INSTRUMENTATION

Sep 1987 - Jun 1988 **Applied Biosystems, Ramsey NJ Division (Business Segment and Facility Closed)**

Monitored and resolved quality problems with the high performance liquid chromatography pumps and gradient controllers. Resolved a serious premature pump seal failure problem by developing a procedure to identify critical contributing factors and coordinating engineering efforts to improve quality control and manufacturing procedures.

TECHNICAL SALES - SUPERCRITICAL FLUID AND MICROBORE HPLC CHROMATOGRAPHY

Jan 1987 - Sep 1987 **Applied Biosystems, Brownlee Labs Division (Business Segment Eliminated)**

Promoted the Brownlee Labs dual syringe pump for use in microbore high performance liquid chromatography (HPLC) and supercritical fluid chromatography (SFC) by teaching the theory of the methods, optimized component selection, and proper system use.

HPLC APPLICATIONS AND INSTRUMENTATION SPECIALIST

Jan 1985 - Nov 1986 **Beckman Instruments, Altex Division (Specialist Position Eliminated)**

Served as technical consultant/troubleshooter solving high performance liquid chromatography (HPLC) methods development and instrument component problems. Conducted training seminars in chromatographic theory, HPLC methods development, and trace analyte extraction. Maintained a complement of HPLC hardware and demonstrated the applicability of different system configurations to different separation problems. Developed HPLC separations methods in the field.

RESEARCH BIOCHEMIST - FERMENTATION

Sep 1982 - Aug 1984 Miller Brewing Company, Milwaukee, WI (Major Reduction in Force)

Established a laboratory for the study of yeast metabolism during fermentation utilizing various analytical procedures including radioactive tracers, UV-VIS spectroscopy, and gas chromatography. Established a radiation safety program, wrote a radiation safety manual, and completed licensing documentation for radioactive tracer use.

RESEARCH FELLOW - ANALYTICAL CHEMISTRY/CANCER RESEARCH

Oct 1980 - Sep 1982 VA Hospital, Minneapolis, MN

Developed methods for the analysis of carcinogen metabolites using HPLC and extraction column techniques for studies of chemical carcinogenesis in the rat mammary gland and carcinogen transmission in milk.

RESEARCH ASSOCIATE - VIRAL GENETICS AND ASSEMBLY

Oct 1977 - Oct 1980 University of Colorado, Boulder, CO

Studied the role of accessory proteins and chemical agents in accelerating self-assembly processes of a bacterial virus. Collaborated in attempts to identify structural points of contact between viral components using genetic and immunochemical techniques. Studied the effects of macromolecular aggregation on the activity of acetylcholinesterase.

Education

MSc MANAGEMENT - 1984

Cardinal Stritch College

Use of an Organizational Climate Survey as a Management Tool

Developed a questionnaire to assess organizational climate among scientists at a technical center and wrote a computer program to analyze the survey data as a means of determining the value of surveys as tools for measuring the status of employee-management relations.

PhD BIOCHEMISTRY - 1977

Rutgers University

Characterization of Homogeneous SS Isozyme of Horse Liver Alcohol Dehydrogenase

Developed a purification procedure for the one of nine structurally similar alcohol dehydrogenase isozymes present in horse livers which catalyzes oxidation/reduction reactions with large, steroidal substrates in addition to catalyzing reactions with smaller substrates such as ethanol and acetaldehyde. Defined its kinetic mechanism via initial velocity studies. Probed the geometry of the enzyme active site by studying the fluorescence of enzyme-cofactor-inhibitor complexes and reactions with geometrically-sensitive substrates.

MSc BIOCHEMISTRY - 1975

Rutgers University

Cobalt (III)-Labelled Aspartokinase/Homoserine Dehydrogenase

Developed a method to selectively modify four of the enzyme's eight active sites in order to understand how changes at one set of four active sites were communicated to the other set of four. Measured the effects of modification on the two different reactions catalyzed by the enzyme and on regulation of the enzyme by feedback inhibitors to determine the structural location of regulatory sites.

BA BIOLOGY - 1970

Franklin and Marshall College

Specialized Training

DRUG ANALYSIS TRAINING COURSE, Pennsylvania State Police

DRUG ANALYST COURSE, Drug Enforcement Administration

HAIR AND FIBER ANALYSIS, Federal Bureau of Investigation

INDUSTRIAL PRODUCT MANAGEMENT, American Management Association

Casimir Nalecz Ryzewski

SUMMARY OF RADIATION-RELATED TRAINING

RADIATION
SAFETY

9/78 - Radiation Safety Course
Department of Molecular, Cellular, and
Developmental Biology
University of Colorado
Boulder, CO

- Participated in a radiation safety course to learn the proper techniques for safe handling of radioactively-labeled materials.

9/82 - 8/84
Miller Brewing Company
Milwaukee, WI

- Established a radiation safety program at the technical center, wrote a radiation safety manual, and completed licensing documentation for radioactive tracer use.

EXPERIENCE
USING
RADIOACTIVE
MATERIALS

3/78 - 9/80
University of Colorado
Boulder, CO

- Used P32-labeled poly A cyclization assay to detect bacteriophage T4 RNA Ligase activity.
- Synthesized ligase substrate by labeling poly A using polynucleotide kinase and P32 labeled ATP and purified the labeled substrate by column chromatography.
- Pulse-labeled of proteins produced in growing bacterial and bacteriophage cultures using C14-labeled and tritium-labeled amino acids.
- Separated radiolabeled proteins by electrophoresis and detected them by autoradiography.

10/80 - 9/82
Laboratory for Cancer Research, VA Hospital
Minneapolis, MN

- Isolated C14-labeled metabolites of a chemical carcinogen (2-fluorenylacamide) from rat tissue homogenates.
- Separated radiolabeled metabolites by HPLC or solid phase extraction and detected them using scintillation counting or a continuous-flow radioactivity detector.

MATERIALS LICENSE

Amendment No. 03

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. Pennsylvania State Police
Bureau of Laboratory and
Communication Services
2. 1800 Elmerton Avenue
Harrisburg, Pennsylvania 17110

In accordance with the application dated
April 19, 1995,
3. License Number 37-28479-01 is amended in
its entirety to read as follows:

4. Expiration Date January 31, 2001

5. Docket or
Reference No. 030-31501

6. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This License

- A. Phosphorus 32
- B. Sulfur 35

- A. Any
- B. Any

- A. 40 millicuries
- B. 40 millicuries

9. Authorized use

- A. and B. In vitro clinical or laboratory testing.

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at Greensburg Regional Laboratory, 100 North Westmoreland Avenue, Greensburg, Pennsylvania and at the Bethlehem Regional Laboratory, 2932 Airport Road, Bethlehem, Pennsylvania.
11. A. Licensed material shall be used by, or under the supervision of, Christine S. Tomsey, Scott F. Ermlick or Anthony J. Onorato.
B. The Radiation Safety Officer for this license is Christine S. Tomsey.
12. Licensed material shall not be used in or on human beings.
13. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
14. 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.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License number

37-28479-01

Docket or Reference number

030-31501

Amendment No. 03

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.

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

16. 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 April 19, 1995

B. Letter dated September 8, 1995



For the U.S. Nuclear Regulatory Commission

By

Michelle A. Seandley
Nuclear Materials Safety Branch
Region I

King of Prussia, Pennsylvania 19406

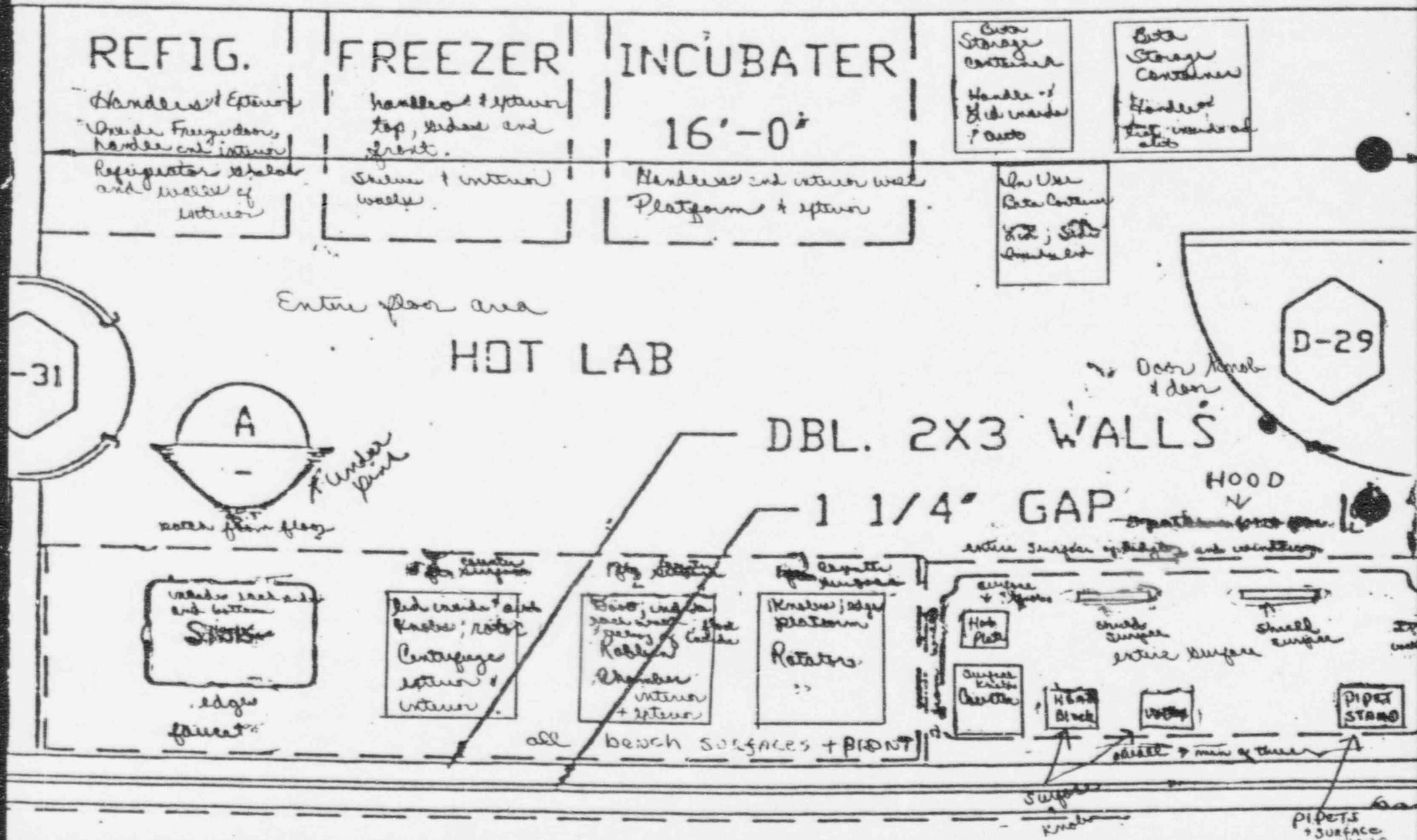
Date

JAN - 5 1996

**DECOMMISSIONING PROCEDURE
FOR RADIATION ROOM LOCATED AT
100 NORTH WESTMORELAND AVENUE
GREENSBURG, PA**

1. All radioactive waste stored in-house for decay will be moved to the new facility. The waste will be moved via large 1/4" acrylic containers. This would involve the moving of approximately 4 plastic bags (8 gallon size).
2. The freezer currently storing the radioactive material will be internally and externally wipe tested. Once tests indicate the freezer is at background, it will be moved to the new radiation room at 80 North Westmoreland Avenue.
3. Each area of the radiation lab will be wipe tested according to the enclosed diagram. Each wipe test will be of a one hundred (100) square inch area and then checked for radiation levels. Appropriate cleaning procedures will be used until the entire room is at background. The laboratory benchwork and floors will then be washed down. The cleaning sponge/cloth will be monitored as cleaning takes place. The results of these wipe tests and monitoring will be sent to the NRC for approval. The room will remain locked until approval is obtained.

Wipe test Decommissioning Plan



BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

(FOR LFMS USE)
INFORMATION FROM LTS

PROGRAM CODE: 02410
STATUS CODE: 0
FEE CATEGORY: 3P
EXP. DATE: 20060131
FEE COMMENTS: _____
DECOM FIN ASSUR REQD: N
.....

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: PENNSYLVANIA STATE POLICE
RECEIVED DATE: 970304
DOCKET NO: 3031501
CONTROL NO.: 124344
LICENSE NO.: 37-28479-01
ACTION TYPE: AMENDMENT

2. FEE ATTACHED
AMOUNT: \$300.00
CHECK NO.: 38503

3. COMMENTS

SIGNED M. A. Perbino
DATE 3/4/97

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED 1 1)

1. FEE CATEGORY AND AMOUNT: 3P 8.300

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

3. OTHER _____

SIGNED _____
DATE _____

I (97)

Log	<u>APP 2</u>
Revised	<u>COMMONWEALTH OF PA</u>
Check No.	<u>38503</u>
Amount	<u>\$300</u>
Category	<u>3P</u>
Amendment	<u>Amo</u>
Date	<u>4/2/97</u>
Signature	<u>MB</u>

1997 MAR 4 PM 3:45