GUTHRIE RESEARCH INSTITUTE

Donald Guthrie Foundation
for Medical Research
Guthrie Square
Sayre, PA 18840-1692
717-888-6666, ext. 4620
717-882-4620

November 23, 1987

John D. Kinneman, Chief
Nuclear Materials Safety Section A
Division of Radiation Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Kinneman:

I would like to respond to your letter of October 29, 1987 in which you cite violations noted on a recent inspection of our facility (License No. 37-21383-01). We have taken significant steps to correct these deficiencies, a description of which is enclosed.

In addition, I would like to inform you of two other changes with regard to our facility and its use of radioactive materials. The first is that I have recently (August 3) been appointed the new Scientific Director and Radiation Protection Officer of the Guthrie Research Institute and will replace Dr. Litwin who left this institution on September 30th. We have recently filed an ammendment to our license to indicate this change. Secondly, the Guthrie Medical Center has recently recruited a new Health Physicist, Dr. T.K. Nair, who will be inspecting the Guthrie Research Institute on a regular basis and will be available for consultation. After receiving your letter of October 29, Dr. Nair conducted several detailed inspections of the facility and advised and assisted us in implementing the changes outlined in the enclosed documents.

I hope that the steps taken will be judged appropriate by your office in order to bring our institution into compliance with NRC rules and regulations. However, if there are questions or if you feel that additional measures are necessary, please do not hesitate to get in touch with me immediately. Thank you.

Yours truly,

Robert E Hall

Robert E. Hall, M.D., Ph.D.
Scientific Director

RESPONSE TO NRC LETTER OF OCTOBER 29, 1987

REGARDING LICENSE NO. 37-21383-01

A. The following survey instruments used in the laboratory for bench monitoring and I-125 contamination measurement were calibrated and updated as detailed below.

1. Survey meter Model 5-10E, S/N 022676 on August 12, 1987.
2. Survey meter Model 5-10E, S/N 022697 on August 12, 1987.
3. Survey meter Model Series 900, S/N 024212 on August 12, 1987, by Technical Associates and
4. Survey meter Model PUG-1, S/N 083131 on November 19, 1987, by Applied Health Physics.

Steps have been taken in consultation with the acting Radiation Safety Officer at Robert Packer Hospital, to insure that the survey instruments are calibrated annually.

B. The contamination detected near the sink of Bench #5 was an unusual occurrence and the area has been decontamined on August 4, 1987, by Dr. Kestler, Research Associate at the lab. The wipetest showed less than 200 cpm after decontamination. The survey and wipetest conducted on November 17, 1987, showed no removable contamination detected over the working benches, floor and sinks. To prevent undetected contamination, the following steps have been implemented.

1. Daily survey of the work benches and sinks at the end of work.
2. Wipetest of working benches sinks, floor and radiation protection survey of the laboratory once a week.

Further acting radiation safety officer of Robert Packer Hospital will be consulted for quarterly review of the radiation safety program.

CERTIFICATE OF INSTRUMENT CALIBRATION

AND CERTIFICATE OF COMPLIANCE

This is to certify that Survey Meter (Model) 5.105 (Serial Number) 022674 was calibrated on 8/12/87 (Date). Except as noted below, this instrument now meets the manufacturer's tolerance of ± 15 % F.S. Source used for calibration is traceable to NBS. The isotope used was Cs-137. The instrument was calibrated at an ambient temperature of 60-80° F and includes a background reading of 0.02 mR/hr.

Calibration is performed in conformance with recommendations of the U.S. Nuclear Regulatory Commission, and agreement State regulations and of the International Commission of Radiation Protection. Ref: 1. U.S. Nuclear Regulatory Comm. RG8.21 Section 1.12, and, 2. California ADM. Code, Title 17, Section 30332(c) (1), also N-323-1978.

Two points were checked at each scale; one point is the lower 25% of the scale and one point in the upper 25%. Adjustments have been made so that the instrument reads within the above accuracy on all ranges when compared to true dose rate, unless noted below. Analog instruments reading in counts/minutes are calibrated against a pulse generator traceable to the NBS in addition to checking against a calibrated radiation source.

Comments:

Calibration Technician: JH

Approved by: BG

PURCHASE ORDER: R89037

Property of: D. Guthrie Foundation

TECHNICAL ASSOCIATES

7051 ETON AVENUE • CANOGA PARK, CA 91303 • (818) 883-7043

CERTIFICATE OF INSTRUMENT CALIBRATION

AND CERTIFICATE OF COMPLIANCE

This is to certify that Survey Meter (Model) 5-10E (Serial Number) 022697 was calibrated on 8/12/87 (Date). Except as noted below, this instrument now meets the manufacturer's tolerance of ± 15 % F.S. Source used for calibration is traceable to NBS. The isotope used was Cs-137. The instrument was calibrated at an ambient temperature of 60-80° F and includes a background reading of 0.02 mR/hr.

Calibration is performed in conformance with recommendations of the U.S. Nuclear Regulatory Commission, and agreement State regulations and of the International Commission of Radiation Protection. Ref: 1. U.S. Nuclear Regulatory Comm. RG8 21 Section 1.12, and, 2. California ADM. Code, Title 17, Section 30332(c) (1), also N-323-1978.

Two points were checked at each scale; one point is the lower 25% of the scale and one point in the upper 25%. Adjustments have been made so that the instrument reads within the above accuracy on all ranges when compared to true dose rate, unless noted below. Analog instruments reading in counts/minutes are calibrated against a pulse generator traceable to the NBS in addition to checking against a calibrated radiation source.

Comments:

Calibration Technician: VA

Approved by: BG

PURCHASE ORDER: R89037

Property of: A Guthrie Foundation

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CERTIFICATE OF INSTRUMENT CALIBRATION

AND CERTIFICATE OF COMPLIANCE

This is to certify that Survey Meter (Model) Series 900 (Serial Number) 024212 was calibrated on 8/12/87 (Date). Except as noted below, this instrument now meets the manufacturer's tolerance of ± 15 % F.S. Source used for calibration is traceable to NBS. The isotope used was Cs-137. The instrument was calibrated at an ambient temperature of 60-80° F and includes a background reading of 0.02 mR/hr.

Calibration is performed in conformance with recommendations of the U.S. Nuclear Regulatory Commission, and agreement State regulations and of the International Commission of Radiation Protection. Ref: 1. U.S. Nuclear Regulatory Comm. RG8.21 Section 1.12, and, 2. California ADM. Code, Title 17. Section 30332(c) (1), also N-323-1978.

Two points were checked at each scale; one point is the lower 25% of the scale and one point in the upper 25%. Adjustments have been made so that the instrument reads within the above accuracy on all ranges when compared to true dose rate, unless noted below. Analog instruments reading in counts/minutes are calibrated against a pulse generator traceable to the NBS in addition to checking against a calibrated radiation source.

Comments:

Calibration Technician: JH

Approved by: BG

PURCHASE ORDER: R99037

Property of: D Guthrie Foundation

TECHNICAL ASSOCIATES

7051 ETON AVENUE • CANOGA PARK, CA 91303 • (818) 883-7043

Applied HEALTH PHYSICS inc.

2986 Industrial Blvd. • Box 197 • Bethel Park, Pa. 15102 • Phone 412 • 563-2242

CALIBRATION CERTIFICATE

SHIPPING ADDRESS	BILLING ADDRESS
Cutler Research Institute	SAME
Southeast Avenue	
Sayre, PA 18840	

CONTACT: R.L.A. Porter PHONE # 717-882-4623 DATE 11/19/87 P.O.# 3385

condition of equipment received Kush Calibration

Mfg. Inst. Tech. Assoc. Mod# PUG-1 Ser# 083131
Detector " " Mod# P-8 Ser# 08400

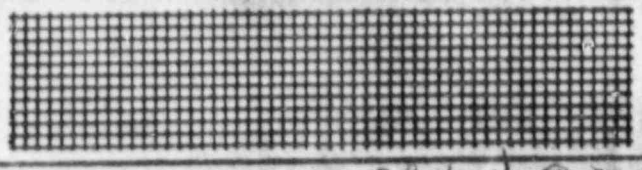
[X] CALIBRATION [ ] REPAIR [ ] SALE [ ] LOAN By: J. Langle

scale	source	reading	scale	source	reading	scale	source	reading
MP-1	cpm	cpm	AM-241	mR/hr	cpm			
X1	200	202	X1	.1	270			
X10	2000	3050	X10	1	2600			
X100	20000	20000	X100	11.2	25000			

Calibration Source [X] GAMMA [X] ELECT [X] ALPHA [X] BETA [ ] OTHER

Description [X] ra-226 [ ] cs-137 [X] sr-90 [X] pu-239 [X] MP-1 [ ] _____

Response Graph N/A



Probe Efficiencies 2π
ALPHA 8 % BETA 17 %

Check Source Readings
EW _____ SW _____
PW _____ IC _____

Maintenance & Comments Replaced (2) D Cells, Taped & Tightened BNC Connector.
Tested, Inspected & Calibrated

Calibration	$50.00/Cal	50.00	
DOS CHECK	$50.00/4ea		
LABOR	$50.00/Hr		
MATERIALS & SALES	(2) D Cells	2.00	6.00
Shipping	UPS/AIR	DOMESTIC	$24.00

Shipping UPS/NDA
DATE 11/19/87
QA DEPT JW
PICK-UP X _____
DATE X ___/___/___

NOTICE: Under Applied Health Physics license #37-09135-01 & in accordance with Federal, Local or State regulations sources are traceable to the National Bureau of Standards. This certificate expires in 12 months and should be recalibrated on or before 11/19/88. The frequency of this recalibration may vary due to governmental requirements. A copy of this record should be maintained for future inspection by the appropriate authorities.