

Cameron ✓



Sinai Samaritan Medical Center  
Aurora Health Care

November 18, 1993

U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

License No. 48-03280-01  
Docket No. 030-03439  
REPLY TO A NOTICE OF VIOLATION

Dear Sirs,

Enclosed you will find a written response to your letter dated November 2, 1993. This reply will address the listed violations and other concerns expressed by your office. If there are additional questions or concerns regarding this reply, please call me at (414) 283-7276.

**Violation A**

The Radiation Safety Officer failed to perform audits as indicated by the license.

- 1) The Radiation Safety Officer, Fred Blizzard, has performed independent audits and surveys of research and diagnostic patient areas. Although these surveys were performed, they were not documented as independent surveys. Mr. Blizzard performed wipe testing and area surveys with the staff of the appropriate area but not documenting them as independent surveys.
- 2) The Radiation Safety Officer (RSO) is now performing independent surveys of all licensed areas on a routine basis. A log (diary) is being maintained as recommended by Mr. Cameron. Enclosed you will find copies of surveys that have been completed following the inspection.
- 3) In order to avoid further violations, the RSO will continue to maintain the log of independent surveys. Diagnostic areas will be surveyed monthly and research areas quarterly or as indicated by future license conditions.

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NOTICE OF VIOLATION RESPONSE

4) Full compliance was achieved October 1, 1993.

**Violation B**

The licensee did not provide basic radiation safety instruction to the animal caretaker since January 21, 1991.

1) The radiation safety office has performed basic radiation safety instruction to personnel but did not include specific instruction for animal caretakers. This was an oversight on the part of the RSO. Mr. Blizzard indicated that he was not aware that an animal caretaker was employed by the research facility.

2) The RSO has been in communication with the Authorized User in charge of animal research. A communication line has been initiated which will be used to inform the radiation safety office of any new employees that begin working in the lab. Basic radiation training is currently a part of every new employees orientation. Radiation safety instruction for animal caretakers will be given annually. Topics will include: (a) contamination control in the laboratory; (b) handling of radioactive animal carcasses; (c) animal waste disposal; and (d) cleaning of animal cages contaminated with radioactive material.

3) In order to avoid further violations, the animal research laboratory will inform the radiation safety office of new employees. Basic radiation safety training will be a part of all employees orientation and animal caretaker training will be given annually.

4) Full compliance will be achieved December 1, 1993.

**Other Concerns**

**Radiation Safety Officer Training**

1. Sinai Samaritan Medical Center is exploring educational training opportunities for Mr. Blizzard. Selection of a program will include comprehensive radiation safety instruction. Targeted completion date for training is December, 1994.

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NOTICE OF VIOLATION RESPONSE

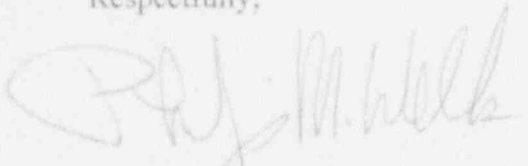
**Performance of Program Audits**

2. Please reference response to Violation A.

**Surveys for Beta-Emitting Isotopes**

3. This procedure was not included in the last license renewal. Methods for detecting beta-emitting isotopes has been developed and will be included in the next license amendment. Although a procedure was not indicated on the license, areas that utilize beta-emitting isotopes have always performed routine surveys were indicated. Mr. Cameron reviewed wipe test results in these areas and found them to be adequate.

Respectfully,



Philip M. Wells, FACHE  
Senior Vice President of Operations

cc: William Jenkins  
Steven Port, M.D.  
Howard Johnson, M.D.  
Zacc Russell

## Survey of Cell Biology

Date: October 1, 1993

Surveys of the cell biology lab were conducted. Wipe tests of areas were conducted. Results are indicated below. Visual inspection of the lab also took place and all was found complete.

Area	DPM
Work area	20
Refrigerator	7
Floor	10
Chair	12
Waste container	10
Counter	12

Bechold scintillation counter was used for test. Efficiency of detector was .42. All areas were free of contamination.

**SINAI SAMARITAN MEDICAL CENTER  
NUCLEAR MEDICINE  
WEEKLY WIPE TEST WORKSHEET**

DATE: 10/22/93

TECHNOLOGIST: Fred B. - RSO

WIPE AREA	GROSS CPM	BKG	NET CPM	DPM
HOOD	54	20	34	42.5
DOSE CALIB.	32	"	12	15
WASTE BIN	30	"	10	12.5
INJ. TRAY	36	"	16	20
INJ. CHAIR	48	"	28	35
BATHROOM	48	"	28	35
4000 CART	24	"	4	5
4000 CONSOL	26	"	6	7.5
3000 CART	48	"	28	35
3000 CONSOL	24	"	4	5
OMEGA AREA	40	"	20	25

ACTION LEVEL = 200 DPM

1) Standard (Co-57) cpm: 76,141

2) Background cpm: 34

3) Net cpm: 76,107 A

4) Standard (Co-57) in uCi: 04246 X  $2.22 \times 10^6$  dpm/uCi =  $9.42 \times 10^4$  B

5) cpm/dpm Conversion Factor: .81 A/B

INSTRUMENT USED: Pickard 4R HIGH VOLTAGE: 553

MODEL: 628438-1 SERIAL: 233294

LAST CALIBRATION: 10/27/92

WINDOWS: LL = 120 UL = 380, Range = 1.0 Mev