



DEPARTMENT OF VETERANS AFFAIRS
Medical Center
3601 Green Bay Road
North Chicago IL 60064-3096

Matson

DEC 18 1992

In Reply Refer To: 556/00A

United States Nuclear Regulatory Commission
Region III
ATTN: John A. Grobe
Chief, Nuclear Materials Safety
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Grobe:

This is in response to your letter dated December 4, 1992 which refers to the special safety inspection conducted by Evelyn Matson of your office on November 12, 1992, to "review concerns associated with activities authorized by NRC Byproduct Material License No. 12-10057-04." I have enclosed a copy of your letter and its enclosures (Enclosure A). Also enclosed (Enclosure B) is the response of Dr. Sanda Loga, Radiation Safety Officer at this medical center. Her response is directed to the items specifically cited in the Notice of Violation provided by your office. We are confident and pleased that all items identified in the Notice of Violation are now resolved and that appropriate actions have been taken to prevent and/or minimize the possibility of their reoccurrence.

Let me state our appreciation for Ms. Matson's instructive and critical review. Reviews such as this are one means by which we continually evaluate the effectiveness of clinical management practices. The application of NRC's findings is valued as we strive to attain the goal of providing the highest quality patient care possible to our veterans. Of course, to do so implies that the work place must be a safe one for patients and employees alike.

In your letter you also state your concern regarding management deficiencies that "appear to have allowed staffing shortages to occur which could have led to safety issues." You ask that in our response we:

- (1) describe the reason why a staffing issue occurred, (2) actions you have taken or plan to take to address the reason the shortages occurred, (3) the action you have taken or plan to take to correct the shortage itself, (4) the dates when corrective actions will be completed, and (5) describe the actions you will take to prevent recurrence of the management deficiencies which allowed it to occur

Our response follows.

I. Describe why a staffing shortage occurred.

We accept Ms. Matson's summary statement, based on assertions by Nuclear Medicine Service personnel, that Nuclear Medicine workload "has been stable for the last several years". Furthermore, until the recent situation arose, staffing has also been relatively stable. Cumulative staffing in FY 1990 and FY 1991 was 9.0 FTEE, and in FY 1992 was 8.1.

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The extent to which any acute staffing shortage may have occurred most recently is attributable to poor management practices on the part of the Chief, Nuclear Medicine Service, Gregory Gergans, M.D. During the period in question, September 1, 1992 to November 28, 1992, Dr. Gergans requested and was granted authority for his staff to work a total of 156.75 hours of overtime.

During this same period of time, Dr. Gergans authorized 252.5 hours of annual leave for his staff. He also requested and was granted 80.25 hours of leave for himself. This equates to a net loss of 176 hours of labor during the period. Dr. Gergans, in his role as Service Chief, has direct control of leave approval.

Illegibly and contrary to sound management, he both approved the leave requests of subordinates and personally took leave during a period of time in which he later described staffing levels as "dangerously low." We accept the sequence of events and conclusions as reflected in Ms. Matson's report (under Item 4, Radiation Safety Program Concerns, AMS No. RIII-92-A-0127, Concerns A and B) including her finding that Dr. Gergans did not notify medical center management of his concern that a "dangerous and unsafe situation existed in Nuclear Medicine Service until October 29, 1992." Furthermore, we agree with Ms. Matson's assessment (pages 6-7):

After becoming aware that there was considerable concern for safety in the Nuclear Medicine Service, the acting [sic] Chief of Staff immediately transferred RIA testing out of the Nuclear Medicine Service on November 9, 1992. However, on November 10, 1992, the Chief of Nuclear Medicine Service stated that an emergency situation did not exist, and requested that the transfer be delayed until further discussion and proper authorizations. His request was granted [emphasis mine].

Dr. Gergans failed to communicate the urgency of his perceived need in a timely manner. Subsequently, he reversed his position. This reflects poor decision making and poor management of the Nuclear Medicine Service. He consistently evidences a lack of skills in this area and has resisted correction of his behavior despite repeated verbal counselling from his supervisor and others. For instance, Dr. Gergans requested additional staffing but never adequately justified the request. When management has sought to clarify the relationship of workload changes to the staffing request, Dr. Gergans reported on several occasions that his workload reporting methods have changed over time and that some of his figures are estimates. He has not established reliable workload figures or documented changes in workload in such a way as to allow comparisons and/or cost-benefit analysis of his request.

Dr. Gergans' request for additional staffing is being disapproved for the following reasons:

- A. the temporary shortage of technical staff is resolved. There are now four technologists on duty (since the return of one from maternity leave on December 14, 1992);
- B. no increase is planned in hours of coverage provided by the service;
- C. the majority of workload related to RIA testing is now being done with different (non-RIA) procedures by Laboratory Service;

D. the remaining RIA workload is being shifted to the Endocrinology Laboratory; and

E. the realignment of functions, i.e., ultrasound and scanning, to Radiology Service, so as to create a "Diagnostic Imaging Service", will affect economies of administrative and technical support.

2. Actions you have taken or plan to take to address the reason the shortages occurred.

Dr. Gergans will formally receive guidance to judiciously utilize overtime and to regulate leave usage during periods of extended sick leave and turnover. Since staffing requirements are a function of workload, he will also be instructed to expeditiously identify potential problem situations and to communicate an appropriate level of urgency so that alternatives may be considered by the Chief of Staff, i.e., referring workload to other nearby VA facilities or to the private sector.

3. The action you have taken or plan to take to correct the shortage itself.

New technology and equipment has become available in recent years to allow more than 80 percent of the in-vitro tests currently conducted using the RIA method to be performed using non-RIA techniques. The equipment to perform these (non-RIA) tests is automated and currently on station. Some of the equipment has already been activated as a result of this review. Other workload that Nuclear Medicine Service refers to private laboratories includes Hepatitis Series, HIV tests, Amikacin and Digoxin levels. This Nuclear Medicine "work" will now be performed on station using non-RIA techniques. The results will be immediately available on the medical center's Decentralized Hospital Computer System and included in the recently activated "laboratory results alert" option which automatically notifies practitioners of abnormal results via electronic mail. Laboratory Service provides coverage 24 hours a day, seven days a week, whereas Nuclear Medicine Service routinely operates Monday through Friday, 8:00 a.m. to 4:30 p.m. (except for emergencies). Laboratory Service will perform these tests without radioactive materials eliminating the overhead and management issues related to the handling, storage and disposal of such materials.

4. The dates when corrective actions will be completed.

A. As stated above (1.D.3-5), some RIA procedures, i.e., Amikacin, Gentamicin and Digoxin levels, are now being performed using non-RIA techniques in the Clinical Laboratory. Hepatitis and HIV testing, now referred to private laboratories, will be performed in house by the Clinical Laboratory by no later than the end of January 1993.

B. The remaining RIA workload (thyroid studies) will be transferred to Endocrinology Laboratory, also by no later than the end of January 1993.

C. Plans and actions integrating radiology, scanning and ultrasound procedures under the umbrella of a Diagnostic Imaging Service will allow the sharing of reception, administration, clerical, procurement and supervisory support duties.

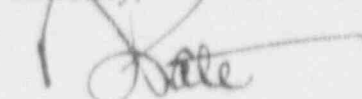
D. Dr. Gergans will formally receive guidance by Wednesday, December 23, 1992.

5. Describe the actions you will take to prevent recurrence of the management deficiencies which allowed it to occur.

The Clinical Executive Board of the Medical Center met November 19, 1992. The minutes reflect discussion and concurrence with recommendations contained under 4A-C (above). The recommendations were approved by the Medical Center Director and the Chief of Staff. The next level of action, that is, reorganization of the Nuclear Medicine Service, requires concurrence by Mr. Al Zamberlan, Regional Director, Central Region, and approval by Milton Gross, M.D., Program Director, Nuclear Medicine Service, VA Central Office. Mr. Zamaberlan's approval is now being sought.

If further information is required, please contact me on FTS 700-384-3700, or the Executive Staff Assistant, Michael A. Tyllas, Ph.D. on FTS 700-384-3702.

Sincerely,



A. S. PATE

Enclosures: 2

cc:

Regional Director (132), Ann Arbor
Director, Field Support (132), VACO

ENCLOSURE A

ENCLOSURE B

December 16, 1992

REPLY TO A NOTICE OF VIOLATION
NRC License No. 12-10057-04

Item 1. Checking Xenon Trap Effluent

a. Reason of Violation:

Weekly checks of the Xenon traps were performed using a GM survey meter.

b. Corrective Action:

Beginning December 15, 1992, we started checking the Xenon trap alarm, according to the manufacturer's instructions (see also NRC Regulatory Guide 10.8, Appendix O, Part O.3, Point 1).

Using the dose calibrator Cs-137 source, we hold it at a distance over a dot in front of the unit. This yields a beep every 1-2 seconds if the alarm is working properly.

Specifically, our Cs-137 source as of 12/15/92, has 281.06 μ Ci and the distance of the source to the Xenon machine dot must be 4.0 inches.

We will perform this test monthly. (See Attachment 1).

Item 2. Weekly Laboratory Surveys

a. Reason of Violation:

Daily wipe tests were done in the hot laboratory.

b. Corrective Action:

Effective 11/16/92, weekly wipe tests are being done in the hot laboratory and in the rooms used to inject patients. (See Attachment 2).

Item 3. Inventory of Sealed Sources

a. Reason of Violation:

Semi-annual inventories of the sealed sources were being done by the Radiation Safety Officer (RSO). The new requirement of quarterly inventories was unintentionally overlooked.

b. Corrective Action:

Quarterly inventories will be done by the RSO beginning 12/3/92. (See Attachment 3).

2.

Item 4. Daily Checks of Survey Meters

a. Reason of Violation:

Routinely, the survey meters were checked daily, but there were a few lapses occasionally.

b. Corrective Action:

A log-book is now in place, where the technicians register their daily surveys. (See Attachment 4).

Item 5. Records of Disposal of By-Product Material

a. Reason of Violation:

Our records were maintained, but they were incomplete in certain areas.

b. Corrective Action:

A new form is now in place, where all the requirements are written down. (See Attachment 5).

The RSO will check the records quarterly.



SANDA LOGA, Ph.D.
Radiation Safety Officer

Attachments: 5

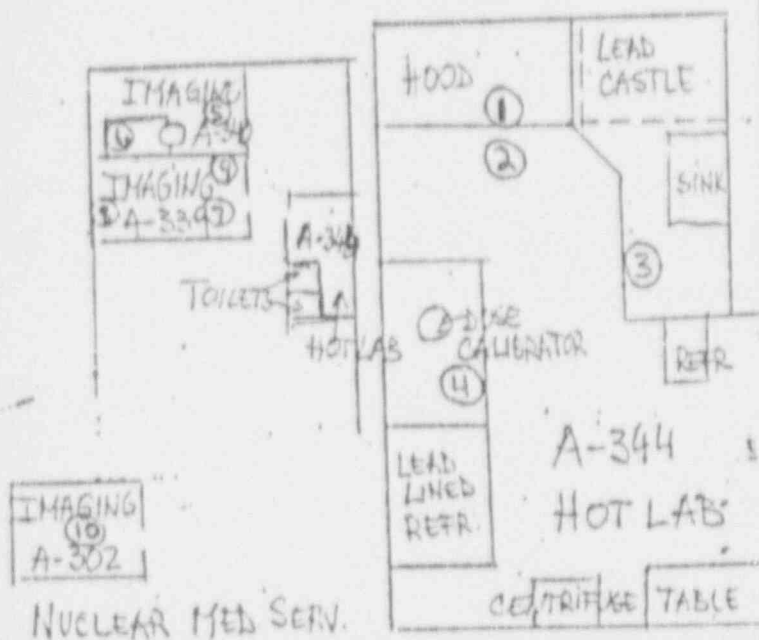
RADIOLOGICAL SAFETY SURVEY REPORT

BUILDING: 133 NUCLEAR MEDICINE SERV DATE: 11/20/92 BY: CANDACE WATKINS
 UTILITY: SPOT CHECK ☐ SPECIAL ☐ EQUIPMENT ☐ TIME: 3:15 pm

SURVEY INSTRUMENT: PACKARD 500 COUNTER

SOURCES OF IONIZING RADIATION

WEEKLY WIPE TEST



TYPE FORM ACTIVITY

VENTILATION:

COMMENTS: Trigger level: 200 dpm/100 cm²

Efficiency of counting 0.93

SURVEY FINDINGS

AREA		CPM	Wipe DPM	INJ
HOOD STORAGE AREA	1	31	7.53	CT
FLOOR IN FRONT OF HOOD	2	21	—	
" HOT " SINK AREA	3	27	3.22	
DOSE CALIBRATOR TABLE	4	19	—	
RIA WORK TABLE	5	30	6.45	
RIA " HOT " SINK	6	24	—	
ELSCINT CAMERA AREA	7	34	1.07	
TRIONIX CAMERA AREA	8	34	10.7	
INJECTION TABLE	9	407	412	
PORTABLE CAMERA AREA	0	79	5.4	
Background		24		✓

10-124
 Feb 1972

RECOMMENDATIONS: Wiped down injection table - Recounted 59.5 dpm
 TR

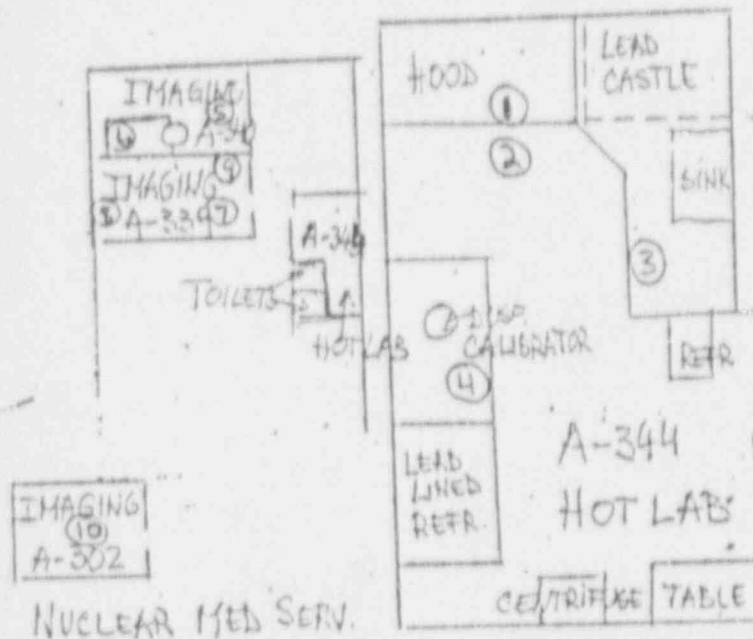
RADIOLOGICAL SAFETY SURVEY REPORT

BUILDING: 133 NUCLEAR MEDICINE SERV DATE: 11/27/92 BY: Candace Thomas
 UTILITY: SPOT CHECK ☐ SPECIAL ☐ EQUIPMENT ☐ TIME: 2:15 pm

INSTRUMENT: PACKARD 500 COUNTER

SOURCES OF IONIZING RADIATION

WEEKLY WIPE TEST



TYPE	FORM	ACTIVITY

VENTILATION: _____

COMMENTS: Trigger level: 200 dpm/100 cm²
 Efficiency of counting 0.93

SURVEY FINDINGS

AREA		CPM	Wipe DPM	INJ
HOOD STORAGE AREA	1	54	21.5	CT
FLOOR IN FRONT OF HOOD	2	59	26.9	1
" HOT " SINK AREA	3	50	17.2	
DOSE CALIBRATOR TABLE	4	79	48.4	
RIA WORK TABLE	5	36	2.10	
RIA " HOT " SINK	6	53	20.4	
ELSCINT CAMERA AREA	7	33	—	
TRIONIX CAMERA AREA	8	34	—	
INJECTION TABLE	9	56	23.6	
PORTABLE CAMERA AREA	0	39	5.4	
Background		34		✓

10-124
 1972

RECOMMENDATIONS: _____

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RAIOLOGICAL SAFETY SURVEY REPORT

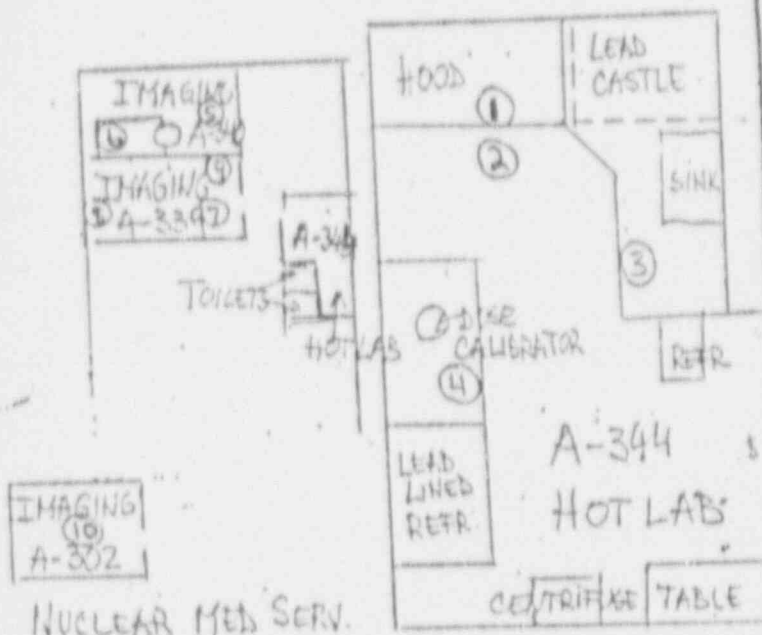
BUILDING: 133 NUCLEAR MEDICINE SERV DATE: 12/4/92 BY: CANDACE WATKINS

UTIME: SPOT CHECK ☐ SPECIAL ☐ EQUIPMENT ☐ TIME: 3:30pm

INSTRUMENT: PACKARD 500 COUNTER

SOURCES OF IONIZING RADIATION

WEEKLY WIPE TEST



TYPE	FORM	ACTIVITY

VENTILATION: _____

COMMENTS: Trigger level: 200 dpm/100 cm²
Efficiency of counting 0.93

SURVEY FINDINGS

AREA		CPM	Wipe DPM	IN
HOOD STORAGE AREA	1	24	—	CT
FLOOR IN FRONT OF HOOD	2	23	—	1
" HOT " SINK AREA	3	34	3.2	
DOSE CALIBRATOR TABLE	4	29	—	
RIA WORK TABLE	5	29	—	
RIA " HOT " SINK	6	27	—	
ELSCINT CAMERA AREA	7	27	—	
TRIONIX CAMERA AREA	8	14	—	
INJECTION TABLE	9	34	3.2	
PORTABLE CAMERA AREA	10	27	—	
Background		31		✓

RECOMMENDATIONS: _____

TB

INVENTORY DATES FOR SEALED SOURCES (QUARTERLY)

Dec 3, 1992 S.L. & K. Sinal

100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000

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