DEC 19 1989

In Reply Refer To:
License: 35-13157-01
Docket: 30-02922/89-01

Muskogee Regional Medical Center
ATTN: William R. Kennedy, CEO
300 Rockefeller Drive
Muskogee, Oklahoma 74401

Gentlemen:

This acknowledges receipt of your letter dated November 20, 1989, in response to our letter and attached Notice of Violation dated November 9, 1989. We have reviewed your reply and find that additional information is needed.

Your response to this letter should address those specific items regarding Violations 4, 5, and 6 as noted below. You should provide your response to this office within 10 days of the receipt of this letter.

Item 4: Your response indicates that you do not frequently use the 1000 mr/hr scale on your Victoreen Model 740-F survey instrument. You should note that although this may be the case during routine use, nonetheless, you are required to maintain a calibrated radiation measurement survey instrument capable of measuring dose rates over the range of 1 millirem per hour to 1000 millirem per hour. The requirements for calibration of these instruments are described in 10 CFR 35.51. Your response indicates that your corrective action has not adequately addressed this violation. Therefore, you are required to provide additional information describing (1) further actions taken to ensure that your instrument calibrations meet regulatory standards, (2) the corrective steps that will be taken to avoid further violation, and (3) the date when full compliance will be achieved.

Items 5 and 6: Although your response indicates that the violations observed during the inspection have been corrected, you have not addressed how you propose to prevent recurrence of these violations. Your response should identify those specific actions implemented to prevent future recurrence of similar violations.

Should you have any questions concerning this matter please contact Linda L. Kasner at (817) 860-8100.

Sincerely,

Original Signed By:
LAWRENCE A. YANDELL

A. Bill Beach, Director
Division of Radiation Safety
and Safeguards

cc:
Oklahoma Radiation Control Program Director

bcc: (see next page)

RIV:NMIS
LLKasner:ch
12/19/89

C:NMIS
CLCain
12/19/89

D:DRSS
ABBeach
12/19/89

IE-07
1/1

8912270011 891219
REG4 LIC30
35-13157-01 PDC

bcc w/copy of licensee letter:
DMB - Original (IE-07)
RDMartin
ABBeach
LAYandell
LShea, RM/ALF (AR-2015)
CLCain
RJEverett
LLKasner
NMSB
MIS System
RIV Files (2)
RSTS Operator

Muskogee Regional
Medical Center
300 Rockefeller Drive
Muskogee, Oklahoma 74401
918/682-5501

Vitality for Life

November 20, 1989

U.S.N.R.C., Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 74012

RE: License No. 35-13157-01
Docket: 30-02922/89-01

Dear Licensing Engineer:

This is in response to your November 9, 1989 correspondence concerning the October 6, 1989 inspection evaluation. Each response uses your numbering system.

1. Since one of the radiologists other than the R.S.O. was representing him on the Radiation Safety Committee, he was not present during the annual A.L.A.R.A. review which is a briefing of management on the entire nuclear program. Compliance with this feature is now complete as per item "2" below.

2. Since the physicians covering radiology services at this facility are a group that rotates coverage among physicians the R.S.O. was present on Committee meeting dates only occasionally. The quarterly meetings are now scheduled three months in advance and he has agreed to always be present. Compliance with this feature is complete.

3. This requirement was overlooked during quarterly linearity tests. We have done a linearity decay to the 10 uCi activity. Quarterly linearity measurements are done twice using the approved transmission method; once with a large activity and another with approximately 2 mCi that attenuates to less than 10 uCi indicated activity. Compliance with this feature is complete.

4. Since radiation levels at this facility are not needed above 100 mR/Hr, the 1000 mR/Hr scale was never used. That scale was, therefore, calibrated only at one point. The 1000 mR/Hr scale has been taped over. All scales up to a maximum of 300 mR/Hr are now being calibrated using two points on each scale. Compliance with this feature is complete.

IC-89-703

IE07

5. Compliance with this feature was overlooked. The brachytherapy source inventory and routine radiation survey of the storage cabinet are now being made and recorded. Compliance with this feature is complete.

6. A system of recording radioactive doses has been in practice here since the original license was approved. The system did not change when the regulations changed. We are currently recording all radioactive material in full compliance with specifications in 10 CFR 35.53 (C). Compliance with this feature is complete.

Each of these violations have been corrected. Routine compliance will be verified each quarter during the record keeping audit.

If additional information is needed, please first contact our physicist, Mike Morris at (405) 528-3501.

Sincerely,

Bill R. Kennedy
Chief Executive Officer
Muskogee Regional Medical Center

NOV - 9 1989

In Reply Refer To:
License: 35-13157-01
Docket: 30-02922/89-01

Muskogee Regional Medical Center
ATTN: William R. Kennedy, C.E.O.
300 Rockefeller Drive
Muskogee, Oklahoma 74401

Gentlemen:

This refers to the routine, unannounced radiation safety inspection conducted by Ms. L. L. Kasner of this office on October 6, 1989, of the activities authorized by NRC Byproduct Material License 35-13157-01, and to the discussion of our findings held by the inspector with members of your staff at the conclusion of the inspection.

The inspection was an examination of the activities conducted under the license as they relate to radiation safety and to compliance with the Commission's rules and regulations and the conditions of the license. The inspection consisted of selective examinations of procedures and representative records, interviews of personnel, and observations by the inspector.

During this inspection, the inspector reviewed the organization of the nuclear medicine department and the roles of individuals named as authorized users under the license. The inspector observed that several individual's responsibilities within the program had changed during this inspection period, but that key individuals such as the Radiation Safety Officer (RSO) had maintained their appointed positions. The inspector also reviewed the roles of your consulting medical physicists and the services they provide with respect to the radiation safety program and its management.

The inspector observed that individuals in your program, particularly those delegated as members of the Radiation Safety Committee (RSC), appeared to communicate effectively and generally performed program audits that were directed to safety issues. The audits performed by your consulting physicist appeared to have been useful in identifying procedures and program areas where radiation safety practice could be improved. However, it was observed that your RSO had been absent from the majority of the RSC meetings and had failed to provide management with annual program reviews during this inspection period. Although the RSO may delegate tasks to alternate individuals as you have done with your consulting physicist, it must be emphasized that the RSO is responsible for the overall effectiveness of the radiation safety program. This responsibility includes oversight of the program to coordinate the efforts of those individuals performing tasks related to the program, directing audits that adequately identify safety issues or areas of noncompliance, and providing guidance to management. The NRC expects the RSO to participate in management audits and committee meetings where policies and procedures related to the radiation safety program are developed or reviewed.

*RIV:NMIS	*C:NMIS	D:DRSS
LLKasner:	CLCain	ABBeach
/ /89	/ /89	11/9 /89

*Previously Concurred

8911160131 2pp

IE-07

During this inspection, certain of your activities were found not to be conducted in full compliance with NRC requirements. Consequently, you are required to respond to this matter in writing, in accordance with the provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the Notice of Violation enclosed with this letter.

The response directed by this letter and the accompanying Notice is not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, we will be pleased to discuss them with you.

Sincerely,

Original Signed By:
A. B. BEACH

A. Bill Beach, Director
Division of Radiation Safety
and Safeguards

Enclosure:
Appendix - Notice of Violation

cc:
Oklahoma Radiation Control Program Director

bcc:
DMB - Original (IE-07)
RDMartin
ABBeach
LAYandell
LShea, RM/ALF (AR-2015)
*CLCain
*RJEverett
*LLKasner
*NMIS
*MIS System
*RIV Files (2)
*RSTS Operator
*REHall, URFO

*W/766

IE-07

APPENDIX

NOTICE OF VIOLATION

Muskogee Regional Medical Center
Muskogee, Oklahoma

Docket: 30-02922/89-01
License: 35-13157-01

During an NRC inspection conducted on October 6, 1989, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," 10 CFR Part 2, Appendix C (1989) (Enforcement Policy), the violations are listed below:

1. 10 CFR 35.21(b)(3) requires that the Radiation Safety Officer (RSO) brief management once each year on the byproduct material program.

   Contrary to the above, during interviews with the licensee's management representative and RSO conducted on October 6, 1989, the inspector determined that annual management briefings had not been conducted during the period from January 1987 through October 1989.

   This is a Severity Level IV violation. (Supplement VI)

2. 10 CFR 35.22(a)(3) requires that in order to establish a quorum and to conduct business, at least one-half of the Radiation Safety Committee's (RSC) membership must be present, including the RSO and the management's representative.

   Contrary to the above, during the inspection conducted on October 6, 1989, the inspector determined that the RSO had been absent from all but two of the quarterly RSC meetings conducted during the period from November 1986 through July 1989.

   This is a Severity Level IV violation. (Supplement VI)

3. 10 CFR 35.50(b)(3) requires, in part, that a licensee shall test each dose calibrator for linearity upon installation and at least quarterly thereafter over the range of its use between the highest dosage that will be administered to a patient and 10 microcuries.

   Contrary to the above, the inspector observed that quarterly linearity tests performed on the licensee's Capintec dose calibrator were performed using source activities ranging from 200 millicuries to 450 microcuries during the period from July 1986 until the date of the inspection. The licensee did not test the instrument for linearity at activity levels below 450 microcuries even though they routinely administered patient doses as low as 15 microcuries.

   This is a Severity Level IV violation. (Supplement VI)

4. 10 CFR 35.51(a) requires, in part, that a licensee shall calibrate survey instruments annually and following repair. This calibration shall include

two separate readings on all scales with readings up to 1000 millirem per hour.

Contrary to the above, the licensee had failed to perform calibrations on one survey instrument, Victoreen Model 740-F, Serial Number 2209, that included two points on each scale reading up to 1000 millirem per hour. The remaining scales on the instrument had been properly calibrated.

This is a Severity Level IV violation. (Supplement VI)

5. 10 CFR 35.59(g) and (h) require, in part, that a licensee shall (1) conduct quarterly physical inventories of brachytherapy sources; and (2) measure the ambient dose rates quarterly in all areas where such sources are stored.

Contrary to the above, the inspector determined that during the period from July 1986 until the date of this inspection, physical inventories of 18 cesium-137 brachytherapy sources and surveys of the area used to store brachytherapy sources had not been performed.

This is a Severity Level IV violation. (Supplement VI)

6. 10 CFR 35.53(c) requires that records of the measurement of radiopharmaceutical dosages contain: (1) generic name, trade name, or abbreviation of the radiopharmaceutical, its lot number, and expiration dates and the radionuclide; (2) patient's name, and identification number if one has been assigned; (3) prescribed dosage and activity of the dosage at the time of measurement, or a notation that the total activity is less than 10 microcuries; (4) date and time of the measurement; and (5) initials of the individual who made the record.

Contrary to the above, during the inspection conducted on October 6, 1989, the inspector observed that records of the measurement of radiopharmaceutical doses did not include: (1) the name of the radiopharmaceutical; (2) the lot number; and (3) the expiration date of the radionuclide.

This is a Severity Level V violation. (Supplement VI)

Pursuant to the provisions of 10 CFR 2.201, Muskogee Regional Medical Center is hereby required to submit to this office, within 30 days of the date of the letter transmitting this Notice, a written statement or explanation in reply, including for each violation: (1) the reason for the violation if admitted, (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending the response time.

Dated at Arlington, Texas,
this 9th day of November 1989

NRC FORM 766

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTOR'S REPORT

Office of Inspection and Enforcement

PRINCIPAL INSPECTOR (name last, first, and middle initial): Kasner, Linda L.

REVIEWER: C.L. Cain CLC

INSPECTORS:

LICENSEE/VENDOR	TRANSACTION TYPE	DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ.	NEXT INSPEC. DATE MO.	YR.
Muskogee Regional Medical Center	X I - INSERT; M - MODIFY; D - DELETE; R - REPLACE	030 02922	8901		04	92

R

PERIOD OF INVESTIGATION/INSPECTION FROM (MO. DAY YR.)	TO (MO. DAY YR.)	INSPECTION PERFORMED BY	ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY: REGION	DIVISION	BRANCH
100689	100689	X 1 - REGIONAL OFFICE STAFF; 2 - RESIDENT INSPECTOR; 3 - PERFORMANCE APPRAISAL TEAM; OTHER	4	3	4

REGIONAL ACTION (Check one box only): 1 - NRC FORM 591; ✓ 2 - REGIONAL OFFICE LETTER

TYPE OF ACTIVITY CONDUCTED (Check one box only): X 02 - SAFETY; 03 - INCIDENT; 04 - ENFORCEMENT; 05 - MGMT AUDIT; 06 - MGMT VISIT; 07 - SPECIAL; 08 - VENDOR; 09 - MAT. ACCT.; 10 - PLANT SEC.; 11 - INVENT. VER.; 12 - SHIPMENT/EXPORT; 13 - IMPORT; 14 - INQUIRY; 15 - INVESTIGATION

INSPECTION/INVESTIGATION FINDINGS: 1 - CLEAR; 2 - VIOLATION; 3 - DEVIATION; 4 - VIOLATION & DEVIATION

TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS	ENFORCEMENT CONFERENCE HELD	REPORT CONTAINS 2.790 INFORMATION	LETTER OR REPORT TRANSMITTAL DATE: NRC FORM 591 OR REG. LETTER ISSUED	REPORT SENT TO HQ FOR ACTION
A: 016	1 - YES	1 - YES	110989	

MODULE INFORMATION

MODULE NUMBER INSP.	SEQ.	PRIORITY / HOURS / PERCENTAGE COMPLETED / STATUS		MODULE NUMBER INSP.	SEQ.	PRIORITY / HOURS / PERCENTAGE COMPLETED / STATUS
5 3 0 7 0 3 B	A	0 0 1		5 8 6 7 4 0	A	001 100 C
Management Meeting				Transportation		
~~Initial~~ B	A			~~Noncompliance Follow-up~~	A	
5 8 7 1 0 0	(A)	003 100 C			A	
Program Requirements						
8 3 8 2 2	A	002 100 C			A	
Radiation Protection						

ARTICLE SEQUENCE # VIOLATION OR DEVIATION

NRC FORM 766 A

U.S. NUCLEAR REGULATORY COMMISSION

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	SEQ	MODULE NUMBER	
030029122	8901	A	518711010	6
		B	VIOLATION SEVERITY OR DEVIATION	SITE RELATED
		C	1 2 3 4 5 6 D	A C B D
		D	X	

VIOLATION OR DEVIATION (Enter up to 2400 characters for each NOV. If the text exceeds this number, it will be necessary to paraphrase. Limit these to 80 characters each.)

10 CFR 35.21(b)(3) requires that the Radiation Safety Officer (RSO) brief management once each year on the byproduct material program.

Contrary to the above, during interviews with the licensee's management representative and RSO conducted on October 6, 1989, the inspector determined that annual management briefings had not been conducted during the period from January 1987 through October 1989.

NRC FORM 766 A

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO	SEQ	MODULE NUMBER	
03002922	89101	A	58711 00	6
		B	VIOLATION SEVERITY OR DEVIATION D	SITE RELATED
		C	1 2 3 4 5 6	A C
		D	X	B D

VIOLATION OR DEVIATION (Enter up to 2430 characters for each item. If the text exceeds this number, it will be necessary to continue. Leave lines to 80 characters each.)

10 CFR 35.22(a)(3) requires that in order to establish a quorum and to conduct business, at least one-half of the Radiation Safety Committee's (RSC) membership must be present, including the RSO and the management's representative.

Contrary to the above, during the inspection conducted on October 6, 1989, the inspector determined that the RSO had been absent from all but two of the quarterly RSC meetings conducted during the period from November 1986 through July 1989.

NRC FORM 766 A
11 87
F MC 0636

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO.	REPORT SEQ.	MODULE NUMBER
03502927	8901	A	587/100
		B	
		C	
		D	

VIOLATION SEVERITY OR DEVIATION: 1 2 3 4 5 6 — X

SITE RELATED: A C / B D

VIOLATION OR DEVIATION (enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Leave ends to 80 characters each.)

10 CFR 35.50(b)(3) requires, in part, that a licensee shall test each dose calibrator for linearity upon installation and at least quarterly thereafter over the range of its use between the highest dosage that will be administered to a patient and 10 microcuries.

Contrary to the above, the inspector observed that quarterly linearity tests performed on the licensee's Capintec dose calibrator were performed using source activities ranging from 200 millicuries to 450 microcuries during the period from July 1986 until the date of the inspection. The licensee did not test the instrument for linearity at activity levels below 450 microcuries even though they routinely administer patient doses as low as 15 microcuries.

NRC FORM 766 A
(9-81)
NRCM 0535

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	R NO	SEQ	MODULE NUMBER
03002922	8810	A	587100 6
		B	VIOLATION SEVERITY OR DEVIATION: 1 2 3 4 X 5 6 — D
		C	SITE RELATED: A C B D
		D	

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 80 characters each.)

10 CFR 35.51(a) requires, in part, that a licensee shall calibrate survey instruments annually and following repair. This calibration shall include two separate readings on all scales with readings up to 1000 millirem per hour.

Contrary to the above, the licensee had failed to perform calibrations on one survey instrument, Victoreen Model 740-F, Serial Number 2209, that included two points on each scale reading up to 1000 millirem per hour.

NRC Form 766 A
EVIC 0535

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO. (8 digits) OR LICENSE NO. (BY PRODUCT) (13 digits)	REPORT NO	SEQ	MODULE NUMBER
03002922	89101	A	58 71 00 6
		B	VIOLATION SEVERITY OR DEVIATION: 1 2 3 4 5 6 D
		C	SITE RELATED: A C B D
		D	

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If this item exceeds this number, it will be necessary to continue. Leave blank to be processed later.)

10 CFR 35.59(g) and (h) require, in part, that a licensee shall (1) conduct quarterly physical inventories of brachytherapy sources; and (2) measure the ambient dose rates quarterly in all areas where such sources are stored.

Contrary to the above, the inspector determined that during the period from July 1986 until the date of this inspection, physical inventories of 18 cesium-137 brachytherapy sources and surveys of the area used to store brachytherapy sources had not been performed at quarterly intervals.

NRC FORM 766 A
(11 89)
(E MC 0636

INSPECTOR'S REPORT
(Continuation)
Office of Inspection and Enforcement

DOCKET NO (8 digits) OR LICENSE NO (BY PRODUCT) (13 digits)	A T NO	SEQ	MODULE NUMBER	
0350292 2	89011	A	56871010	16
		B	VIOLATION SEVERITY OR DEVIATION	SITE RELATED
		C	1 2 3 4 5 6 D	A C B D
		D	X	

VIOLATION OR DEVIATION (Enter up to 2400 characters for each item. If the text exceeds this number, it will be necessary to paraphrase. Limit lines to 80 characters each.)

10 CFR 35.53(c) requires that records of the measurement of radiopharmaceutical dosages contain: (1) generic name, trade name, or abbreviation of the radiopharmaceutical, its lot number, and expiration dates and the radionuclide; (2) patient's name, and identification number if one has been assigned; (3) prescribed dosage and activity of the dosage at the time of measurement, or a notation that the total activity is less than 10 microcuries; (4) date and time of the measurement; and (5) initials of the individual who made the record.

Contrary to the above, during the inspection conducted on October 6, 1989, the inspector observed that records of the measurement of radiopharmaceutical doses did not include: (1) the name of the radiopharmaceutical; (2) the lot number; and (3) the expiration date of the radionuclide.