In Reply Refer To: License: 35-18282-01 Docket: 30-14781/89-01

Oral Roberts University
ATTN: Larry Edwards
Vice President
for Health Affairs
7777 South Lewis Avenue
Tulsa, Oklahoma 74171

Gentlemen:

Thank you for your letter of September 25, 1989, in response to our letter and attached Notice of Violation both dated August 18, 1989. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation. We will review the implementation of your corrective actions during a future inspection to determine whether full compliance has been achieved and will be maintained.

Original Signed By: William L. Fisher

William L. Fisher, Chief Nuclear Materials Safety Branch

cc: Oklahoma Radiation Control Program Director

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

RIVINGIS C:NMISTAC SRapendran:ch CLCain 10/3/89 10/9/89 C:NMSB 1 2 3 WLFisher 10/10/89

IE-C

ORAL ROBERTS UNIVERSITY SCHOOL OF MEDICINE CITY OF FAITH MEDICAL AND RESEARCH CENTER 8181 South Lewis, Tulsa, OK 74137 (918) 493-8959

September 25, 1989

William L. Fisher, Chief Nuclear Materials Safety Branch United States Muclear Regulatory Commission Region VI 611 Ryan Plaza Drive Suite 1000 Arlington, TX 76011

RE: License: 35-18282-01 Docket: 030-14781/89-01

Dear Mr. Fisher:

In reference to your letter and NOV dated 18 August 1989, we offer the following response:

A1. Low specific activity of Cobalt 57 calibration source.

Due to an oversight, the Cobalt 57 source was allowed to decay beyond the range for calibration of accuracy check.

Immediate corrective steps taken include the ordering and subsequent receiving of an appropriate Cobalt Source. It is now being used as an accuracy check.

Further corrective steps taken include calculating and recording in the calibrator book the date at which the new source became non-compliant. A special note draws it to the attention of the calibrator.

Full compliance was accomplished 7 August 1989.

Calculated constancy of dose calibrator.

This violation is a result of relying on visual checks rather than actual plots of data to ascertain the +5%. The plots were done after the fact; however, no procedure was started without the visual check indicating the accuracy was within limits.

89+0040298 3BB

IEON

SEP 28 1989

Immediate corrective steps taken include plotting by readings daily before the fact. A poster is now in place in the hot lab, reminding all who are involved of the need to plot the readings daily.

Full compliance was achieved 7 August 1989.

B. Lack of wipe tests from 14-31 July 1989.

These violations occurred during the Chief Nuclear Technologist's vacation, due to lack of familiarity of the back-up person with all the procedures.

Immediate corrective steps taken include the posting of a reminder of wipe test requirements for those people left in charge of the nuclear lab during vacation and absences. Since posting the weekly list, no violations have occurred.

Full compliance was accomplished 7 August 1989.

C. Lack of Quarterly Laboratory Surveys since 29 May 1987.

The laboratories had last been inspected during the first quarter of 1988 rather than 29 May 1987 as shown on the NOV. They were not in the proper folder. The laboratories have not been systematically inspected since mid-April of 1988, although they were surveyed from time to time.

Prior to August of 1988, the clinical and non-clinical isotope users records were kept in separate offices. They were moved and merged together at the beginning of the new fiscal year. During the merger, the laboratory surveys were not filed appropriately, although they had been performed.

During the fall of 1988 and the spring of 1989, the Radiation Safety Office operated with a manpower shortage. Because: (1) a tight control of ordering and receiving isotopes was (is) in place, thus allowing us to know who had what on hand; (2) only minimal waste on hand, since a pick-up had occurred in mid-April of 1988; and (3) only minimal research activity was underway; it was felt that spot checks of laboratories would be adequate, thus allowing the personnel assigned to Radiation Safety to deal with critical issues.

William L. Fisher September 25, 1989 Page 3

Immediate corrective steps include the filing of the missing reports, the assigning of more personnel to the Radiation Safety Office and the reinstitution of the mandatory quarterly surveys of laboratories. The survey for the third quarter will be completed by 9 October 1989. Survey forms will be filed appropriately, at which time we will be fully compliant.

Further corrective steps will include a tickler file system to be utilized by the RSO as a reminder, to ensure compliance of our license.

We trust this response is sufficient and are proceeding accordingly.

Sincerely,

Larry D. Edwards, M.D.

Vice-President for Health Affairs

Oral Roberts University School of Medicine

/11 w

In Reply Refer To: License: 35-18282-01 Docket: 030-14781/89-01

Oral Roberts University
ATTN: Larry Edwards
Vice President for Health Affairs
7777 South Lewis Avenue
Tulsa, Oklahoma 74171

Gentlemen:

This refers to the routine, unannounced radiation safety inspection conducted by Mr. Selvan Rajendran of this office on July 31 and August 1, 1989, of the activities authorized by NRC Byproduct Material License 35-18282-01 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, independent measurements, and observations by the inspector.

During this inspection, certain of your activities were found not to the 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 "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 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.

RIVEMIS SRadiendran/tw Q/17/89 C:NMISQUE CLCain 8/17/89 C:NMSB 1.27 WLFisher 8/17/89

-89 08 790036 ZPM

IE-07

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

Sincerely,

Original Signed By: William L. Fisher

William L. Fisher, Chief Nuclear Materials Safety Branch

Enclosure:
Appendix - Notice of Violation

cc w/enclosure: Oklahoma Radiation Control Program Director

bcc: DMB - Original (IE-07) RDMartin ABBeach REHall WLFisher LShea, RM/ALF (AR-2015) *RIV Files (2)

*CLCain
*RJEverett
*SRajendran
*NMSB
*HIS System
*RSTS Operator

*w/766

APPENDIX

NOTICE OF VIOLATION

Oral Roberts University Tulsa, Oklahoma Docket: 030-14781/89-01 License: 35-18282-01

During an NRC inspection conducted on July 31 and August 1, 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 (1988), the violations are listed below:

Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983.

- A. Item No. 10 of this application requires that dose calibrators be calibrated in accordance with procedures contained in Appendix D, Section 2, of Regulatory Guide 10.8, Revision 1.
 - Item G of Appendix D, Section 2, requires that dose calibrators be checked for accuracy with a cobalt-57 source of 3-5 millicuries.

Contrary to the above, on March 20, 1989, the cobalt-57 source in use had decayed to 90 microcuries.

 Item C.6 of Appendix D, Section 2, requires that dose calibrator constancy be within ±5 percent of the calculated activity.

Contrary to the above, from June 22 to July 31, 1989, the dose calibrator constancy test results were not evaluated to determine if they were within ±5 percent of the calculated activity.

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

B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1.

Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests.

Contrary to the above, from July 14-31, 1989, no wipe tests were performed.

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

-89 082 9W38 200

C. In the application, page 24, item 17, "Survey Procedures," requires radiation safety staff to inspect the laboratories and the investigators' records at least once per quarter.

Contrary to the above, the inspection of laboratories had not been performed since May 29, 1987.

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

Pursuant to the provisions of 10 CFR 2.201, Oral Roberts University 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 18th day of August 1989

						
C FORM 788 A DOCKET NO (6 signts) OR L/GENSE NO (8Y PRODUCT((1) signts)		NO SEO 871 1001				
INSPECTOR'S REPORT	03 01141918111111	8901 A VIDLATION SEVERITY OR DEVIATION ASITE				
(Continuation)		B 2 3 . S C ACLATED				
Office of Inspection and Enforcement		0 0				
VIOLATION OR DEVIATION LETTER UP TO 24.0 CRAFACTOR'S for each II	I THE TAX DESCRIPTION TO THE PARTY OF THE PA	NO SO CONTROL AND HOLD IN SOCIAL PROPERTY OF THE PROPERTY OF T				
	that licensed material be	possessed and used in				
Condition 22 requires	that incensed matters, at	nd procedures contained in				
accordance with stated Marc	h 2. 1983.					
application dated hare		that dose calibrators be				
A. Item No. 10 of th	is application requires	that dose calibrators be contained in Appendix D. — sion 1. —				
calibrated in acc	A. Item No. 10 of this application requires that dose call Appendix D. calibrated in accordance with procedures contained in Appendix D. section 2, of Regulatory Guide 10.8, Revision 1.					
Section 2, of key	10180019	that dose calibrators be				
1. Item G of A	ppendix D. Section 2. rec	quires that dose calibrators be				
checked for	accuracy with a cobait.					
10	the shove on March 20.	1989, the cobalt-57 source in use -				
Contrary to	to 90 microcuries.	- The state of the				
12						
13						
This is a	Seventy hard IX	violation. (Supplement VI)				
16	0					
•						
20						
21						
2						
D						
24						
8						
28						
2						
3						
*						
31						
10						
2						
3						

INSPECTOR'S REPORT (Continuation) colin report (Continuation) condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed. This is a Severity Level IV violation. (Supplement VI)
INSPECTOR'S REPORT (Continuation) e of inspection and Enforcement Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983. B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed.
Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983. B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed.
Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983. B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed.
Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983. B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed.
Condition 22 requires that licensed material be possessed and used in accordance with statements, representations, and procedures contained in application dated March 2, 1983. B. Item 17 of the application requires that surveys be performed in accordance with the "Area Survey Procedures" in Appendix I of Regulatory Guide 10.8, Revision 1. Item 1 of Appendix I requires that all elution, preparation, and injection areas be surveyed daily. Item 4.b of this appendix requires that weekly surveys include wipe tests. Contrary to the above, from July 14-31, 1989, no wipe tests were performed.

0 007-001

NRC IDIN 78 A.	DOCKET NO IS DIGITE DR LIDER	NSE REPORT MODULE NUMBER		
# WC DER	03 1017 14 17 18 17 1	MO SEO 8 7 / 0 0	TY DE DEVIATION SITE	
(Continuation)	D 12 16 14 14 14 14	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A DEVIATION BITE	
Office of Inspection and Enforcement				
		n necessary to peraphrase		
VIOLATION OR DEVIATION (Enter up to 2400 characters for each to	item. If the text exceeds this number, if will b	a necessary to peraphirase to a to 30 to 50 characters on	ch.)	
Condition 22 requires	that licensed materi	al be possessed and used in		
accordance with statem application dated Marc	ments, representation	s, and procedures contained	in	
	2, 1905.			
•	OUNCE OF THE PARTY			
1				
2. Item C.6 of App	pendix D, Section 2.	requires that dose calibrat	or	
constancy be within 15 percent of the tartorners				
Contrary to the	e above, from June 22	to July 31, 1989, the dose	ine 15	
	stancy test results win ±5 percent of the			
This is a Severity I	Level IV violation.	(Supplement VI)		
13				
14				
11				
16				
17				
•				
•				
20				
21.				
22				
2)				
24				
8				
8				
27				
8				
8				
20				
31				
n				
D .				
*				
*	**************************************			

WHIC FORM 786 A	DOCKET NO 18 DIGITAL DR LICENSE REPORT MODULE NUMBER	
IE MC DESS	10 10 0 1 10 0	
(Continuation)	D RE	ATED
Office of Inspection and Enforcement	THE SAME SAME SAME SAME SAME SAME SAME SAM	6 0
	tem If the text exceeds this number, if will be neccasary to paraphrese Limit lines to 50 characters each.)	
THOUSE TON ON DEVIATION LETTE UP TO PERSON TO SECURITY TO	The territory was desired and the second of	_
Condition 22 requires	that licensed material be possessed and used in	_
accordance with statem	ents, representations, and procedures contained in	_
. application dated Marc	h 2, 1983.	
<u>. </u>		
, In the application, pr	age 24, item 17, "Survey Procedures," requires	
records at least once	LU INSPECT THE INDUSCRUSE AND	
performed since May 29	the inspection of laboratories had not been	
	[19] [1] [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2	
12 Inis is a Severity Lev	el IV violation. (Supplement VI)	
13		
*		
1		
16		
"		_
• 0.000		
16		_
20		
21.		
22		_
D .		
24		
27		
70		
31		
2		
3		
*		-
B. A. BERTHER STREET,		