

REGION I Form 198-C  
(July 82)

LICENSE NO: 20-00742-10

DOCKET NO. (s) \_\_\_\_\_

PAGE \_\_\_\_\_ OF \_\_\_\_\_

ATTACHED

- ☐ Appendix A  
☐ Appendix B  
☐ Appendix C  
☐ Memo

INSPECTION REPORT NO. 87-01

Beth Israel Hospital

330 Brookline Avenue

Boston, MA 02215

LICENSEE CONTACT: Rosemary Kennedy

Telephone No: 617-735-2000

LICENSE NO: 20-00742-10

CATEGORY C-1 PRIORITY: II

CATEGORY \_\_\_\_\_ PRIORITY: \_\_\_\_\_

CATEGORY \_\_\_\_\_ PRIORITY: \_\_\_\_\_

INSPECTION DATE (s): 1/2/87

TYPE OF INSPECTION: ☐ SPECIAL ☐ ANNOUNCED  
☒ ROUTINE ☐ UNANNOUNCED  
☐ DAYSHIFT  
☐ OTHER

SUMMARY OF FINDINGS AND ACTION

- ☒ NO NONCOMPLIANCE, CLEAR 591 ISSUED  
☐ NO NONCOMPLIANCE, LETTER  
☐ NONCOMPLIANCE, APPENDIX A

- ☒ ACTION ON PREVIOUS NONCOMPLIANCE, APPENDIX B  
☐ NONCOMPLIANCE, 591 ISSUED  
☐ SUPPLEMENTAL INFO, APPENDIX C

RECOMMENDATIONS  
SEE BASIS IN APPENDIX C

☐ CHANGE CATEGORY TO: \_\_\_\_\_  
☒ NEXT INSPECTION DATE: 1/87

☐ CHANGE PRIORITY TO: \_\_\_\_\_

PERSONS CONTACTED

Lisa Olson, Tech

Dore Janson, Chief Tech

Ed Golden, Tech

Dr. Gerald Kolodny, MD, Chief of New Med

Rosemary Kennedy, RSO

Mel Weiner, Assoc. Director

INSPECTOR: E. Whitley

APPROVED: [Signature]

9301080284 920520  
PDR FOIA  
STOLL 92-58 FDR

D/67

INSPECTION PLAN AND REPORT NUMBER \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

Plan Approved: \_\_\_\_\_

Date: \_\_\_\_\_

Licensee: \_\_\_\_\_

License No. \_\_\_\_\_

Inspection Items	Scheduled for Inspection	Post Inspection Status	Module No.
Management Meeting - Entrance and Exit Interviews (Required)	-		30703B
Program Requirements, MC 2860 (Required)			78710B
Followup on Noncompliance and Deviations			92702B
Independent Inspection Effort (Required)			92706B
Transportation			86740B

(July 82)

INSPECTION REPORT NUMBER \_\_\_\_\_

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787108 - Medical

AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEMS	CRITERIA	FINDING
1. <u>Organization</u>	Lic Cond _____	<u>C</u>
Structure of organization as described in requirements?	7 Techs. - Use instant Tech	
Scope of Program? Patient load?	Full time Asst. RSO	except for evenings & on weekends for which they use
NOTES & REMARKS:	350-400 patients/mo 6 Xe-133/mo None - Techs.	as used & generated which they get from B&W's Pharmacy 31 Permit holders including residents.
2. <u>Licensee Internal Audits</u>	Lic Cond _____	<u>C</u>
Scope and frequency of audits as required?	Quarterly Audits by Rad. Safety Office	
Conducted by appropriate persons? <u>Yes</u>	Howard performs surveys	
Records maintained? <u>✓</u>	weekly in Nuc. Med. & monthly surveys in research areas	
Reviewed by management? <u>Reviewed by RSO</u>	Set 5 day turnaround from Howard	
Deficiencies identified and corrected?	by Telephone, if > 1000 cpm for 3r	
NOTES & REMARKS:	Howard has hired two new HP's	> 500 cpm for air line
3. <u>Training and Qualification of Personnel</u>	Lic Cond _____	<u>C</u>
Training & retraining conducted as required?	Howard offers Safe Use of RAM course	
Written & oral exams conducted?	approx. 3/yr - RSO has videotapes	
Examination results reviewed by management?	of lecture course so that she can give to training to new individuals before they beginning using RAM	
Instructions to workers per 19.12?	19.12	
Authorized users? On license? Available in emergency?	Lic Cond _____	
NOTES & REMARKS:	These training records on computer	This will be fully implemented in 1987 - up to this point individual permit holders are responsible for training
4. <u>Radiation Protection Procedures</u>	Lic Cond _____	<u>C</u>
Procedures available and implemented?		
Identify radiopharmaceutical and dose(s)?		
Cover handling of patients receiving therapeutic doses? Cover handling of cadavers?		
Close out Surveys on Patients receiving temporary implants? <u>✓</u>	35.14 (b)(5)(v)	
Emergency procedures for spills, etc? <u>✓</u>		
Personnel understand procedures?		
NOTES & REMARKS:		

## AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
5. <u>Use of Materials</u>		<u>C</u>
Procurement and use as required? <input checked="" type="checkbox"/> Authorized form & route of administration? <input checked="" type="checkbox"/>	35.14(b)	
Special tests (moly breakthrough, leak tests, etc) required? <input checked="" type="checkbox"/>	35.14(b)(4)	
Inventory of brachytherapy sources? <input checked="" type="checkbox"/>	35.14(b)(5)	<i>All Ir-192 implants brought over from and returned to Joint Center for Rad. Therapy (New England Deaconess)</i>
Dose calibration checks performed? <i>Yes</i>		
Posting & labeling as required? <input checked="" type="checkbox"/>	20.203	
NOTES & REMARKS: <i>Joint Center does leak tests for Cs-137 Brachy sources - have 3yr sources which require lb test every 3 yrs</i>		
6. <u>Storage of Materials</u>		<u>C</u>
Material secured in both restricted and unrestricted areas? Adequately? <input checked="" type="checkbox"/>	20.207	
NOTES & REMARKS:		
7. <u>Facilities</u>	Lic Cond _____	<u>C</u>
As described in lic cond or application? <input checked="" type="checkbox"/>		
Any changes made? Adequacy? <i>Yes</i>		
NOTES & REMARKS:		
8. <u>Instruments</u>	Lic Cond _____	<u>C</u>
Survey meters & instruments adequate for program?		<i>Calib in Nuc. Med. &amp; Rad. Surgery Office</i>
Instruments & meters operable? <input checked="" type="checkbox"/> Calibrated? <input checked="" type="checkbox"/>		
Calibration adequate? <input checked="" type="checkbox"/>		
NOTES & REMARKS:		

## AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEMS	CRITERIA	FINDING
9. <u>Receipt and Transfer of Material</u>		<u>C</u>
Written procedures for pickup, receiving, opening packages? ✓	20.205	
Survey of packages when received? ✓	20.205(c)(1)	
Records of survey of packages? ✓	20.401(b)	
Transfer of materials proper? Transfer records maintained? ✓	30.41, 30.51	
Authorized containers used? Shipping papers & package labels proper for packages on hand? ✓	71.5	

NOTES &amp; REMARKS:

10. Personnel Protection - External

Personnel monitoring controls adequate? ✓ Exposures minimized? ✓	20.101, 20.202
Exposure records (NRC-4 or 5) maintained? Available for employee review? ✓	20.102(b), 20.401(a)
Surveys conducted? Adequate? ✓	20.201
Records of monitoring, surveys? ✓	20.401
Levels in unrestricted areas within limits? (Particularly around nuclear med. hot lab rooms of brachytherapy patients)	20.1, 20.105

NOTES &amp; REMARKS:

*Room surveys of I-131 therapy patients were not being done in a fully satisfactory manner, but RSO is auditing this and has corrected problem.*

11. Personnel Protection - Internal

Airborne concentrations in restricted areas? (Xe-133, patients treated with I-131) ✓	20.103
Exposures to minors? ✓	20.104
Posting of airborne radioactivity areas? ✓	20.203(d)
Survey, monitoring bioassay adequate for airborne radioactivity, surface contamination? Records maintained? ✓	20.201 20.401

Procedures for use of Xe-133 followed? ✓

NOTES &amp; REMARKS:

*Use trip & check approx every two yrs.  
Bioassays of individuals performing no duration*

## AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
12. <u>Effluent Controls, Waste Disposal</u>		<u>C</u>
Release of effluents controlled? (particularly Xe-133, radiiodine where used)	20.106, 20.33	
Waste disposals controlled? <input checked="" type="checkbox"/>	20.301, 20.303, 20.304, 20.305	
Procedures, records maintained? <input checked="" type="checkbox"/>	20.401, Lic Cond _____	
Surveys made? Adequate?	20.401	
NOTES & REMARKS:		

13. Notifications and Reports

To individuals?	19.13
Overexposures, excessive levels & concentrations, incidents?	20.403, 20.405
Personnel exposures and monitoring, termination reports?	20.407, 20.408
Theft or loss of licensed material? <i>No</i>	20.402
Misadministrations?	35.41-35.45

NOTES &amp; REMARKS:

*7/30/86* *Cv-51 EDTA instance of Cv-51 NaChromate  
(30PC) - insignificant dose to patient  
- Report filed 10/6/86*

14. Posting of Notices

Part 20, license & documents, procedures, notice of violations posted? <input checked="" type="checkbox"/>	19.11(a)
NRC-3 posted? <input checked="" type="checkbox"/>	19.11(c)

NOTES &amp; REMARKS:

15. Other License Conditions



## AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

## INSPECTION ITEMS

## CRITERIA

## FINDING

16. Confirmatory Measurements

*No measurements were  
taken as batteries in GPM  
were ~~randomly~~ discharged.*

WRC Instrument: \_\_\_\_\_

Calibration Due Date: \_\_\_\_\_

17. Independent Inspection Effort18. Incidents and Events

Any incidents of misadministrations,  
contamination, etc., not otherwise  
covered by reports?

35.41 - 35.45  
20.402, 20.403, 20.405

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## APPENDIX A - DOCUMENTATION OF NONCOMPLIANCE

Licensee: \_\_\_\_\_

License No: \_\_\_\_\_

### Reference

Basis for noncompliance

Report item Plaza

10 CFR \_\_\_\_\_

Life Cond \_\_\_\_\_

Type n/c\_\_\_\_\_

Report item \_\_\_\_\_

10 CFR \_\_\_\_\_

Life Cond \_\_\_\_\_

Type n/c \_\_\_\_\_

Report item \_\_\_\_\_

10 CFR

Lic Cond \_\_\_\_\_

Type n/c \_\_\_\_\_

Report item \_\_\_\_\_

10 CFR \_\_\_\_\_

Lic Cond \_\_\_\_\_

Type n/c \_\_\_\_\_

Report item \_\_\_\_\_

10 CFR \_\_\_\_\_

Life Cond \_\_\_\_\_

Type n/c \_\_\_\_\_

Report item \_\_\_\_\_

10 CFR \_\_\_\_\_

Lic Cond \_\_\_\_\_

Type n/c\_\_\_\_\_



(July 82)

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## APPENDIX B - LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS

Licensee: \_\_\_\_\_

License No: \_\_\_\_\_

Identification and summary of action taken	Status
--	--------

Report No: <u>85-01</u> Type n/c: <u>IV</u> Describe: <u>Findings found - long when hand has inserted</u>	
---	--

Action taken: <u>Technicians were observed using fergs and the plexiglas platform was in place and being used</u>	
---	--

OPEN

CLOSED

Report No: _____      Type n/c: _____      Describe: _____	
--	--

Action taken: \_\_\_\_\_

OPEN

CLOSED

Report No: _____      Type n/c: _____      Describe: _____	
--	--

Action taken: \_\_\_\_\_

OPEN

CLOSED

Report No: _____      Type n/c: _____      Describe: _____	
--	--

Action taken: \_\_\_\_\_

OPEN

CLOSED

Report No: _____      Type n/c: _____      Describe: _____	
--	--

Action taken: \_\_\_\_\_

OPEN

CLOSED

Report No: _____      Type n/c: _____      Describe: _____	
--	--

Action taken: \_\_\_\_\_

OPEN

CLOSED

(July 82)

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APPENDIX C - SUPPLEMENTARY INFORMATION

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_

☐ Uncorrected/repeated noncompliance

☐ Unresolved items

☐ Unusual occurrence, conditions, etc

☐ Inspector's comments

☐ Basis for change of Category or Priority

# Beth 'Israel Hospita'

030-09062

330 Brookline Avenue  
Boston, MA 02215

A major teaching hospital of  
Harvard Medical School

Mitchell T. Raskin, MD  
President

(617) 735-2000

A constituent agency of  
Combined Jewish Philanthropies

LIC # 20-00742-18

2/28/89

U.S. Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia  
PA 19406

Dear Sirs:

We wish to amend our license to add laboratories and  
clinical uses in the Emmanuel Science Building at

79 Avenue Louis Pasteur  
Boston, MA

A check for \$110 amendment fee is attached

Sincerely,

*Rosemary Kennedy*

M. Rosemary Kennedy  
Radiation Safety Officer

9005310351 B90921  
REQ1 LIC30  
MATLSLICENSING PDR

Log	1141
Remitter	
Check No.	642930
Amount	\$110
Fee Category	
Type of fee	AMSD
Date Check Rec'd.	3/7/89
Date Completed	
By:	<i>R. Kennedy</i>

11:21 9-MAR 89

RECEIVED

110391

OFFICIAL RECORD COPY ML 10

MAR 06 1989

D/68

OCT 18 1989

License No. 20-00742-18  
Docket No. 030-09062  
Control No. 110391

Beth Israel Hospital  
ATTN: M. Rosemary Kennedy  
Radiation Safety Officer  
330 Brookline Avenue  
Boston, Massachusetts 02215

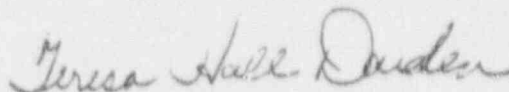
Gentlemen:

Enclosed is the Corrected Copy of Amendment No. 13 for License No. 20-00742-18. In accordance with the telephone call from you, on September 27, 1989, in which you stated that it was not your intent, at the time of the amendment request, that Emmanuel Science Building be restricted from in vivo animal research studies even though it was not stated in the request, and you wish to perform in vivo animal research at the Emmanuel Science Building. Therefore, License Condition No. 10 was corrected to read:

Licensed materials shall be used only at Beth Israel Hospital, 330 Brookline Avenue, Boston, Massachusetts. Licensed material may also be used, only for in vitro research, at the Hebrew Rehabilitation Center for Aged, 1200 Centre Street, (Roslindale) Boston, Massachusetts and for in vitro and in vivo animal research at the Emmanuel Science Building, 79 Avenue Louis Pasteur, Boston, Massachusetts.

We apologize for any inconvenience this omission may have caused.

Sincerely,



Teresa Hall Darden, M.S.  
Health Physicist  
Nuclear Materials Safety Section A  
Division of Radiation Safety  
and Safeguards

Enclosures: Corrected Copy for Amendment No. 13

DRSS:RI  
Darden/pmb  
10/18/89

*Teresa Hall Darden*

OFFICIAL RECORD COPY

ML 20-00742-18/LTR - 0001.0.0  
10/13/89

ML 10

9004050232-XA  
1P.