

LICENSE NO: 06-13514-01

DOCKET NO. (s) 30-06891

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

ATTACHED

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

INSPECTION REPORT NO. 82-01  
Becton-Dickinson Company  
Route 7 and Grace Way  
North Canaan, Conn. 06018

LICENSEE CONTACT: \_\_\_\_\_ Telephone No: (203) 824-5487

LICENSE NO: 06-13514-01 CATEGORY E PRIORITY: II

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

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

INSPECTION DATE (s): Aug. 2, 1982

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: 06/83

☐ CHANGE PRIORITY TO: \_\_\_\_\_

PERSONS CONTACTED

Richard D. Cook, mgr.  
Wm. R. Case, Sterilization Supervisor, RSO.  
Bob Picinocchi, Operator

INSPECTOR: Lawrence F. Friedman 8/6/82

APPROVED: \_\_\_\_\_

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 2850 (Required)			77710B
Followup on Noncompliance and Deviations			92702B
Independent Inspection Effort (Required)			92706B
Transportation			86740B

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

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

77710B - Irradiator

AREAS INSPECTED AND FINDINGS

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

INSPECTION ITEMS	CRITERIA	FINDING
1. <u>Organization</u>	Lic Cond _____	
Management organization?		
Radiation protection organization?		
Scope of program?		
NOTES & REMARKS:	<i>4 licensed operators incl. Cass. irradiation operates ~ 20 hrs./wk operates only on day shift</i>	
2. <u>Licensee Internal Audits</u>	Lic Cond _____	<u>                    </u>
Scope and frequency?		
Management controls?		
NOTES & REMARKS:	<i>Cass audits logs + operators reports monthly to Crook in writing. only one records of semiannual-annual audit in books dated "1982"</i>	
3. <u>Training and Instructions to Employees</u>		<u>                    </u>
Training program, scope and frequency, retraining?	Lic Cond _____	
Required tests administered; scores satisfactory?		
Instructions to workers?	19.12	
NOTES & REMARKS:	<i>formal retraining of 6 mos. <del>info</del> documented. informal training more frequently.</i>	
4. <u>Radiation Protection Procedures</u>		<u>                    </u>
Operating & emergency procedures implemented?	Lic Cond _____	
Security?	20.207	
NOTES & REMARKS:		

## AREAS INSPECTED AND FINDINGS

Licensee:                                      License No:                                      Amendment No:                                     

INSPECTION ITEM	CRITERIA	FINDING
5. <u>Materials, Facilities and Instruments</u>		<u>C</u>
Authorized uses and quantities? <u>C</u>	Lic Cond <u>                    </u>	
Restricted areas, posting requirements? <u>C</u>	20.203	
Survey instruments & dosimeters; operable, properly calibrated? <u>C</u>	Lic Cond <u>                    </u>	
Independent area radiation monitor? <u>C</u>		
Survey meter used on entering HRA? <u>C</u>		
NOTES & REMARKS:		
6. <u>Receipt and Transfer of Materials</u>		<u>C</u>
Procedures implemented, adequate?	20.205, 71.51	
Transfer of byproduct material?	30.41	
Control of source material, SNM?	40.51, 40.64, 70.42, 70.51, 70.53, 70.54	
Records of receipt, transfer, storage, survey and monitoring?	30.51	
NOTES & REMARKS:	<u>done by AFCL, records on hand.</u>	
7. <u>Control of High Radiation Area</u>		<u>C</u>
Interlocks, tests, entry control? <u>C</u>	20.203(c)(6)	
Action if entry control device fails? <u>C</u>	<u>fail safe, locks on power failure</u>	
Device to prevent source exposure with individual in chamber? <u>C</u>		
Level control for liquid shield? <u>C</u>		
Source exposure procedure? <u>C</u>		
Control of portals (continuous irradiator)? <u>C</u>		
NOTES & REMARKS:		

777108 - Irradiator

## AREAS INSPECTED AND FINDINGS

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

INSPECTION ITEM	CRITERIA	FINDING
8. <u>Transportation</u>		
Management controls, audits?		<i>n/a</i>
Selection of packaging?	49 CFR 173.393-5, 10 CFR 71	
Preparation of packages for shipment?	49 CFR 172, 173	
Filling, loading, closing, liquids?	49 CFR 172, 300	
Markings & labelling?	49 CFR 172.403, 402	
Monitoring?	49 CFR 173.393	
Shipping papers, loading & placarding of vehicles?	49 CFR 172.200	
Reports of Incidents?		
Examination of packages?		
NOTES & REMARKS:		

9. Personnel Protection- External

Personnel monitoring control; minimize exposures, control of accumulated dose?	20.101, 20.102, 20.202
Surveys conducted, adequate?	20.201
Records of monitoring, surveys, disposals?	20.401, Lic Cond _____
Levels in unrestricted areas?	20.1, 20.105
NOTES & REMARKS:	

10. Personnel Protection - Internal

Airborne concentrations in restricted areas?	20.103
Exposure of minors?	20.104
Posting of airborne radioactivity areas?	20.203
Survey, monitoring, bioassay requirements; records?	20.201, 20.401
Leak tests of sealed sources?	Lic Cond _____

NOTES &amp; REMARKS:

*records available only thru 3/80. Leak test done 5/81 by AECL during recovery from accident, not since.*

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

12. <u>Shipping, Shipping Incidents</u>	
Procedures for pickup, receipt, monitoring of packages?	20.205(b) & (c)
Incidents, reports, corrective actions?	49 CFR 170-189
NOTES & REMARKS:	

13. <u>Notifications and Reports</u>	
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?	20.402
NOTES & REMARKS:	

14. Posting of Notices

Part 20, license & documents, procedures,  
notice of violations? 19.11(a)

NRC-3? 19.11(c)

NOTES & REMARKS:



## AREAS INSPECTED AND FINDINGS

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

INSPECTION ITEM	CRITERIA	FINDING
15. <u>Environmental Monitoring Program</u> Implementation of program, scope and frequency as required? Records maintained, reviewed by management? NOTES & REMARKS:	Lic Cond _____	<i>nta</i>
16. <u>Emergency Preparedness</u> Procedures available for incidents and accidents? Training for personnel; coordination with supporting groups and agencies? NOTES & REMARKS:	Lic Cond _____	<i>C</i>
17. <u>Other License Conditions</u>  NOTES & REMARKS:		
18. <u>Confirmatory Measurements</u> Licensee's surveys verified on sampling basis? 20.105, 20.201 Analysis of pool water sample? NOTES & REMARKS: <i>pool water sample (1.957 ± 0.585) × 10<sup>-7</sup> μCi/ml 5000 sec. count = background</i>		
NRC Instrument: <i>Ludlum 14C</i>	Calibration Due Date: <i>7/20/82</i>	
19. <u>Independent Inspection Effort</u> <i>all items in IAL done except item 10, installation of new sprinkler system</i>		

NOTES &amp; REMARKS:

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

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

APPENDIX A - DOCUMENTATION OF NONCOMPLIANCE

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

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

Reference	Basis for noncompliance
Report item _____ 10 CFR _____ Lic Cond <u>13</u> Type n/c <u>IV</u>	15mCi Tech Ops calibrator, received 8/80, no leak test certificate, used prior to leak test. Tests performed 10/20/81 and 5/19/82, interval > 6 mos.
Report item _____ 10 CFR _____ Lic Cond <u>16</u> Type n/c <u>V</u> appx. 10/19/79	only one "Semi-Annual + Annual Check Sheet" in file dated "1982" no other records of semi-annual + annual audits.
Report item _____ 10 CFR _____ Lic 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 _____ Lic Cond _____ Type n/c _____	



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

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

APPENDIX B - LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS

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

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

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

Report No: <u>81-01</u>	Type n/c: <u>II</u>	Describe: <u>failure to follow emergency procedures</u>
Action taken: <u>procedures posted - records of operator training reviewed by inspector</u>		
Status: <u>CLOSED</u>		

Report No: _____	Type n/c: _____	Describe: _____
Action taken: _____		
Status: <u>OPEN</u> <u>CLOSED</u>		

Report No: _____	Type n/c: _____	Describe: _____
Action taken: _____		
Status: <u>OPEN</u> <u>CLOSED</u>		

Report No: _____	Type n/c: _____	Describe: _____
Action taken: _____		
Status: <u>OPEN</u> <u>CLOSED</u>		

Report No: _____	Type n/c: _____	Describe: _____
Action taken: _____		
Status: <u>OPEN</u> <u>CLOSED</u>		

Report No: _____	Type n/c: _____	Describe: _____
Action taken: _____		
Status: <u>OPEN</u> <u>CLOSED</u>		

APPENDIX C - SUPPLEMENTARY INFORMATION

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

- |   |   |
|---|---|
| <input type="checkbox"/> Uncorrected/repeated noncompliance       | <input type="checkbox"/> Unresolved items     |
| <input type="checkbox"/> Unusual occurrence, conditions, etc      | <input type="checkbox"/> Inspector's comments |
| <input type="checkbox"/> Basis for change of Category or Priority |   |

Plant personnel give sloppy + lackadaisical impression. Record keeping is sloppy. Initially, leak test records for irradiator could not be found, even by operator who checked off on audit sheet. Case's memos documenting audits were based on ~~this~~ check ~~sheet~~sheets, not review of original records.

Rowjohn, in during phone conversation, stated he would personally audit program, & admitted work was sloppy.

no sprinkler system

Tech Ops calibrator ~~was~~ returned to Tech Ops. 6/80  
last leak tested 10/3/79.

New calibrator received 8/80. No leak test certificate.  
Leak tested 10/20/81 but used in the interim.  
Next leak tested 5/13/82.