

DATA SHEET

Appendix A
Appendix B
Appendix C

DOCKET NO. _____

FACILITY U.S. Army, Fort Monmouth INSPECTION NO. 76-01

CITY, STATE FORT MONMOUTH, NEW JERSEY DATE/S 4/12/76 - 4/13/76

SUBJECT - RADIATION SAFETY LICENSE NO/S. See attached

PHONE # FTS 8-341-3000 LOCAL 532-9000

INSPECTOR Slobodien REVIEWER R. McDevitt

TYPE OF INSPECTION: INITIAL SPECIAL ANNOUNCED
 REINSPECTION ROUTINE UNANNOUNCED

DATE OF LAST INSPECTION: 5/17/74

RECOMMENDED DATE, NEXT INSPECTION: May 1978 SPECIAL ROUTINE

TYPE OPERATION: Military Research and Inventory Control

SCOPE OF OPERATION SMALL MEDIUM LARGE

PRESENTLY CLASSIFIED CAT/PRI E/III; AS OF AMENDMENT NO. 17

NO CHANGES REQUIRED CHANGES TO CAT/PRI _____

PER ATTACHED MEMO DATED _____

SUMMARY OF FINDINGS

NO NONCOMPLIANCE NOTED
 591 ROL OTHER
 NO SPECIAL PROBLEMS

SEE APPENDIX A FOR NONCOMPLIANCE ITEMS *relie*
89-01022+06
 SEE APPENDIX B FOR PROBLEM AREAS
RELATIVE TO _____

PERSONS CONTACTED*

NAME	TITLE	ORG	NAME	TITLE	ORG
1. MR. STANLEY POTTER	R.P.C.		6. J. Weed	RPO/ACT. HEXAGON AREA	
2. Mr. Clifford Watson	RAD TECH		7.		
3. Mr. BART	SAUNTING, RAD TECH		8.		
4.	SP16NAC		9.		
5. JOSEPH CRUCHFELDT	- 3.S.K.C. source operator		10.		

* MANAGEMENT MEETING ATTENDEES

inspection items all 60012
See list for individual licenses
specific items of note
RMC

DEPARTMENT of the ARMY
 U.S. ARMY ELECTRONICS COMMAND
 FORT MONMOUTH, NEW JERSEY

08
 09
 11

SMM
 1327

SUB
 1150

Summary of CURRENT LICENSED ACTIVITIES

as of 4/1/76

LICENSE	Type	PRIORITY	LAST INSP	To be insp 76-01
9-01032-06	Z 3-83 broad byprod.	E/III	5/17/74	yes Potter
9-01032-07	⁶⁰ Co irradiators	E/III	5/17/74	yes Potter
9-01032-08	⁹⁰ Sr large clock sizes	R/IV	NONE	if time permits OK
9-01032-09	⁹⁰ Sr large clock sizes	R/IV	NONE	" " " OK
9-01032-10	⁶⁰ Co 125000 Ci irradiation facility	E/III	5/17/74	yes Potter
9-01032-11	⁸⁵ Kr 7mc clock sizes	R/IV	NONE	if time permits OK
SNM 1323	²³⁹ Pu THERMIONIC GENERATORS	E/III	5/17/74	yes Potter
NM-1327	²³⁹ Pu ⁶⁹ Pu clock sources	R/IV	NONE	No OK
IMB-1183	URANIUM THORIUM	E/III	5/17/74	Lic. Active yes close out 74-01 Potter
UB-1150	URANIUM THORIUM CHECK SOURCES	R/IV	NONE	if time permits OK

	<u>INSPECTION ITEM</u>	<u>SOURCE OF INFORMATION</u>	<u>ACCEPTANCE CRITERIA</u>	<u>FINDINGS</u>
P/I 7410	<u>Management Controls</u>	Potter		
.01 .06	Responsibilities; Qualifications Users---RSO---Management		L/C 14 which references document dated <u>4/22/74</u>	adequate, up to date
.02	Internal Audits	Records	L/C as above; 10 CFR 19, 20, 31, 35	Monthly surveys adequate
.04	Inventory Controls; Related Records	observation	L/C 6, 7, 8; 30.41, 30.53	adequate all licensed NOT R/V
	<u>Training</u>			
.07	Qualification, Competence of Instructors Technical Instruction/Training Posting of Notices, Lic., AEC-3, etc. Special Work Permits Cleaning & Bldg. Maint. Pers.	Employees Watson Crotchet Employee Interviews	Inspector Judgement 06 license Document dated <u>4/22/74</u> L/C 14, 19.12 19.11 19.12 19.12	all adequate
7415 .01	<u>Inspection History</u> Corrective action; Previously noted noncompliance		IE letter 5/31/74 for SNB-1183 Pertinent regulations Licensee Letter dated <u>7/26/74</u>	Corrected. No ACTIVITIES SINCE LAST Insp. NO PLANS FOR FUTURE ACTIVITIES

n/c

R.S.O. (Potter) stated that during changing of a ^3H target on the neutron generator the Johnson ^3H air "sniffer" in use went off scale. Personnel quickly finished the job (about 2 min) and exited area taking sniffer with them. The Users could not get sniffer to return to an on-scale reading and assumed electronic failure. Individuals then reentered area to complete job. \$

Subsequent urinalysis \Rightarrow $19 \mu\text{Ci/l}$ on one individual according to Potter. Potter said that because he was informed by the office that performed the bioassay that $19 \mu\text{Ci/l}$ was not a significant health problem he did not pursue and evaluate air concentration re 20.103.

n/c 20.201(b) re 20.103

~~to 111~~

20.201(b) re sporting requirements
20.405

See CIS Radiopharmaceuticals 76-01 for form of the letter

INSPECTION ITEM	SOURCE OF INFORMATION	ACCEPTANCE CRITERIA	FINDINGS
.02 Incidents, accidents, unusual occurrences since last inspection including equipment malfunctions	RPO	20.402; 20.403; 20.405 Inspector Judgement	NONE
.02 Unresolved Items, per list, Problem areas, per previous inspection, evaluation memo.	RPO, RECORDS,	Pertinent regulations Inspector Judgement	NONE
F/I 7420 <u>Uses of Material</u>			
.01 License limitations, re: purpose, personnel, location, etc.	Crotchfield, Watson, Savignone, Potter	L/C 9, 10 et. seq.	ALL USES AS OUTLINED IN LIC.
.01 Scope of program	See notes	Not applicable	
7430 <u>Surveys</u>			
.01 Restricted Areas Unrestricted Areas Extremities OK Airborne Activity, Contamination Trash, Wastes, Burials Liquid and Gaseous Effluents Leak Tests adequate Incoming Packages adequate	possible etc re 3rd in section	20.101 OK 20.105 OK 20.103 See below w/c are noted in file 20.301; 20.304 20.106; 20.303 OK L/C reviews 20.205 OK	See notes Adequate except 20.103 possible etc re 3rd users who check of spec targets
.02 Personnel Monitoring Equip. Records Personnel Exposures - ALAP	RPO Records See notes previous page back	20.202 20.401(a); 20.401(b) 20.1 20.102-10 w/c HPS/MSR	adequate see notes re 3rd

INSPECTION ITEM	SOURCE OF INFORMATION	ACCEPTANCE CRITERIA	FINDINGS
7420 <u>Equipment</u>			
.03 Adequacy of instrumentation; fixed & portable meters and systems alarms; warning devices, Calibrations of Instruments	observation	Inspector Judgement 20.203 Qtrly; Inspector Judgement	adequate
<u>Observations/Measurements</u>			
.01 Posting of notices; warning signs, alarms, warning devices		19.11(b), (c), (d); 20.203	adequate
Physical security; housekeeping		20.207; Insp. Judgement	adequate
Radiation levels	INSPECTOR MEASUREMENTS	20.105	good
Wearing of required P.M. devices		20.202	adequate
Breathing Zone Air sampling sys.		20.201(b)	poor/ no 3H, 40 gal drums ed because <u>not</u> evaluated
Isokinetics, Effluent sampling systems		20.106, 20.301, 20.303	N/A
AP; Contamination controls via ventilation, Hood face velocities, gloveboxes		20.103; 20.106	N/A
Protective clothing; disposable equipment		20.103	N/A

APPENDIX A

NONCOMPLIANCE BACKUP

Facility U.S. Army Electronics Command Insp. No. 76-01

License No. 29-01022-06

BASIS FOR CITATION

Failure to eval. bioassay data for 3H to determine compliance w 20.103, 20.405 following change of 3H target in reaction generate in June-July 1975. See notes in Data Slats.

Item # 1
10 CFR 20.201(b) & 20.103
L/C 20.405
*Class inf

Item # _____
10 CFR _____
L/C _____
*Class _____

Item # _____
10 CFR _____
L/C _____
*Class _____

Item # _____
10 CFR _____
L/C _____
*Class _____

Item # _____
10 CFR _____
L/C _____
*Class _____

Item # _____
10 CFR _____
L/C _____
*Class _____

*(V) Violations; (In) Infraction; (Def) Deficiency; (C) Commitment;
(Dev) Deviation

- Inspector Comments
- Unresolved Items
- Uncorrected or Repeated n/c
- Unusual Occurrences, Etc.

Facility _____ Inspection No. _____

License No. _____

The next inspector should be aware of the following:

APPENDIX C - SPECIAL CONSIDERATIONS

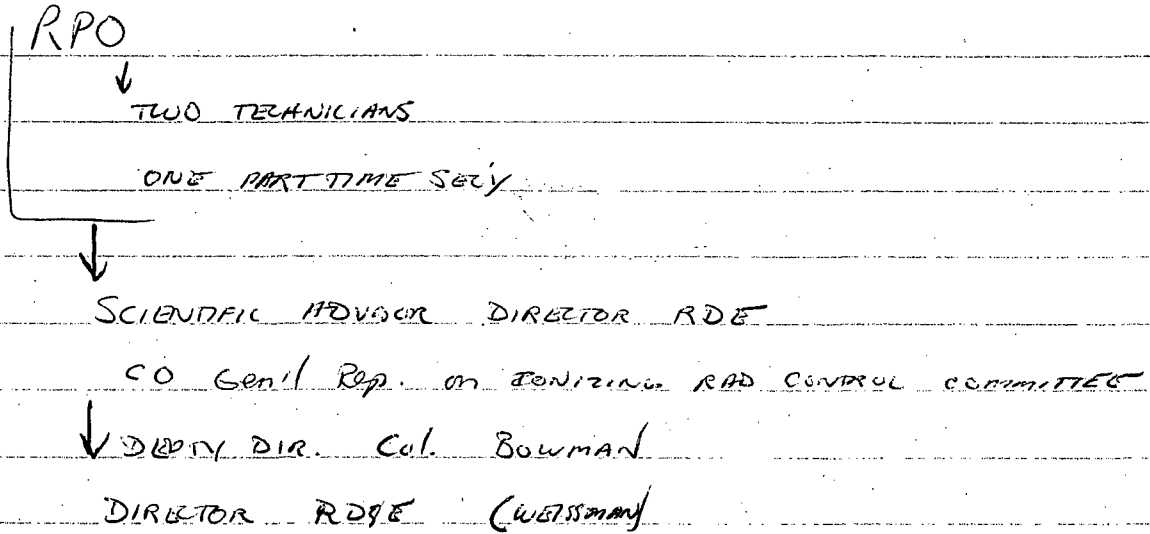
Licensee _____

Lic. No. _____

Insp. No. _____

<u>Inspection Item</u>	<u>Source of Information</u>	<u>Acceptance Criteria</u>	<u>Findings</u>
<p>A) Dose Considerations:</p> <ul style="list-style-type: none"> (1) Lenses of Eyes (2) Extremity Doses - (Rings) (3) Ancillary personnel (Nurses) 		<p>Inspector judgment 20.201(b) ref. 20.101</p>	
<p>B) Teletherapy</p> <ul style="list-style-type: none"> (1) Posting (2) Interlocks (3) 5 year maintenance (4) Malfunctions 		<p>Inspector judgment 20.101; 20.105</p>	
<p>C) Medical</p> <ul style="list-style-type: none"> (1) Authorized Procedures Authorized Materials Authorized Users Authorized Instruments <ul style="list-style-type: none"> (a) Mo⁹⁹ breakthru (b) Calibrated as per L/C _____ (2) Leak Tests (3) Sealed Source Inventory (4) Xe133 & others auth. by L/C _____ 		<p>35.14, 35.100</p> <p>L/C</p> <p>35.14(b)(5)(i) 35.14(e)(1)(1)</p> <p>35.14(b)(5)(v) 35.14(f)(2)</p> <p>L/C</p>	

I. ORGANIZATION



II SCOPE

ALL USE AUTH BY IONIZING CONTROL COMMITTEE

06 a) γ generator

^{3H} 10 Ci targets w/ up to 2 spec 10 Ci targets
 up to a max of 60 Ci in 6 targets
 spec targets stored in Evans Area

06 b) β scope

μ C level ¹⁴C, ¹⁴⁷Pm, ²⁰⁴Tl, ¹³⁷Cs

06 c) ⁶³Ni e⁻ capture detector 2mCi

leak test req semi anal