

LICENSEE: Valley Forge Laboratories, Inc. REPORT NO. 89-01

ADDRESS: 6 Berkeley Rd.  
Nexon, PA. 19333

LICENSEE CONTACT: Ward Mc Masters TELEPHONE NO. 215-688-8517

LICENSE NUMBER	DOCKET NUMBER	CATEGORY	PRIORITY	PROGRAM CODE
<u>37-20584-01</u>	<u>030-30892</u>	<u>E1</u>	<u>4</u>	<u>03121</u>

INSPECTION DATE (S) June 2 + May 31st, 1989 TYPE OF INSPECTION

LOCATION(S) Nexon, PA.  
Marsh Creek, PA (Eagle PA)

- SPECIAL  ROUTINE
- ANNOUNCED  UNANNOUNCED
- DAYSHIFT  BACKSHIFT

SUMMARY OF FINDINGS AND ACTION

- NO NONCOMPLIANCE, 591  ACTION ON PREVIOUS NONCOMPLIANCE, APPENDIX B
- NO NONCOMPLIANCE, LETTER  SUPPLEMENTAL INFORMATION, APPENDIX C
- NONCOMPLIANCE, 591  APPENDIX C
- NONCOMPLIANCE, LETTER

PERSONS CONTACTED (Name, Title)

\*Ward Mc Masters, KSC \_\_\_\_\_

Andy Hickey, user \_\_\_\_\_

Bruce Witt, user \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\* attended exit meeting

Maureen Taylor 8/10/89  
Inspector Signature Date

\_\_\_\_\_  
Inspector Signature, Date

APPROVED \_\_\_\_\_  
Signature, Date

	RESULTS
1. <u>ORGANIZATION</u>	<u>C</u> NC
a. Describe the management structure. <i>Ward Mc Masters</i> <i>! staff</i>	C NC
b. Describe the radiation protection organization. <i>same as above</i>	<u>C</u> NC
c. Individuals identified in the license as being responsible for the programs still hold these positions.	<u>C</u> NC
d. Radiation Safety Committee operates as required.	C NC <u>NA</u> NI
1. meeting frequency: _____	
2. records maintained _____	y/n/na/ni
3. records reviewed by inspector for period _____ to _____	
4. required persons in attendance _____	y/n/na/ni
e. Management control programs conducted as required.	C NC <u>NA</u> NI
1. records maintained _____	y/n/na/ni
2. Describe scope, frequency, etc.	

Comments

		RESULTS	
<u>2. SCOPE OF LICENSED ACTIVITIES</u>		C	NC
a.	Describe the types of current activities.	C	NC
	<i>10 frequent users of the device</i>		
	<i>9 gauges Teoxler 3400 series + CPN M 39028686</i>		
b.	Describe the current workload in terms of number of workers, quantities of radioactive material used each week/month/year, frequency of use, other appropriate information.		
	<i>They have 2 offices Berlin, N.J. + Devon. gauges only at Devon. At the time of the inspection they have 5 temporary job sites. Gauges used 5 days per week</i>		
c.	Describe any changes since the last inspection, and any which may be planned.		
	<i>None</i>		

Comments

		RESULTS			
<u>3. TRAINING AND INSTRUCTIONS TO EMPLOYEES</u>		C	NC		
a.	Instruction to all persons working in a restricted area (19.12).	(C)	NC		
b.	Additional required training for users and other specified workers.	(C)	NC	NA	NI
1.	approved training program	y/n/na/ni			
2.	training provided by <u>Troxler</u>				
3.	users complete on-the-job training	(y/n/na/ni)			
4.	tests are given				
a.	written	y/n/na/ni			
b.	oral	y/n/na/ni			
c.	practical <u>certo.</u>	y/n/na/ni			
d.	records of <del>tests</del> maintained	(y/n/na/ni)			
e.	deficiencies noted	y/n/na/ni			
5.	test results reviewed by NRC inspector for period _____ to _____	y/n/na/ni			
c.	Periodic training is implemented as required.	C	NC	(NA)	NI
1.	records of retraining maintained	y/n/na/ni			
2.	Describe frequency and scope of periodic training				
d.	Employees interviewed appeared familiar with safe handling practices and other requirements.	(C)	NC	NA	NI

Comments

	RESULTS
4. <u>MATERIALS</u>	C NC
a. Radioactive material as authorized by license.	C NC
1. type and quantity authorized	y/n
2. inventory records maintained	y/n/na/ni
3. inventory records reviewed for period <u>7/87</u> to <u>present</u>	
b. Control of source material (Part 40) and special nuclear material (Part 70) as required.	C NC NA NI
1. transfers in accordance with 40.51/70.42,70.54	y/n/na/ni
2. records and inventory required by 40.61/70.51	y/n/na/ni
3. reports in accordance with 40.64/70.53, 70.54	y/n/na/ni

Comments

	RESULTS
5. <u>FACILITIES MAINTAINED AS DESCRIBED IN APPLICATION</u>	(C) NC
a. postings and labelings as required	(C) NC
1. 20.203(b) radiation area	y/n/na/ni
2. 20.203(d) airborne radiation area	y/n/na/ni
3. 20.203(e) use or storage areas posted with "Caution - Radioactive Material"	y/n/na/ni
4. 20.203(f) containers and devices properly labeled	y/n/na/ni
5. 19.11(a)(b) posting of documents	y/n/na/ni
6. 19.11(c) posting of NRC-3	y/n/na/ni
7. 20.203(c) high radiation areas	y/n/na/ni
b. Security of licensed material is maintained.	(C) NC
1. locked in device cabinet or room	y/n/na/ni
2. secured to prevent unauthorized removal from an unrestricted area	y/n/na/ni
3. devices and materials secured at field location	y/n/na/ni
c. High Radiation Area operated as required.	C NC (NA) NI
1. posted as required by 20.203(c)(1)	yes/no
2. interlocked as required by 20.203(c)(2)(i)	yes/no
3. entrance controlled in accordance with 20.203(c)(2)	yes/no
4. exit controlled in accordance with 20.203(c)(3)	yes/no
5. surveillance or locked to prevent unauthorized entry as required by 20.203(c)(4)	yes/no
6. visible and audible signals operate correctly to warn of the presence of radiation	yes/no
7. alarm tested at required intervals	yes/no
8. records of alarm system test maintained	yes/no
9. exposure devices and storage containers meet radiation level limits of 20.203	yes/no

Comments

RESULTS

6. INSTRUMENTS, EQUIPMENT, AND DEVICES

C NC

a. calibrated and operable meters available and used properly.

C NC

NA

NI

1. number, type, and ranges  
(e.g. 2, ion chamber, 1R/hr; 3, GM, 10,000 cpm)

Number	Type	Range

- 3. calibrated by: \_\_\_\_\_
- 4. calibration method as authorized \_\_\_\_\_
- 5. calibration interval \_\_\_\_\_  
as required
- 6. Records reviewed by NRC inspector for the  
period \_\_\_\_\_ to \_\_\_\_\_

y/n/na/ni

y/n/na/ni

b. other special equipment (ventilation, hoods, shielding, etc) operable and available as described in license. Description:

C NC NA NI

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Comments

		RESULTS			
<u>7. RECEIPT AND TRANSFER OF MATERIALS</u>		C	NC	NA	NI
a.	Procedures for picking up, receiving, and opening of packages performed as required by 20.205.	C	NC	NA	NI
1.	written procedures available			y/n/na/ni	
2.	procedures approved in application			y/n/na/ni	
3.	survey of packages when received			y/n/na/ni	
4.	20.401 records of survey of packages			y/n/na/ni	
5.	20.401 records of receipt of packages			y/n/na/ni	
b.	Licensed material transferred as required.	C	NC	NA	NI
1.	30.41 verification of recipient's license			y/n/na/ni	
2.	20.401, 30.51 records of transfer maintained			y/n/na/ni	
3.	Licensee makes shipments of radioactive materials			yes/no	
	a. delivered by common carrier			yes/no	
	b. transported in licensee's own vehicle as a private carrier.			yes/no	

\*IF ABOVE IS ANSWERED "YES", COMPLETE 7.A TRANSPORTATION

COMMENTS



		RESULTS			
7.A. TRANSPORTATION		C	NC	NA	NI
1.	Are authorized packages used	173.415-416		yes/no	
2.	Types of packages used (for example, DOT-7A)	173.415			
3.	Performance test records on file	173.416(a)		yes/no	
4.	Licensee aware of 6/30/85 cutoff on use ( ) certified	173.416(b)		yes/no	
5.	NRC COC's on file	71.12(c)(1)		yes/no	
6.	Registered with NRC as user	71.12(c)(3)		yes/no	
7.	Documented NRC-approved Q/A program? NRC Q/A Approval number _____	71.12(b)		yes/no	
8.	Special Form Material Performance test records available for each source design	173.476(a)		yes/no/na	
9.	packages labeled as required	172.403 (a-f)		yes/no	
	a. Excepted				
	b. White I				
	c. Yellow II				
	d. Yellow III				
10.	Surveys performed to select correct label category and compliance with radiation limits	175.475(i)		yes/no	
11.	Packages marked as required with	172.300-310		yes/no	
	a. shipping name			yes/no	
	b. Spec No.				
	c. Certificate of Compliance (COC) No. etc.				
12.	Shipping papers are prepared for each shipment	172.200		yes/no	
13.	Shipping papers contain required information	172.203(d)		yes/no	
14.	For private carrier shipments:				
	a. vehicles placarded as required	172.500,504		yes/no	
	b. cargo blocked, braced, tied down in vehicle	177.842(d)		yes/no	
	c. any incidents reported to DOT	171.15-16		yes/no	
15.	Licensee carries shipping papers that are readily accessible when transporting radioactive material				

Comments

RESULTS

8. PERSONNEL MONITORING

C  NC  NA  NI

a. Personnel dosimetry assigned and worn as required.

C  NC  NA  NI

- 1. whole-body dosimeter used
  - a. \_\_\_\_\_ film  TLD
  - b. exchange frequency: quarterly
  - c. supplier ~~\_\_\_\_\_~~ Advanced Dosimetry
  - d. supplier NVLAP accredited 10 CFR 20.202
- 2. extremity dosimetry used
- 3. workers observed wearing required dosimetry

y/n/na/ni

y/n/na/ni

y/n/na/ni

y/n/na/ni

b. Personnel dosimetry reports maintained as required

C  NC  NA  NI

- 1. records reviewed by management frequency: quarterly
- 2. NRC inspector reviewed personnel monitoring records from 7/87 to present
  - a. whole body quarterly dose: typical M
  - b. extremity quarterly dose: typical \_\_\_\_\_
- 3. Forms NRC-4, NRC-5 or equivalent records completed
- 4. Termination and annual reports to individuals and NRC, as required

y/n/na/ni

y/n/na/ni

max \_\_\_\_\_

max \_\_\_\_\_

y/n/na/ni

y/n/ na/ni <sup>none</sup>

c. Formal ALARA program is implemented

C  NC  NA  NI

Comments

## RESULTS

9. RADIATION AND CONTAMINATION SURVEYS

	C	NC	NA	NI
a. Radiation and Contamination surveys	C	NC	NA	NI
1. radiation and contamination surveys recorded				y/n/na/ni
2. surveys performed at required frequency: _____				y/n/na/ni
3. appropriate instruments used				y/n/na/ni
4. action limits observed, and post-decontamination surveys performed when necessary				y/n/na/ni
5. NRC inspector reviewed survey records for the period _____ to _____				
6. maximum radiation levels in unrestricted area: _____				
b. Airborne Radioactivity Surveys performed	C	NC	NA	NI
1. Air sampling in restricted areas				y/n/na/ni
a. maximum concentration levels: _____				
b. typical concentration levels: _____				
2. bioassay procedures performed				y/n/na/ni
a. type(s) _____				
b. maximum results _____				
c. typical results _____				
3. bioassay and air sampling records maintained as required				y/n/na/ni
4. Principal isotopes _____				
c. Leak tests of sealed sources performed as required	C	NC	NA	NI
1. performed by user and method approved				y/n/na/ni
2. tested at required interval: <u>6 mo</u>				y/n/na/ni
3. records maintained				y/n/na/ni
4. records reviewed by NRC inspector for the period <u>6/87</u> to <u>present</u>				

Comments

	RESULTS			
10. <u>EFFLUENT CONTROL, WASTE DISPOSAL</u>	C	NC	NA	NI
a. Releases to the environment in accordance with requirements.	C	NC	NA	NI
1. airborne releases are made				y/n/na/ni
a. evaluations adequate				y/n/na/ni
b. releases within limits (10 CFR 20.106)				y/n/na/ni
c. typical concentrations _____				
d. principal isotopes released _____				
2. liquid releases are made to _____ (sewer, unrestricted)				y/n/na/ni
a. evaluations adequate				y/n/na/ni
b. releases within limits (10 CFR 20.106, 10 CFR 20.303)				y/n/na/ni
c. typical concentrations _____				
d. principal isotopes released _____				
3. Records maintained				y/n/na/ni
b. Waste disposal in accordance with requirements	C	NC	NA	NI
1. methods: <u>returned to mfg.</u>				
_____				
_____				
_____				
2. records of waste transfer maintained				y/n/na/ni
3. surveys of waste containers and material in storage-for-decay performed				y/n/na/ni
4. obliteration of labels				y/n/na/ni
c. Burial of licensed material done in past			Yes/No	
1. Location of past burials _____				
2. types of materials buried _____				
3. types of surveys of area, results: _____				
_____				
_____				
d. 10 CFR 61 Requirements Reviewed				y/n/na/ni

Comments

RESULTS

11. NOTIFICATIONS AND REPORTS

C NC NA NI

*None*

1. Licensee is in compliance with

- a. reports of thefts or losses (20.402)
- b. reports of incidents (excessive releases, fires, or other catastrophes) (20.403)

y/n/na/ni  
y/n/na/ni

2. Licensee took appropriate action in response to the following Bulletins, Circulars, and Information Notices.

y/n/na/ni

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

Comments

12. OTHER LICENSE CONDITIONS	RESULTS			
	C	NC	NA	NI

List any other license conditions which were reviewed during the inspection, and describe the results.

a. *inventories conducted* C NC

b. C NC

c. C NC

Comments

RESULTS

13. INDEPENDENT AND CONFIRMATORY MEASUREMENTS

C NC NA NI

a. <u>Type of Survey</u>	<u>Areas Surveyed</u>	<u>Results</u> (indicate units)
1. <u>Radiation level</u>	<i>storage closet gauge</i>	<i>0.1 mR/hr 5 mR/hr contact</i>
2. <u>Wipe</u>		
3. <u>Sample (describe)</u>		

4. Attach any sample analysis data from Region I laboratory

b. Survey Instruments Used

- |                          |                       |          |
|--------------------------|-----------------------|----------|
| 1. Type                  | a. <u>Ludlum 14C.</u> | b. _____ |
| 2. NRC #                 | a. _____              | b. _____ |
| 3. last calibration date | a. <u>2/89</u>        | b. _____ |

Comments

APPENDIX A - DOCUMENTATION OF NONCOMPLIANCE

Requirement	Basis for noncompliance
1. 10 CFR _____ Lic Cond _____	
2. 10 CFR _____ Lic Cond _____	
3. 10 CFR _____ Lic Cond _____	
4. 10 CFR _____ Lic Cond _____	
5. 10 CFR _____ Lic Cond _____	
6. 10 CFR _____ Lic Cond _____	



APPENDIX B - LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS

Identification and summary of action taken	Status
Report No: _____ Severity Level _____	
Describe previous violation:	
Corrective Action taken:	OPEN
	CLOSED
Report No.: _____ Severity Level _____	
Describe previous violation:	
Corrective Action taken:	OPEN
	CLOSED
Report No: _____ Severity Level _____	
Describe previous violation:	
Corrective action taken:	OPEN
	CLOSED

## APPENDIX B (continued)

Identification and summary of action taken	Status
Report No: _____	Severity Level _____
Describe previous violation:	
Corrective action taken:	OPEN
	CLOSED
Report No: _____	Severity Level _____
Describe previous violation:	
Corrective action taken:	OPEN
	CLOSED
Report No: _____	Severity Level _____
Describe previous violation:	
Corrective action taken:	OPEN
	CLOSED

APPENDIX C - SUPPLEMENTARY INFORMATION

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( ) Unusual occurrence, conditions, etc.

( ) Unresolved items

( ) Description of attachments to field notes

( ) Inspector's comments

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U.S. NUCLEAR REGULATORY COMMISSION  
REGION I  
OPEN ITEMS TRACKING SYSTEM

DOCKET NUMBER: 30-19945

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REPORT NUMBER	STATUS	DATE OPEN	DATE CLOSED	REVIEWER NAME	CLOSING OPTION	REFER
1 87-001	OPEN	06/17/87	/ /	RAJENDRAN	VIOL	
ITEM: TROXLER GAUGE UNSECURED						
2 87-001	OPEN	06/17/87	/ /	RAJENDRAN	VIOL	
ITEM: FAILURE TO PERFORM LEAK TESTS AS REQUIRED						
3 -	OPEN	/ /	/ /		LER	
ITEM:						
4 89-001	CLOSED	06/02/89	06/02/89	TAYLOR	VIOL	89-001
ITEM: 591-CLEAR						