REGION I Form 198-D (October 88)

(JUSTRIAL/ACADEMIC

LICENSEE: U.S. Testing Co., Inc. REPORT NO. 91-001

ADDRESS: 1415 Park Avenue
Hoboken, New Jersey
07030

LICENSEE CONTACT: Joe Mohrbacher TELEPHONE NO. _____

LICENSE NUMBER	DOCKET NUMBER	CATEGORY	PRIORITY	PROGRAM CODE
29-02477-05	030-05278	K	7	3123
29-02477-07	030-14548	E1	4	3121

INSPECTION DATE (S) 1/18/91

TYPE OF INSPECTION

LOCATION(S) _____

/ / SPECIAL /✓/ ROUTINE

/ / ANNOUNCED /✓/ UNANNOUNCED

/✓/ DAYSHIFT / / BACKSHIFT

SUMMARY OF FINDINGS AND ACTION

/✓/ NO NONCOMPLIANCE, 591

/ / NO NONCOMPLIANCE, LETTER

/ / NONCOMPLIANCE, 591

/ / NONCOMPLIANCE, LETTER

/ / ACTION ON PREVIOUS NONCOMPLIANCE, APPENDIX B

/ / SUPPLEMENTAL INFORMATION, APPENDIX C
APPENDIX C

PERSONS CONTACTED (Name, Title)

* J.A. Mohrbacher, Director Corporate QA + Rad Safety

Linda Monroe, Acting RSO (-07)

Michelle Piepoli, Chemist (-05)

Tim Kroeber, Chemist (-05)

Bruce Monroe, Asst Director Rad Safety

Jerome Grimm, Asst. Director Rad Safety

* attended exit meeting

1/18/91
Inspector Signature, Date

Inspector Signature, Date

APPROVED _____ 1/24/91
Signature, Date

A30

	RESULTS
1. ORGANIZATION	(C) NC
a. Describe the management structure.	C NC

b. Describe the radiation protection organization. (C) NC

Mokrzbacher, Director

↓

Grimm + Monroe

↳ L. Monroe (gauge) + Piepoli (resp. for G.C.)

c. Individuals identified in the license as being responsible for the programs still hold these positions. L. Monroe currently involved in license amendment Piepoli on license (all other GC users gone) C NC

d. Radiation Safety Committee operates as required. C NC (NA) 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 NA NI

1. records maintained y/n/na/ni
2. Describe scope, frequency, etc.

Comments

Regarding gauge license. On 4/27/90 licensee requested amendment to name Richard Harvey RSO with Mokrzbacher as backup. We made def. call 10/5/90 — at that time Mokrzbacher proposed naming Kottle Mullins as RSO. + promised to submit info. At time of inspection Mullins was no longer w/ Company — Linda Monroe now being proposed as RSO.

	RESULTS	
2. SCOPE OF LICENSED ACTIVITIES	C	NC
a. Describe the types of current activities.	C	NC

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.

gauges used infrequently out of Hoboken for soil density (7) gauge in Hoboken, (2) troxlers out (last used) due to leak test — tag indicated (1) 7411(5) troxler out 8/90 (1) moist gauge locked out 6/90

c. Describe any changes since the last inspection, and any which may be planned.

business decreasing out of Hoboken

Comments

gauge license also listed locating in Jim Thorpe, PA. RSO reports much greater activity in Jim Thorpe. Licensee has submitted (4) additional sites that may or may not be pursued — currently operating at Merck on temporary basis pending amendment.

	RESULTS
3. TRAINING AND INSTRUCTIONS TO EMPLOYEES	(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 manufacturer	
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	y/n/na/ni
d. records of tests 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. each site provides ~ 1 hour training per quarter, usually fired monthly	(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

Licensee authorized to train own portable gage users, Trainers named as Margaret Wolle + Harold Doty → both left in 1990. Mohrbacher stated that users are trained by Traxler, this authorized only for flexibility, NOT utilized

	RESULTS
4. MATERIALS	(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 1986 to present	
X 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

GC ⇒ Ni 63 sources (9)

forge — Trailer (2) 741(b)
(1) Root forge

— calibrations listed on license
NOT present.

	RESULTS
5. FACILITIES MAINTAINED AS DESCRIBED IN APPLICATION	(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

licensee requires group users to have (2) meters in possession.

3. calibrated by: _____
4. calibration method as authorized — y/n/na/ni
5. calibration interval _____ as required — y/n/na/ni
6. Records reviewed by NRC inspector for the period _____ to _____

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

_____

_____

_____

_____

_____

_____

_____

Comments

7.A. TRANSPORTATION		RESULTS C	NC	NA	NI
1. Are authorized packages used	173.415-416			yes/no	
2. Types of packages used (for example, DOT-7A) 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

Transport in company vehicles, chains in place

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 (y)/n/na/ni
   a. X film ____ TLD
   b. exchange frequency: monthly
   c. supplier RDC
   d. supplier NVLAP accredited 10 CFR 20.202 (y)/n/na/ni
2. extremity dosimetry used y/n/(na)/ni
3. workers observed wearing required dosimetry (y)/n/na/ni

(b.) Personnel dosimetry reports maintained as required (C) NC NA NI

1. records reviewed by management frequency: (y)/n/na/ni
   monthly
2. NRC inspector reviewed personnel monitoring records from 1986 to present (y)/n/na/ni
   a. whole body quarterly dose: typical mrem max 10
   b. extremity quarterly dose: typical NR max NR
3. Forms NRC-4, NRC-5 or equivalent records completed y/n/na/ni
4. Termination and annual reports to individuals and NRC, as required y/n/na/ni

c. Formal ALARA program is implemented (C) NC NA NI

Comments

→ Jim Thayer facility submits records to Hobbs.

RESULTS

9. RADIATION AND CONTAMINATION SURVEYS — (C) NC

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-docontamination 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: 6 months — y/n/na/ni
3. records maintained — y/n/na/ni
4. records reviewed by NRC inspector for the period 1986 to present — y/n/na/ni

Comments: leak tests evaluated by RDC

~~Leak Tests of~~ equipment inspected at Yg inventory

10. EFFLUENT CONTROL, WASTE DISPOSAL	RESULTS 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: GC detector cells returned to HP				
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

RADIATION SAFETY PROGRAM

SEALED SOURCES INVENTORY (QUARTERLY)

ASSIGNEE B. SChweibinz DUE DATE 12-20-90

LOCATION U.S. Testing Co., Inc. Jim Thorpe, PA QUARTER 4 th 19 90

SPECIAL INSTRUCTIONS N/A

	Source Material Cs 137/Am 241/Be or Ra 226/Be	Nuclear Gauge Model	Nuclear Gauge S/N	Source S/N	Source mCi
1.	Cs 137	3411-B	4327	CC15538	7.5
2.	Am 241/Be			Caa562	40
3.	Cs 137	3411-B	4744	CC15878	8.8
4.	AM 241/Be			CAA805	40
5.	Cs 137	3411-B	6645	CC3779	8.5
6.	AM 241/Be			CAA2894	40
7.	Cs 137	3401	5645	CC2813	8.3
8.	Am 241/Be			CAA1784	40
9.	Cs 137	3401	6913	CC4051	7.4
10.	Am 241/Be			CAA5085	40
11.	Cs 137	3411-B	4107	401124	8.8
12.	Am 241/Be			470159	40

Remarks

Project Manager Bernard Schweibinz Date 12-5-90

Note: See reverse side for instructions.

RADIATION SAFETY PROGRAM

NUCLEAR GAUGE INSPECTION (QUARTERLY)

ASSIGNEE B. Schweibinz DUE DATE 12-20-90 4th. QTR. 1990

NUCLEAR GAUGE MFG. Troxler MODEL 3411-B S/N 4107

LOCATION U.S. Testing Co., Inc. 616 North St. Jim Thorpe, PA 18229

SPECIAL INSTRUCTIONS N/A

	Item	Condition Checked For	S	U
1.	Nuclear Gauge	General operating condition	X	
2.	Source Identification	Tag securely attached; Gauge labeled	X	
3.	Handle	Securely attached; Damage	X	
4.	Leak Test	Current leak test on file	X	
5.	Exposure Port	Dirt, damage and ease of movement	X	
6.	Control Mechanism	General ease of operation	X	
7.	Source Rod Handle and Connections	Dirt, wear or damage	X	
8.	Locking Mechanism	Dirt, wear and ease of operation	X	
9.	Shipping Container	General condition	X	

For items which do not apply, mark "N/A" in the "S" box.

Items found to be unsatisfactory and that are not corrected, indicate the action taken to correct these conditions.

REMARKS

DESIGNATED REPRESENTATIVE Bernard A. Schweibinz DATE 12-5-90