

RI - DNMS Licensee Event Report Disposition

Licensee:	US Engineering Inc				
Event Description:	MISSING GAGE				
License No:	29 30107-01	Docket No:	030 33387	MLER-RI:	2006-012
Event Date:		Report Date:	3/6/06	HQ Ops Event #:	

1. REPORTING REQUIREMENT

<input checked="" type="checkbox"/>	10 CFR 20.1906 Package Contamination	<input type="checkbox"/>	10 CFR 30.50 Report
<input checked="" type="checkbox"/>	10 CFR 20.2201 Theft or Loss	<input type="checkbox"/>	10 CFR 35.3045 Medical Event
<input type="checkbox"/>	10 CFR 20.2203 30 Day Report	<input type="checkbox"/>	License Condition
<input type="checkbox"/>	Other _____		

2. REGION I RESPONSE

<input type="checkbox"/>	Immediate Site Inspection	Inspector/Date	
<input type="checkbox"/>	Special Inspection	Inspector/Date	
<input type="checkbox"/>	Telephone Inquiry	Inspector/Date	
<input type="checkbox"/>	Preliminary Notification/Report	<input type="checkbox"/>	Daily Report
<input checked="" type="checkbox"/>	Information Entered in RI Log	<input type="checkbox"/>	Review at Next Inspection
<input type="checkbox"/>	Report Referred To: _____		

3. REPORT EVALUATION

<input checked="" type="checkbox"/>	Description of Event	<input checked="" type="checkbox"/>	Corrective Actions
<input checked="" type="checkbox"/>	Levels of RAM Involved	<input type="checkbox"/>	Calculations Adequate
<input checked="" type="checkbox"/>	Cause of Event	<input type="checkbox"/>	Additional Information Requested from Licensee

4. MANAGEMENT DIRECTIVE 8.3 EVALUATION

<input type="checkbox"/>	Release w/Exposure > Limits	<input type="checkbox"/>	Deliberate Misuse w/Exposure > Limits
<input type="checkbox"/>	Repeated Inadequate Control	<input type="checkbox"/>	Pkgng Failure > 10 rads/hr or Contamination > 1000x Limits
<input type="checkbox"/>	Exposure 5x Limits	<input type="checkbox"/>	Large# Indivs w/Exp > Limits or Medical Deterministic Effects
<input type="checkbox"/>	Potential Fatality	<input type="checkbox"/>	Unique Circumstances or Safeguards Concerns
<input type="checkbox"/>	If any of the above are involved:		
<input type="checkbox"/>	Considered Need for IIT	<input type="checkbox"/>	Considered Need for AIT
<input type="checkbox"/>	Decision/Made By/Date: _____		

5. MANAGEMENT DIRECTIVE 8.10 EVALUATION (additional evaluation for medical events only)

<input type="checkbox"/>	Timeliness - Inspection Meets Requirements (5 days for overdose / 10 days for underdose)
<input type="checkbox"/>	Medical Consultant Used-Name of Consultant/Date of Report: _____
<input type="checkbox"/>	Medical Consultant Determined Event Directly Contributed to Fatality
<input type="checkbox"/>	Device Failure with Possible Adverse Generic Implications
<input type="checkbox"/>	HQ or Contractor Support Required to Evaluate Consequences

6. SPECIAL INSTRUCTIONS OR COMMENTS

Review Downy Special inspection

<input checked="" type="checkbox"/> Non-Public	Inspector Signature: <u>[Signature]</u>	Date: <u>4/24/2006</u>
<input type="checkbox"/> Public-SISP REVIEW COMPLETE	Branch Chief Initials: <u>[Signature]</u>	Date: <u>4/20/2006</u>



RECEIVED
REGION 1

2006 APR -7 PM 1: 20

US Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA. 19406-1415

March 31, 2006

Attention: Samuel Collins
Regional Administrator, USNRC

Re: License 29-30107-01

In accordance with the Code of Federal Regulations Title 10, Chapter 1, Part 20, Subpart M- 20.2201, U.S. Laboratories Inc. is issuing a written report regarding the missing and recently recovered licensed radioactive material. The subject material is 8.0 millicuries of Cesium 137 and 40 millicuries of Americium 241 Beryllium contained in a Portable Nuclear Density Gauge- Model Troxler 3411B, Serial # 9524

It should be noted that on 3/7/06 the material was recovered intact by Jack Branyan, ARSO and is presently secured at our Broomall, Pa. storage facilities. Upon recovery, the gauge was found locked in its transport case and the source-rod locked in the safe position. An immediate radiation survey indicated levels of radiation less than 3 mrem/hour at one meter from the sides of the NDG transport package container and a leak test was performed for which the results are included within in this report that indicate less than .005 mCi.

The precise details of the circumstances leading up to the loss of this gauge are still unclear at this point and we are still pursuing additional information. As soon as further details become available we will issue a follow up report regarding any new pertinent information.

To the best of our knowledge, the following information regarding gauge #9524 is verifiable:

- 1). Physical inventory and leak test performed on 4/26/05.
- 2). Gauge signed out to Dan Griffin on 5/19/05
- 3). Gauge was assigned to Jamie Figueroa at the University of Penn. on 6/22/05.
- 4). Gauge was picked up on 6/22/06 and returned to the Broomall office by Shawn Casey.
- 5). Gauge was not signed in or signed out in the utilization log.

Gauge #9524 was discovered by a Public Works Employee behind a guardrail while cleaning out a storm drain at the end of a cul de sac in an industrial park in Northeast Philadelphia on 3/02/06. The employee immediately called 911 and the NE Philadelphia Fire Dept. Hazmat Team responded and recovered the gauge after a survey was performed. The gauge was then transported to the Fire Training Academy in NE Philadelphia where it was held until 3/06/06 when the NRC was notified. The gauge was still in its DOT approved transport case. The case was locked as well as the source rod.

U.S. Laboratories Inc.

A Bureau Veritas Company
139 N. Iowa Avenue
Atlantic City, NJ 08401

Main: (609) 344-3200
Fax: (609) 344-2125
www.us.bureauveritas.com



Although exposures of individuals to radiation or total effective dose equivalent to persons in unrestricted areas cannot be fully verified at this time we strongly believe that it is highly unlikely that any one individual was exposed to more than 100mr for the following reasons:

- 1). The gauge was found in a remote location not frequented by pedestrian or automobile traffic.
- 2). The gauge source rod and case were still locked when found.
- 3). The transport index for this device is less than 0.3 mrem/hour at one meter from the sides of the transport package and as a result a member of the public would have to have been in close proximity to the gauge over an extended period of time for any significant radiation exposure to have occurred. Should additional information reveal verifiable exposures other than the above estimates we will forward our findings in a follow up report.

The following is a list of corrective actions and/or measures being implemented to ensure against a recurrence of the loss of licensed material:

- 1). Access to remove and store gauges at the storage facilities has become limited to 2 Senior level individuals in each office.
- 2). A memorandum issued to all gauge operators requiring daily written and verbal confirmation of gauge possession and location for tracking purposes.
- 3). A bi-weekly email or fax reporting of all gauge locations to the Regional RSO.
- 4). Disciplinary action for those employees which violated the NDG Enforcement Policy as applicable.
- 5). Revising of USL RPPG (Radiation Protection Program Guide) to include in house management notification procedures.

Items 1, 2 & 3 were implemented within the first two weeks of gauge discovery.
Items 4 & 5 are in the process of being implemented.

Respectfully Yours

Martin H. Mygrant
Regional Radiation Safety Officer
U S Laboratories Inc.
A Bureau Veritas Company
139 North Iowa Ave.
Atlantic City, NJ. 08401
Ph. 609-344-3200
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Robert E. Hughes
Chief Regional Executive
U S Laboratories Inc.
A Bureau Veritas Company
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Rahway, New Jersey 07065
Ph. 732-382-3553
Fax 732-382-8140

cc. John Kinneman, Branch Chief- DNMS-USNRC
Ralph Silva, Corporate RSO-USL
Robert E. Hughes, Chief Regional Executive-USL
USL- RSO file

U.S. Laboratories Inc.

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139 N. Iowa Avenue
Atlantic City, NJ 08401



Attachments:

- 1). Leak Test report for gauge #9524.
- 2). Memorandum regarding daily confirmation.
- 3). Letter to Management, Re-Missing gauge.

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North East Technical Services, Inc.
75 Aileron Ct., Suite 4
Westminster, MD 21157
Ph: 410.751.5090 Fax: 410.751.5091

US Laboratories, Inc. - Rahway
903 E. Hazlewood Ave.
Rahway, NJ 07065
ATTN: Martin Mygrant

Shipping Address: 903 E. Hazlewood Ave.
Rahway, NJ 07065

LEAK TEST CERTIFICATE

MD Materials License # MD-13-020-01

This certifies that leak test analysis was conducted on the sample with the following information. The results shown below accurately represent the level of removeable contamination.

Gauge Model	3411	Gauge S/N	9524	Leak Test Date	3/8/2006
Source			Reading in microCuries		
	40-6971		0.0000731		
	47-6156		0.0000013		

Note: 0.005 microCuries (185 Bq) or greater is considered a leaking source. The source(s) tested above may remain in use.

Reviewed by: *Doyle Sims*

Date: *3-9-06*



RECEIVED
REGION 1

2006 APR -3 AM 11: 20

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Respectfully Yours

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Robert E. Hughes, Chief Regional Executive-USL
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Atlantic City, NJ 08401



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Note: 0.005 microCuries (185 Bq) or greater is considered a leaking source. The source(s) tested above may remain in use.

Reviewed by: Doyle Sims

Date: 3-9-06



March 15, 2006

To: All NDG Operators, Operation Managers & ARSO's

This memo and its directives are the direct result of the loss of a Nuclear Density Gauge, Serial # 9524 from the Broomall, PA. office.

This gauge has been recovered yet, due to the breakdown in our system regarding tracking gauges, we are as of today implementing new procedures for gauge accountability. The following tracking methods shall be utilized in all offices of US Laboratories Inc.

- 1). Gauges **will not** be signed in or checked out without the express permission of one of two senior individuals from each office.
- 2). The NDG Operators are to utilize the space on our standard Testing & Inspection report for **daily** documentation of the gauge # in their possession. **(This is mandatory)**
- 3). When the NDG Operators call in their time they are to also notify office personal what gauge # they may have. This info shall be documented on the daily logs.
- 4). The ARSO or the Operation Manager shall email or fax an up-dated inventory of gauges along with the gauge locations every two weeks.

The theft or loss of Radioactive Material is a very serious issue and is subject to civil penalties. Your cooperation in the implementation of these procedures is **not optional**. If, for any reason, these measures cannot be adhered to, the RSO must be notified immediately.

Your Friendly RSO,

Martin H. Mygrant
Regional Radiation Safety Officer
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March 10, 2006

Robert E. Hughes
Regional Chief Executive
US Laboratories Inc. /Bureau Veritas

Dear Bob,

I am writing this letter to you to document the facts as I know them regarding the missing and recently found Nuclear Density Gauge Serial # 9524.

On September 30, 2005 a Radiation Safety Meeting was conducted at the Broomall, PA. office of US Laboratories Inc. The purposes of this meeting was to update the personnel regarding the NRC findings relating to NRC Inspection and subsequent Notice of Apparent Violations and for performing a physical inventory and leak test on all of the gauges in this office. All attending were required to read and sign the Enforcement Policy. This was listed as a mandatory meeting and several employees did not attend. All gauges assigned to this office were inventoried and leak tested with the exception of #'s 270, 9524 & 33117. The Operators who did not show were M. Bradson, S. Budko, C. Connelly, D. Griffin & V. McCoy. Jack Branyan was instructed to follow-up on the remaining Operators and to complete the leak testing on the three gauges which were not tested. As a follow-up to the physical inventory a request for NDG inventories are emailed to all offices every month and this inventory list is to include the location of these gauges and the operator in possession in order to maintain close control. These measures, if properly followed, were regarded as adequate for preventing such an occurrence. The Rahway and AC offices complied with these requests, but the Broomall office was not responding. Repeated requests were made and a follow-up call was made to Paul Spiegel regarding the lack of response. No mention was made of the possibility of a missing gauge to me in any form or manner. Recent conversations in February with Jack Branyan were in reference to gauges that were to be sent out for repair or disposal and again no mention of a missing gauge. I received a call from the NRC at 5:00 PM Monday 3/06/06 stating gauge #9524 was recovered in Northeast Philadelphia, PA by the Fire Company.

I hope this letter clarifies your understanding of my position on this incident. Should you have any questions, please do not hesitate to contact me at your earliest convenience.

Respectfully Yours,

Martin H. Mygrant, RSO
US Laboratories Inc.



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U.S. LABS

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