



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

March 8, 2007

EA-07-035

Docket No. 03033387

License No. 29-30107-01

Robert Hughes
Regional Chief Executive
U.S. Engineering Laboratories, Inc.
903 East Hazelwood Avenue
Rahway, NJ 07065

SUBJECT: NRC INSPECTION NO. 03033387/2006001, U.S ENGINEERING
LABORATORIES, INC., AND OFFICE OF INVESTIGATIONS (OI)
REPORT NO. 1-2006-027

Dear Mr. Hughes:

On March 2, 2006, NRC Region I was contacted by the Philadelphia Fire Department (PFD) and notified that a Philadelphia Water Department employee had discovered a box containing a Troxler Model 3411B nuclear density gauge in a wooded area along McNulty Road, in Northeast Philadelphia, Pennsylvania, and that the PFD recovered the gauge and secured it at their Fire Academy in Northeast Philadelphia. NRC Region I determined that the gauge was probably owned by your company. On March 6, 2006, Judith Joustra, of our office, contacted your Radiation Safety Officer, Martin Mygrant, and notified him that a gauge apparently owned by USEL had been recovered by the PFD, and that NRC was opening an inspection for this event. On March 7, 2007, Michelle Beardsley, of this office, met the Operations Manager (OM), who also assisted with Radiation Safety Officer duties at your Broomall facility, at the PFD Fire Academy to examine the gauge. Ms. Beardsley and the OM confirmed that the source was intact and there had been no leakage. Your employee agreed that the recovered gauge belonged to USEL and he transported the gauge to your Broomall facility.

Our inspection of this event and your activities under your license was conducted on March 7, 23, and 28, 2006. The findings of the inspection were discussed on March 28, 2006, with you, the OM of the Broomall facility, and your Radiation Safety Officer. In addition, based on the initial NRC staff inspection findings, the NRC Office of Investigations (OI), Region I Field Office, opened and conducted OI Investigation No. 1-2006-027 from April 17 through August 15, 2006.

The results of the inspection activities are included in the enclosed Inspection Report No. 03033387/2006001. The results of the OI Investigation are included in the enclosed Factual Summary of OI Investigation 1-2006-027.

Based on the results of this inspection and OI investigation, four violations were identified; two of these violations are being considered for escalated enforcement in accordance with the NRC Enforcement Policy. The two apparent violations not being considered for escalated enforcement are discussed in detail in the enclosed inspection report.

The first apparent violation being considered for escalated enforcement action involves the failure to secure a portable gauge containing licensed material from unauthorized access and removal and the failure to maintain constant surveillance over that gauge as required by 10 CFR 20.1801 and 10 CFR 20.1802. Specifically, a portable nuclear density gauge containing licensed material could not be located by the OM in your Broomall facility as of October 1, 2005, until it was discovered in a wooded lot along McNulty Road, in Northeast Philadelphia, on March 2, 2006. The second apparent violation involves the failure to immediately report lost, stolen or missing licensed material in an aggregate quantity equal to or greater than 1000 times the quantity specified in Appendix C to Part 20 as required by 10 CFR 20.2201(a)(1). Based on the results of the OI investigation, we have concluded that the second violation resulted from deliberate misconduct by a USEL employee, as noted in the Factual Summary.

Before the NRC makes its enforcement decision, we are providing you with the opportunity to either: (1) attend a Predecisional Enforcement Conference (PEC) to discuss the apparent violations, or (2) request Alternative Dispute Resolution (ADR) to resolve these issues.

If you attend a PEC, it will be held in the Region I office and will be closed to the public and will be transcribed. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be held to obtain information to assist the NRC in making an enforcement decision. This may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned. The conference would provide you an opportunity to present your perspective on these matters and any other information that you believe the NRC should take into consideration in making an enforcement decision. In presenting your corrective action, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION," may be helpful.

Instead of a PEC, USEL may request Alternative Dispute Resolution (ADR) with the NRC. ADR is a general term encompassing various techniques for resolving conflict outside of court using a neutral third party. The technique that the NRC has decided to employ is mediation. In mediation, a neutral mediator with no decision-making authority helps parties clarify issues, explore settlement options, and evaluate how best to advance their respective interests. The mediator's responsibility is to assist the parties in reaching an agreement. However, the mediator has no authority to impose a resolution upon the parties. Mediation is a confidential and voluntary process. If the parties to the ADR process (the NRC and USEL) agree to use ADR, they select a mutually agreeable neutral mediator and share equally the cost of the mediator's services. Additional information concerning the NRC's ADR can be obtained at

<http://www.nrc.gov>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as an intake neutral. Intake neutrals perform several functions, including: assisting the parties in determining ADR potential for their case, advising parties regarding the ADR process, aiding the parties in selecting an appropriate mediator, explaining the extent of confidentiality, and providing other logistic assistance as necessary.

Please contact ICR at Cornell University at (877) 733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of these issues through ADR.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html>.

Current NRC regulations are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Toolkit Index Page**. The current Enforcement Policy is included on the NRC's website at www.nrc.gov; select **about NRC, Organization and Functions, Office of Enforcement, about Enforcement**, then Enforcement Policy. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Please contact Marie Miller at (610) 337-5205 within 10 days of the date of this letter to notify the NRC of your decision to either participate in a PEC or ADR.

Sincerely,

/RA/

Brian E. Holian, Director
Division of Nuclear Materials Safety

Enclosures:

- 1) NRC Inspection Report No. 03033387/2006001
- 2) Factual Summary of OI Investigation Report No. 1-2006-027
- 3) Excerpt from NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION"
- 4) NUREG/BR-0317, "Post-Investigation ADR Program"

cc:

Martin Mygrant, Radiation Safety Officer
Commonwealth of Pennsylvania

Distribution:

ADAMS (PARS)

SECY

CA

OEMAIL

OEWEB

L Reyes, EDO

M Virgilio, DEDMRT

C Carpenter, OE

S Merchant, OE

L Sreenivas, OE

B Jones, OGC (Bradley)

L Chandler, OGC

C Miller, FSME

G Pangburn, FSME

J Schlueter, FSME

D Rathbun, FSME

B Sosa, EDO

Enforcement Coordinators

RII, RIII, RIV

L. Lopez, OE

O. Samuel, OE

R Taylor, OE

M Elwood, OGC

S. Gagner, OPA

H Bell, OIG

G Caputo, OI

L Tremper, OCFO

D Screnci, PAO-RI

N Sheehan, PAO-RI

B Holian, RI

M Miller, RI

K Farrar, RI

D Holody, RI

A. DeFrancisco, RI

R Summers, RI

C O'Daniell, RI

S. Villar, RI

Region I OE Files (with concurrences)

DOCUMENT NAME: C:\FileNet\ML070680216.wpd

SUNSI Review Complete: MBeardsley

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI	DNMS/RI	ORA
NAME	MBeardsley mrb		MMiller mtm1	BHolian jdk for	DHolody rjs for
DATE	2/21/07		2/21/07	2/22/07	2/23/07
OFFICE	ORA		OI/RI	OFSMEMP	OE*
NAME	KFarrar klf		EWilson epw	GMorrell * via e-mail	CCarpenter* via e-mail
DATE	2/27/07		2/26/07	3/5/07	3/6/07
OFFICE					
NAME					
DATE					

EXECUTIVE SUMMARY

U.S. Engineering Laboratories, Inc.
NRC Inspection Report No. 03033387/2006001

On March 2, 2006, Philadelphia Fire Department (PFD) personnel notified NRC Region I that a box containing a Troxler Model 3411B nuclear density gauge, Serial No. 9524, was found abandoned in a wooded area in Northeast Philadelphia by Philadelphia Water Department personnel. The PFD representative stated that the box was locked and that their initial radiological analysis indicated the presence of cesium-137. PFD personnel then removed the gauge and secured it at their facilities in Northeast Philadelphia.

Region I contacted Troxler Electronic Laboratories and determined that the gauge was presently owned by U.S. Engineering Laboratories (USEL) of Rahway, New Jersey. USEL is a Region I licensee and is authorized to use various nuclear gauges, including Troxler Model 3411B by NRC License No. 29-30107-01.

Region I contacted USEL who acknowledged that one of their gauges was missing. On March 7, 2006, a Region I inspector visited the sites where the gauge was found by PFD and the location where it was being stored temporarily at their facility. The Operations Manager (OM) of USEL met with the inspector at the PFD storage location and positively identified the gauge as belonging to USEL. The OM transported the gauge in its transport container back to the USEL facility in Broomall, Pennsylvania. The inspector visited the Broomall facility on March 23 and 28, 2006, and reviewed records of use and control of this gauge in particular, and the licensee's procedures for control of its gauges in general. The records of use for this particular gauge were not complete, and it could not be determined when or who had last removed it from the storage location at the Broomall facility.

As a result of this inspection, four apparent violations were identified: (1) failure to perform a physical inventory of all gauges at the required frequency; (2) failure to control licensed material from unauthorized removal; (3) failure to follow the licensee's procedure for maintaining logs of gauge use; and (4) failure to notify the NRC of theft or loss of licensed material.

REPORT DETAILS

I. Organization and Scope of the Program

a. Inspection Scope

The inspector reviewed the organization and scope of the licensee's Radiation Safety Program. Information was gathered by a review of records, interviews with cognizant personnel, and through direct observations.

b. Observations and Findings

U.S. Engineering Laboratories, Inc. (USEL) is a geotechnical and construction materials testing firm and is a subsidiary of Bureau Veritas (formerly U.S. Laboratories, Inc.). USEL maintains NRC License No. 29-30107-01 that authorizes the use of portable nuclear density gauges (gauges) at temporary job sites. USEL is authorized to possess a variety of gauges, including Humboldt Scientific Model 5001; Troxler Electronic Laboratories Models 4640, 3411B, and 3400 Series; and CPN International Models MC Series PORTAPROBEB, MC-S-24 STRATAGAUGE, and 500 Series (501, 502, and 503). USEL possesses 54 gauges, has approximately 30 authorized users, and has three permanent authorized use locations. Approximately 32 gauges are assigned to USEL's main office in Rahway, New Jersey, approximately 13 are assigned to the Broomall, Pennsylvania office, and approximately 9 gauges are assigned to the Atlantic City, New Jersey office. A Troxler Model 3411B, Serial No. 9524 was among the 13 gauges that were assigned to the Broomall office.

c. Conclusions

Licensed activities were limited to those authorized by NRC license No. 29-30107-01. No violations or safety concerns were identified.

II. Management Oversight of the Program

a. Inspection Scope

The inspector reviewed management oversight of NRC licensed activities. Information was gathered by a review of records and through interviews of cognizant personnel.

b. Observations and Findings

The Radiation Safety Officer (RSO) is primarily responsible for the oversight of all licensed activities including compliance with license conditions, source security, physical inventories, leak testing, staff training, source transportation, and the generation and maintenance of program records. The RSO is assisted in the performance of these duties by key individuals located at each authorized use location. For example, the Operations Manager (OM) at the Broomall facility assists the RSO with day-to-day activities by performing source inventories, leak testing, training of gauge users, and maintenance of records. The RSO reports directly to the Regional Chief Executive. The

RSO also performs an annual audit of the content and implementation of the radiation safety program and submits results to the Corporate Director and Regional Chief Executive.

One of the responsibilities of the RSO is to ensure compliance with the requirements of the radiation safety program. The program requires, in part, that: (1) all sealed sources be tested for leakage at intervals not to exceed six months; (2) proper authorities are notified in case of theft; (3) unusual occurrences involving the gauges are investigated; and (4) that corrective actions are taken in the event of non-compliance.

During a review of leak test records, the inspector noted that one nuclear density gauge assigned to the Broomall facility, a Troxler Model 3411B gauge, Serial No. 9524, containing approximately 8 millicuries of Cs-137 and approximately 44 millicuries of Am-241 was not leak tested at the required frequency. The RSO stated that on September 30, 2005, he performed the semi-annual inventory and leak tests of gauges assigned to the Broomall facility, and noted that Serial No. 9524 was not present. The RSO informed the OM that he would need to locate the gauge and leak test it, and notify him of the results. The RSO stated that he sent e-mails to the OM every two weeks from October through December, indicating that the leak test for this gauge was overdue, however the OM never responded. The RSO stated that he contacted the Unit Business Manager at the Broomall facility who said he would investigate, but that he did not raise the issue to his senior management. The RSO stated that the next time he heard anything about the matter was on March 6, 2006, when he was notified by NRC that a Troxler Model 3411B moisture density gauge, Serial No. 9524, had been recovered by the Philadelphia Fire Department (PFD). See Section III for additional details regarding the missing source.

NRC License No. 29-30107-01, Amendment No. 6, License Condition No. 14, requires the licensee to conduct a physical inventory every six months, to account for all sources and/or devices received and possessed under the license, and the failure to complete the inventory for the gauge represented an apparent violation of NRC license requirements.

The inspector noted that the RSO's failure to confirm the location of the source contributed to the licensee's failure to identify that the licensee had lost control of the source and prevented the licensee from notifying the NRC of the lost source as required by 10 CFR 20.2201.

c. Conclusions

One apparent violation of NRC licensee requirements was identified related to the failure of the licensee to complete a physical inventory of all sources as required by NRC License No. 29-30107-01, Amendment No. 6, License Condition No. 14.

III. Lost Source and Recovery

a. Inspection Scope

The inspector reviewed the circumstances surrounding the discovery of an abandoned nuclear gauge which was confirmed with the manufacturer to be owned by USEL. Information was gathered by interviews with cognizant personnel, review of records, and direct inspection of the Philadelphia Fire Academy storage area, and the McNulty Road site in Northeast Philadelphia where the gauge was found.

b. Observations and Findings

On March 2, 2006, a PFD representative notified NRC Region I that a box containing a Troxler Model 3411B, Serial No. 9524 nuclear density gauge was found by an employee of the Philadelphia Water Department (PWD), abandoned in a wooded area, adjacent to an industrial complex, near McNulty Road in Northeast Philadelphia. The box appeared to have been discarded with other items approximately 15 - 30 feet from the road. The box was partially covered with mud and other debris, and appeared to have been lying there for several weeks. The PWD notified the PFD, who recovered the source and placed it in a storage area at the Philadelphia Fire Academy. The PFD representative stated that the box was locked and that their radiological surveys indicated that the box contained radioactive material. The PFD representative stated that the serial number on the outer box was 9524 and the gauge was being stored at their facility in Northeast Philadelphia until ownership of the box could be established.

Region I contacted Troxler Electronic Laboratories and determined that USEL presently owned the gauge. On March 6, 2006, Region I called USEL to discuss the discovery of the gauge. USEL acknowledged that a Troxler Model 3411B gauge, Serial No. 9524, was indeed missing from their Broomall facility. The OM agreed to meet the inspector at the PFD facility where the gauge was being stored.

On March 7, 2006, the inspector visited the PFD facility in Northeast Philadelphia where the gauge was stored. The inspector, PFD representatives, and USEL's OM examined the container. The container was a transport container that is used to transport Troxler gauges. The inspector noted that the transport container's lock was intact and there was no evidence of tampering with the lock. USEL's OM opened the container and the inspector noted that there was a Troxler Model 3411B moisture density gauge inside the container. The sealed sources were locked in the shielded position. Surveys of the gauge made by the inspector indicated a dose rate of 5.0 mR/h at the surface of the gauge in the vicinity of the source location, and a dose rate of 0.3 mR/hr at a distance of one meter, which was consistent with the Transport Index on the container label. The inspector's surveys confirmed that the source was intact and that there had been no spread of contamination onto the outside surfaces of the source container or into any areas of the Philadelphia Fire Academy storage area. The OM positively identified the gauge as the one missing from their Broomall facility. He transported the container and the gauge to their facility.

The inspector and PFD representatives went to the location where the source was found, approximately 15 - 30 feet from McNulty Road, in Northeast Philadelphia. The site was littered with miscellaneous debris. The inspector performed radiological

surveys and found no elevated radiation readings. The inspector noted that the gauge had been left unattended for an unknown period of time in an unrestricted area, while it was located at McNulty Road.

The inspector discussed with USEL's OM that 10 CFR 20.1801 requires licensees to secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas, and that 10 CFR 20.1802 requires licensees to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage, and that the failure to maintain control of the source represented a violation of NRC requirements. The licensee did not secure from unauthorized removal a Troxler portable gauge containing approximately 8 millicuries of cesium-137 (Cs-137) and 44 millicuries of americium-241 (Am-241) from the storage area in its Broomall facility, which is a controlled area, nor did the licensee control and maintain constant surveillance of this licensed material.

c. Conclusions

One apparent violation of NRC requirements of 10 CFR 20.1801 and 10 CFR 20.1802 was identified regarding the failure of the licensee to properly secure a Troxler Model 3411B gauge from unauthorized removal and/or the failure to control and maintain constant surveillance of licensed material that is in an unrestricted area and that is not in storage.

IV. Material Receipt, Use, Transfer, and Control

a. Inspection Scope

The inspector reviewed licensee policies for material receipt, use, transfer and control of licensed materials, and events which led to the lost Troxler Model 3411 B gauge. Information was gathered through interviews of cognizant personnel, reviews of records, and through direct inspection of USEL's Broomall facility.

b. Observations and Findings

The RSO reported that he conducts inventory of gauges and collects leak test samples every six months. The licensee's records indicated that the previous inventory was conducted on April 26, 2005. The RSO stated that he conducted the semi-annual inventory and gauge leak test at the Broomall facility on September 30, 2005. The inspector noted that inventory and leak test records were complete except for gauge, Serial No. 9524, which was not present. He stated that he instructed the OM to locate the gauge, leak test the gauge, and send him the leak test sample for analysis.

The OM stated that the gauge was assigned to user J. Figueroa at the University of Pennsylvania temporary job site on June 24, 2005. Mr. Figueroa stated that he never used the gauge and gave it to user S. Casey to return to storage. Mr. Casey remembered returning a gauge, but could not recall its serial number, nor did he document its return in the control log. He stated that he had assigned the gauge to user D. Griffin on May 19, 2005, for work at a job site in Bensalem, Pennsylvania, and Mr. Griffin transferred it to Mr. Figueroa on June 24, 2005, for use at a site in Philadelphia. The OM stated that his work records indicated that Mr. Griffin performed soils work in

the months of September and October, 2005, but the gauge was not signed out for this work. He explained that it was a common practice at his facility for the users to use the same gauge for the same types of work, and therefore, it was highly likely that Mr. Griffin used the gauge in his work during September and October, although the control logs did not indicate this. Mr. Griffin resigned in January, 2006. The OM stated that he had not been successful in contacting him.

The inspector reviewed the Gauge User's Log at the Broomall facility and noted that records for gauge, Serial No. 9524 were not maintained in that the information provided for the gauge location, dates of use, and users of the gauge were either incorrect or not completed. The inspector discussed USEL's corrective actions for a previous violation, as described in their letter dated January 27, 2004, (ML0450430046). USEL committed in their license to follow the Operating and Emergency Procedures contained in NUREG-1556, Vol. 1, Appendix H, for routine use of gauges. The operating procedures contained in Appendix H to NUREG-1556, require licensee staff to sign out gauges in a log book including the dates of use, names of the authorized users that will be responsible for the gauge, and the temporary job sites where the gauge will be used.

The inspector stated that the failure to update and maintain the Gauge User's Log, as required by NRC License No. 29-30107-01, Amendment No. 6, Condition No. 20, was an apparent violation of NRC requirements. The inspector also noted that the failure to update the Gauge User's Log prevented USEL from being able to properly track the use and control of the gauge, and was likely a causal factor in the loss of the gauge.

The OM stated that he knew that he is supposed to inform the RSO if there is any problem locating the gauges; however, he did not inform the RSO about the missing gauge because he believed that he could locate it. The RSO stated that he sent e-mails to the OM every two weeks from October through December 2006, indicating that the leak test for this gauge was overdue, however the OM never responded. The RSO stated that he also contacted the Unit Business Manager at the Broomall facility who said he would investigate. The RSO stated that the next time he heard anything about the matter was when he was contacted by NRC on March 6, 2006.

Licensee records showed that the Troxler Model 3411B, moisture density gauge, Serial No. 9524, contained 44 millicuries of Am-241, which exceeds 1000 times the 10 CFR 20 Appendix C quantity of 0.001 microcuries. The inspector discussed the NRC reporting requirements in 10 CFR 20.2201, which require the licensee to immediately report, after the occurrence becomes known to the licensee, any lost, stolen, or missing licensed material in an aggregate quantity greater than 1000 times the quantity specified in Appendix C to Part 20, under such circumstances that it appears to the licensee than an exposure could result to persons in an unrestricted area.

Based on the information provided by licensee staff, the inspector concluded that the licensee staff had sufficient information to conclude that the gauge was missing. Therefore, USEL's failure to immediately report the loss of the gauge represents an apparent violation of 10 CFR 20.2201(a).

c. Conclusions

The following two apparent violations were identified:

- [1] The licensee failed to update and maintain the Gauge User's Log, as required by NRC License No. 29-30107-01, Amendment No. 6, Condition No. 20.
- [2] The licensee failed to immediately notify NRC to report the loss of the gauge as required by 10 CFR 20.2201(a).

IV. Exit Meeting

At the conclusion of the inspection on March 28, 2006, the inspector discussed the facts that were collected during the inspection regarding the discovery of a Troxler Model 3411B portable gauge in Northeast Philadelphia by an employee of the PWD, which turned out to be missing from the licensee's inventory. The following four apparent violations were discussed:

1. Failure to perform a semi-annual physical inventory of all gauges in their possession is an apparent violation of License Condition No. 14.
2. Failure to secure licensed materials is an apparent violation of 10 CFR 20.1801 and 20.1802.
3. Failure to properly document when gauges are returned or removed from storage is an apparent violation of License Condition 20, and the letter dated January 27, 2004 which states that the licensee will commit to Appendix H of NUREG-1557, Vol. 1, Operating Procedures.
4. Failure to notify the NRC as required by 10 CFR 20.2201(a)(i).

The Regional Chief Executive, Corporate Director of Training, and the RSO explained that they have already initiated immediate corrective actions which included the following: (1) performance of a gauge inventory; (2) requirement of time clerks to obtain and document gauge serial numbers and location on payroll sheets; (3) changing their procedure for logging the gauges in/out to mandate that this has to be done by the OM; and (4) re-training gauge users to contact the RSO in the event of a missing gauge. The RSO had stated that they were considering disciplinary actions against those individuals who did not properly document the removal/return of gauges in the control log, and against the OM for not reporting the loss of this gauge to the RSO. The inspector explained the range of enforcement actions that could be taken by NRC with respect to these inspection findings.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- *Jack Branyan, Operations Manager, Broomall facility
- *Martin Mygrant, Radiation Safety Officer, Field Services Manager
- *Robert E. Hughes, Regional Chief Executive Officer
- Rafael E. Silva, Corporate Director, Training, Health & Safety
- Jamie Figueroa, authorized gauge user

*Denotes attendance at the exit interview on March 28, 2006.

FACTUAL SUMMARY OF OI INVESTIGATION REPORT NO. 1-2006-027

On April 7, 2006, the U. S. Nuclear Regulatory Commission's (NRC) Office of Investigations (OI), Region I (RI) Field Office, initiated an investigation to determine if employees of U.S. Engineering Laboratories' (USEL), Rahway, NJ, and Broomall, PA, offices deliberately violated USEL's NRC license and NRC regulations by (1) failing to properly control a Troxler density gauge not in use or storage, and (2) failing to report a missing gauge. Specifically, on March 2, 2006, a gauge was found abandoned in a public, unrestricted area of Philadelphia, Pennsylvania, by the Philadelphia Fire Department. The NRC determined that this gauge was last used by a USEL authorized user on June 24, 2005, and was not reported missing by USEL.

Based on the evidence developed during its investigation, OI did not substantiate that USEL employees deliberately failed to control NRC licensed material not in storage. Interviews with eight current or former USEL employees did not provide sufficient evidence to determine that the failure to control licensed material, which resulted in the lost of the gauge, was a result of actions by a particular employee.

OI did substantiate that the former Operations Manager (OM) of the Broomall facility, who is referred to in the investigation report as the Assistant Radiation Safety Officer, deliberately failed to report the missing gauge to the NRC for a minimum of five months. OI determined that the former OM, during the time that the gauge was lost, was fully aware that the gauge was not in USEL's control and its location was not known. The evidence supporting this conclusion included: (1) a review of records and interviews with eight current or former USEL employees, which indicated that as of August 2005, the former OM was aware that the gauge was not in USEL's control and its location was not known; (2) the statement of the RSO that, following an inventory of USEL gauges on September 30, 2005, he was told by the former OM that the gauge was at a job site and that he first became aware that the gauge had been missing when he was notified by the NRC that it had been found; (3) a review of training and experience documentation which indicated that the former OM was knowledgeable of the NRC license requirements for control of licensed material, and the requirement to immediately report lost or stolen material; and (4) the admission of the former OM that he was not in control of the gauge from October 2005 until March 2006 when the gauge was located by the Philadelphia Fire Department.