

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

INSPECTION REPORT

Inspection No. 15000045/2011006
Docket No. 15000045
VA License No. 683-298-1 (formerly NRC License No. 45-25554-01)
EA No. EA-11-071
Licensee: Construction Testing & Engineering, Inc.
Location: 9111-A Industry Drive
Manassas Park, VA 22150
Inspection Dates: March 15 – April 20, 2011
Dates Follow-up
Information Received: March 22, 2011, April 11, 2011, and April 13, 2011

Inspectors:	/RA/	05/18/11
	_____ Shawn Seeley Health Physicist Decommissioning Branch Division of Nuclear Materials Safety	_____ date
	/RA J. A. Joustra for/	05/19/11
	_____ Laurie A. Kauffman Health Physicist Decommissioning Branch Division of Nuclear Materials Safety	_____ date
Approved By:	/RA/	05/19/11
	_____ Judith A. Joustra, Chief Decommissioning Branch Division of Nuclear Materials Safety	_____ date

EXECUTIVE SUMMARY

Construction Testing & Engineering, Inc.
NRC Inspection Report No. 15000045/2011006

An announced special inspection at Construction Testing and Engineering, Inc. (CTE) in Manassas Park, Virginia, was conducted on March 15, 2011 and concluded on April 20, 2011. CTE holds a Commonwealth of Virginia (Agreement State) license. This was a reactive inspection in response to a report of a stolen portable moisture density gauge (portable gauge) on October 26, 2010 (Licensee Event Report (LER) Number 2010-013 and Nuclear Materials Event Report (NMED) Item Number 100530) and a safety inspection to review CTE's radiation protection program regarding activities in an area under NRC jurisdiction (non-Agreement State) that had not been appropriately authorized. This inspection was conducted pursuant to Inspection Manual Chapter (IMC) 2800 and Inspection Procedure (IP) 87124.

The inspection included interviews with licensee representatives, including, the radiation safety officer and the authorized user involved with the event, to establish an understanding of the event and subsequent portable gauge recovery. The inspection also included a review of CTE's portable gauge use logs, shipping papers, training records, including the required hazardous material (hazmat) employee training every three years, and the report documenting the theft and the recovery of the portable gauge.

Within the scope of this inspection, three apparent violations of NRC regulations were identified. The first apparent violation involved the failure to, at least three days before engaging in a licensed activity for the first time in a calendar year, file a submittal containing an NRC Form 241, "Report of Proposed Activities in Non-Agreement States," with the Regional Administrator of the appropriate NRC regional office, as required by 10 CFR Part 150.20(b)(1). The second apparent violation involved the failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance, as required by 10 CFR Part 30.34(i). The third apparent violation involved the failure to comply with the applicable requirements of the Department of Transportation (DOT) regulations in 49 CFR Parts 172, as required by 10 CFR 71.5(a), specifically, the failure to provide hazardous materials (hazmat) refresher training every three years to the hazmat employees, as required by 49 CFR Part 172.704(c). The third apparent violation is a repeat finding.

REPORT DETAILS

I. Program Scope and Inspection History

Construction Testing and Engineering, Inc. (CTE) holds a portable gauge license with the Commonwealth of Virginia (License Number VA 683-298-1). CTE previously held a US NRC license (License Number 45-25554-01) that was transferred to Virginia upon their recognition as an Agreement State in March 2009. CTE informed the NRC on February 6, 2009, they did not wish to continue the use of licensed material in areas under NRC jurisdiction (ADAMS Accession Number ML090500691). Therefore, their NRC license was amended, in a letter dated March 31, 2009, to remove all reference to locations of use and/or storage in non-Agreement States, leaving only the authorization to conduct licensed operations in the Commonwealth of Virginia (ADAMS Accession Number ML090830675). Their NRC license was subsequently converted to a Commonwealth of Virginia license on December 14, 2010.

During the previous NRC inspection, conducted on May 17, 2006, one Severity Level IV (SL IV) violation involving the failure to provide the required hazmat refresher training every three years to the hazmat employees was identified.

CTE is a small engineering and testing company that employs three people: two portable gauge users and a company radiation safety officer (RSO)/vice president. Portable gauges are utilized primarily from April through October on various construction projects two to three times per week. CTE currently possesses eight portable gauges.

II. Sequence of Events

a. Inspection Scope

The inspector interviewed the authorized user (AU), whose vehicle was stolen with the Troxler portable gauge locked in the trunk, to determine the sequence of events that resulted in the portable gauge being declared stolen. In addition, the inspector interviewed the RSO, reviewed selected records, and CTE's compliance with regulatory requirements relevant to the stolen portable gauge.

b. Observations and Findings

On October 26, 2010, a Troxler nuclear density portable gauge, Model 3440, was reported stolen when an AU's vehicle was stolen while located at a temporary jobsite. The AU stated that upon completion of testing, he placed the portable gauge in its transport case, locked the case, and loaded it into the trunk of his vehicle. He noticed a contractor foreman. He exited the vehicle, with the portable gauge locked in the trunk, to give the foreman copies of the paperwork (approximately 50 feet away). While talking with the foreman, someone entered his vehicle and drove off with his car. The AU further stated that he left the vehicle unattended for approximately 1-2 minutes and during that time, the vehicle was not in his direct line of sight. The AU indicated he did

not know where his keys were during this period. The AU stated the portable gauge had been locked in the trunk of the vehicle, but not secured with a second lock within the trunk. The inspector determined that the portable gauge was not secured in the trunk with a second tangible barrier as required by 10 CFR 30.34(i). The temporary jobsite was located on 18th Street, SE in the District of Columbia (DC).

The inspector also determined that CTE did not file the appropriate documents to request performing a licensed activity under reciprocity before conducting the licensed activity. It was further determined that the AU transported the device without having completed the required three year US DOT hazmat refresher training.

CTE notified the NRC's Emergency Operations Center (HOO) of the theft of one of its portable gauges on October 26, 2010 at approximately 1630 hours (the vehicle was determined to be missing at approximately 1615 hours). CTE submitted a 30-day report, dated November 18, 2010.

The next day, CTE received a phone call from a member of the public who stated that he had found a "big yellow box" that belonged to CTE. He called the emergency contact number found in a packet located next to the equipment. He indicated the portable gauge was not in the transport case but laying next to the case near a dumpster. The dumpster was behind an apartment building in the general area where the vehicle had been stolen. CTE personnel determined the source handle was locked and there was no obvious sign of damage to the portable gauge. CTE personnel secured the portable gauge in its transport case and returned to the CTE facility, where a leak test was performed and sent to Troxler for analysis. The results depicted the source was not leaking. The vehicle was recovered seven days later.

c. Conclusions

Within the scope of this inspection, three apparent violations of NRC regulations were identified. The first apparent violation involved the failure to, at least three days before engaging in each activity for the first time in a calendar year, file a submittal containing an NRC Form 241, "Report of Proposed Activities in Non-Agreement States," with the Regional Administrator of the appropriate NRC regional office, as required by 10 CFR Part 150.20(b)(1). The second apparent violation involved the failure to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee, as required by 10 CFR Part 30.34(i). The third apparent violation involved the failure to comply with the applicable requirements of the Department of Transportation (DOT) regulations in 49 CFR Part 172, as required by 10 CFR 71.5(a), specifically, the failure to provide hazmat refresher training every three years to hazmat employees, as required by 49 CFR Part 172.704(c). The third apparent violation is a repeat finding.

III. Notifications and Reports

a. Inspection Scope

The inspector interviewed the authorized user and the radiation safety officer, and reviewed CTE's reporting of the incident.

b. Observations and Findings

CTE notified the HOO at 1630 on October 26, 2010, approximately 15 minutes after the vehicle containing the licensed portable gauge was discovered missing. The Virginia Radiation Control Program (VRCP) was also notified and the theft was reported to the DC police who responded to the scene.

This timely notification to the HOO met the immediate reporting requirements of 10 CFR 20.2201(a)(i), which requires in part, that each licensee shall notify the NRC immediately after it becomes known, of any lost, stolen or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in appendix C to Part 20.

The device was recovered the following morning. CTE notified the HOO and VRCP the device had been located.

CTE submitted an incident report to the NRC, dated November 18, 2010, describing the details surrounding the event and the subsequent recovery of the portable gauge and vehicle. The timely submission of the incident report met the requirements of 10 CFR 20.2201(b), which requires, in part, that each licensee who makes a report required by paragraph (a) of 10 CFR 20.2201 shall submit a follow-up report within 30 days of the initial report.

c. Conclusions

The notification and reporting requirements were met. No violations were identified.

IV. Corrective Actions

a. Inspection Scope

The inspector reviewed corrective actions taken by CTE in response to the stolen portable gauge. In addition the inspector interviewed the AU, RSO and reviewed selected records.

b. Observations and Findings

CTE submitted additional information following the March 15, 2011 inspection to explain the corrective actions taken since the event to prevent recurrence. These communications are found in a letter dated March 22, 2011 (ADAMS Accession Number

ML110910533) and four separate emails sent on April 11, 2011 (ADAMS Accession Number ML111050104).

The corrective actions were also discussed at the preliminary exit meeting, held via teleconference, on March 24, 2011. In summary, CTE has agreed not to perform any work in NRC jurisdiction unless they have applied for reciprocity. CTE was made aware of and agreed to follow 10 CFR 30.34(i) requirements and Appendix H of NUREG-1556, Vol.1 for the security of portable gauges. CTE also scheduled and completed an online hazmat refresher training class for the two AUs on March 16, 2011 and March 19, 2011.

c. Conclusions

The inspector determined that corrective actions taken appeared to appropriately address the NRC finding and should prevent recurrence.

V. Exit Meeting

A preliminary exit meeting was conducted on March 15, 2011 to discuss the scope of the inspection and the inspector's initial observations. Additional information was received from CTE on March 22, 2011. On March 24, 2011, a second preliminary exit meeting was conducted by telephone with the RSO to discuss the inspectors' findings. A closeout exit meeting was held by telephone to discuss the inspector's final observations and findings on April 20, 2011. CTE acknowledged the inspection findings.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

*@\$ Hassan Tajick, RSO/Owner
#* Nadew Hailu, Authorized user

Individuals (s) present at onsite inspection (March 15, 2011)

* Individuals (s) present at onsite exit meeting (March 15, 2011)

@ Individuals (s) present on preliminary exit telephone call (March 24, 2011)

\$ Individuals (s) present at final exit telephone call (April 20, 2011)