

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Inspection No. 15000016/2012001  
Docket No. 15000016  
KY License No. KY-201-098-52  
Licensee: L.E. Gregg Associates  
Location: 440 East High Street  
Lexington, KY 40507  
Inspection Dates: April 26, 2012 through June 8, 2012

Inspector:	<b>/RA/</b> _____ Michael Reichard Health Physicist Materials Security and Industrial Branch Division of Nuclear Materials Safety	<b>06/22/12</b> _____ date
Approved By:	<b>/RA/</b> _____ Blake D. Welling, Chief Materials Security and Industrial Branch Division of Nuclear Materials Safety	<b>06/25/12</b> _____ date

## **EXECUTIVE SUMMARY**

L.E. Gregg Associates  
NRC Inspection Report No. 15000016/2012001

L.E. Gregg Associates is a geotechnical engineering firm that is licensed by the Commonwealth of Kentucky (KY-201-098-52) to conduct material density testing using Seaman Nuclear Corporation, Troxler, and CPN Corporation portable nuclear density gauges, which can contain up to 4.5 mCi of radium-226, 10 mCi of cesium-137, 66 mCi of californium-252, and/or 50 mCi of americium-241 depending on the specific model.

The NRC determined that L.E. Gregg Associates worked in the State of West Virginia without filing for reciprocity with the NRC as required. As a result, one apparent violation of 10 CFR 150.20(b) was identified for a failure to file for reciprocity with the NRC for work performed in the State of West Virginia, on December 12-16, 2011; January 5-7, 2012; and February 21 - 24, 2012.

## **REPORT DETAILS**

### **I. Organization and Scope of the Program**

#### a. Inspection Scope

The inspector reviewed the organization and scope of the licensee's portable gauge program. Information was gathered through direct inspection, reviews of records, and interviews with cognizant individuals.

#### b. Observations and Findings

L.E. Gregg Associates is a geotechnical engineering firm that is licensed by the Commonwealth of Kentucky (KY-201-098-52) to conduct material density testing using Seaman Nuclear Corporation, Troxler, and CPN Corporation portable nuclear density gauges, which can contain up to 4.5 mCi of radium-226, 10 mCi of cesium-137, 66 mCi of californium-252, and/or 50 mCi of americium-241 depending on the specific model. Jason Ainslie is the President and Tony Goodrich is the Radiation Safety Officer.

#### c. Conclusions

No violations of NRC requirements were identified.

### **II. Material Control**

#### a. Inspection Scope

The inspector reviewed L.E. Gregg Associates' material control program. Information was gathered by a review of records and interviews with cognizant individuals.

#### b. Observations and Findings

Records showed that L.E. Gregg Associates maintained current source leak test results and all results were negative, including results for tests performed on the gauge used in the State of West Virginia. L.E. Gregg Associates also maintained adequate records of source inventory, radiation exposure records, and annual self-assessments. During interviews, an authorized user demonstrated a thorough knowledge of the management, oversight, and control of a portable gauge program including methods to comply with gauge security requirements outlined in 10 CFR 30.34(i) for storage and transportation of portable gauges.

#### c. Conclusions

L.E. Gregg Associates maintained adequate safety and security controls for their licensed gauge. No violations of NRC requirements were identified.

### III. Material Receipt, Use, Transfer, and Control

#### a. Inspection Scope

The inspector reviewed L.E. Gregg Associates' use of a portable gauge in the State of West Virginia. Information was gathered through a review of records and interviews with the president.

#### b. Observations and Findings

The inspector reviewed the portable gauge use logs for the last five years. Three periods of use were identified in NRC jurisdiction, December 12-16, 2011; January 5-7, 2012; and February 21-24, 2012. The same portable gauge was used for all three jobs, a Troxler model 3411, which contained a 9 millicurie Cs-137 sealed source and a 44 millicurie Am-241 sealed source. The same authorized user transported and used the gauge at each location. A review of applicable records, including training records, leak test records, transportation paperwork, and use logs, determined that device was used, transported, and secured properly.

However, the inspector determined, from discussions with the company president, that L.E. Gregg Associates failed to file for reciprocity with the NRC, as required. The president indicated that heavy staff turnover and unclear roles and responsibilities created knowledge gaps during this timeframe that resulted in a failure to identify the need to file for reciprocity. The current company president joined L.E. Gregg Associates in October 2011. The licensee had three Radiation Safety Officers in a nine-month period, one of which left the company in November 2011. Also, a review of the licensee's use logs indicated that they had not used licensed material in NRC jurisdiction since at least 2006. The licensee was not familiar with the requirement to file for reciprocity because they had not worked in NRC jurisdiction for at least five years.

The inspector continued the inspection from the office, primarily reviewing L.E. Gregg Associates' corrective actions. As an immediate corrective action, L.E. Gregg Associates submitted the appropriate reciprocity paperwork and fees for 2012 on May 22, 2012. L.E. Gregg Associates implemented preventative corrective actions by establishing a procedure and checklist that requires the project managers to ensure that reciprocity agreements are in place prior to performing work in NRC jurisdiction. The procedure and checklist was received by the NRC on June 7, 2012.

c. Conclusions

The NRC determined that L.E. Gregg Associates worked in the State of West Virginia without filing for reciprocity with the NRC as required. As a result, one apparent violation of 10 CFR 150.20(b) was identified for a failure to file reciprocity with the NRC for work performed in the State of West Virginia, on December 12-16, 2011; January 5-7, 2012; and February 21-24, 2012.

10 CFR 30.3 states, in part, that no person shall own, possess, or use byproduct material except as authorized in a specific or general license issued in accordance with the regulations in this chapter.

10 CFR 150.20(a) states, in part, that any person who holds a specific license from an Agreement State is granted an NRC general license to conduct the same activity in non-Agreement States, provided that the provisions of 10 CFR 150.20(b) have been met.

10 CFR 150.20(b)(1) requires, in part, that any person engaging in activities in non-Agreement States, shall, at least 3 days before engaging in each such activity, 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.

Contrary to the above, on December 12-16, 2011; January 5-7, 2012; and February 21-24, 2012, L.E. Gregg Associates, which holds only a Kentucky (Agreement State) license, engaged in activities at temporary jobsites in West Virginia (a Non-Agreement State), involving the use and storage of a portable nuclear gauge containing a cesium-137 sealed source and an americium-241 sealed source, without either obtaining a specific license issued by the NRC or, at least 3 days before engaging in such activity, filing a submittal containing an NRC Form 241, "Report of Proposed Activities in Non-Agreement States," a copy of its Agreement State specific license, and the appropriate fee with the Regional Administrator of the appropriate NRC regional office.

#### **IV. Exit Meeting**

On June 8, 2012, the inspector conducted an inspection exit meeting by telephone with Jason Ainslie, President of L.E. Gregg Associates. The inspector described the inspection findings, including one apparent violation of 10 CFR 150.20(b). Mr. Ainslie acknowledged the inspection findings.

## **PARTIAL LIST OF PERSONS CONTACTED**

Jason Ainslie, P.E., L.E. Gregg Associates, President  
Tony Goodrich, L.E. Gregg Associates, Radiation Safety Officer

Curt Pendergrass, PhD, Kentucky Department of Health, Supervisor

## **INSPECTION PROCEDURES USED**

IP 87124, Fixed and Portable Gauges

## **LIST OF DOCUMENTS REVIEWED**

Commonwealth of Kentucky, Radioactive Materials License No. 201-098-52, Amendment 47  
L.E. Gregg Associates Leak Test Results  
L.E. Gregg Associates Source Inventories  
L.E. Gregg Associates Dosimetry Records  
L.E. Gregg Associates Portable Gauge Use Logs  
NRC Form 241, received and approved by NRC Region I on 05/22/2012  
Project Pre-Construction Procedures and Checklist received by NRC Region I on June 7, 2012

## **LIST OF ACRONYMS USED**

Am-241	Americium-241
CFR	Code of Federal Regulations
Cs-137	Cesium-137
IP	Inspection Procedure
KY	Kentucky
mCi	Millicuries
NRC	Nuclear Regulatory Commission