

U.S. NUCLEAR REGULATORY COMMISSION  
REGION I

INSPECTION REPORT

Inspection No. 03033097/2004001  
Docket No. 03033097  
License No. 45-25239-01  
Licensee: ECS, Ltd  
Location: 2119-D N. Hamilton St.  
Richmond, VA 23230  
Inspection Dates: May 5, 2004

***/RA by John D. Kinneman Acting For/ 5/13/05***

Inspector:	_____ N. Jeff Griffis Health Physicist	_____ date
Approved By:	<b><i>Original signed John D. Kinneman</i></b> _____ John D. Kinneman, Chief Security and Industrial Branch Division of Nuclear Materials Safety	<b><i>May 13, 2005</i></b> _____ date

## **EXECUTIVE SUMMARY**

ECS, Ltd  
NRC Inspection Report No. 03033097/2004001

This reactive, unannounced inspection included discussions with cognizant licensee representatives, observations of licensed storage facilities, and a review of selected records.

The inspection was conducted at the licensee's office in Richmond, Virginia. During the inspection, the inspector determined that the licensee had transferred a portable moisture density gauge containing 40 millicuries (mCi) of cesium-137 (Cs-137) and 10 mCi of americium-241 (Am-241) to Universal Calibrations, a company that was not licensed by the NRC or an Agreement State to receive or possess byproduct material. Since ECS staff had never verified that the transferee was licensed to receive byproduct material, these transfers were an apparent violation of 10 CFR 30.41(c).

## **REPORT DETAILS**

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

#### **a. Inspection Scope**

The inspector interviewed personnel and reviewed selected records to determine the program organization and scope

#### **b. Observations and Findings**

At the time of the inspection, the licensee was a large engineering firm with several branch offices located in Virginia and surrounding Agreement States where portable gauges were stored. The company had elected to maintain a separate NRC license for each office located in Virginia. At the time of the inspection, each office listed a separate Radiation Safety Officer (RSO) on their individual licenses, and the Corporate Radiation Safety Officer RSO worked out of the Chantilly, Virginia office.

Through observations and discussions with the RSO, the inspector determined that the Richmond office possessed portable moisture density gauges in a secure storage area (including Troxler Model 3400 and 4600 series, and CPN Model MC1 series). According to the RSO, the Richmond office employed over 30 qualified gauge operators, and the gauges were used on a daily basis as work permitted. The RSO stated that all gauges were returned to the storage location at the office at the end of a work day.

#### **c. Conclusions**

No violations were identified

### **II. Material Receipt, Use, Transfer, and Control**

#### **a. Inspection Scope**

On May 5, 2004, a special inspection was conducted at the Richmond, VA office of ECS, Ltd. to determine whether the licensee had transferred a portable gauge containing licensed material to a company that was not licensed by the NRC or an Agreement State. The inspection included observations, interviews with knowledgeable ECS staff, and a review of selected records.

b. Observations and Findings

Through discussions with licensee representatives and review of licensee documents, the inspector determined that the licensee allowed a representative of Universal Calibrations (a Maine based company) to take possession of a portable gauge containing licensed radioactive sources on September 15, 2003. The RSO stated that the representative of Universal Calibrations took the gauge off site for disposal. After interviewing cognizant ECS staff, the inspector determined that Universal Calibrations did not provide documents showing that the company was licensed by the NRC or an Agreement State to possess and use licensed material. According to licensee records, a Mr. John Myers of Universal Calibrations picked up the gauge to ship it to CPN International in CA. Through subsequent discussions with staff of the Maine Radiation Control Program (MRCP), the inspector determined that Universal Calibrations was not licensed by Maine, or any other Agreement State to possess licensed material on September 15, 2003. The inspector also spoke with the RSO of CPN International, who stated that Mr. Myers had not sent the gauge to CPN for disposal, and was using official CPN disposal forms inappropriately. This constituted an unauthorized transfer of licensed material by ECS.

10 CFR 30.41(c) states that, before transferring byproduct material to a specific licensee of the Commission or an Agreement State or to a general licensee who is required to register with the Commission or with an Agreement State prior to receipt of the byproduct material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of byproduct material to be transferred.

10 CFR 30.41(d) further requires that the transferor verifies transferee's authorization to receive the material by obtaining written documents, rather than oral certification, unless the transfer is an emergency situation.

Contrary to the above, on September 15, 2004, the licensee transferred portable gauges containing 11 millicuries of Cesium-137 and 40 millicuries of Americium-241 to Universal Calibrations, without verifying that the company was licensed to receive it. This constituted a transfer of licensed material to a company that was NOT licensed by the NRC or an Agreement State to possess or use byproduct material.

c. Conclusions

On September 15, 2003, the licensee failed to verify by method stated in 10 CFR 30.41(d) that Universal Calibrations was licensed to receive a portable gauge containing 11 millicuries of Cesium-137 and 40 millicuries of Americium-241. This failure was an apparent violation of 10CFR 30.41(c), and resulted in the transfer of licensed material to a company that did not possess an NRC or Agreement State license to receive byproduct material.

### **III. Exit Meeting**

An exit meeting was held at the licensee's Richmond, VA facility at the conclusion of the inspection on May 5, 2004. During the exit, the overall findings from the inspection were discussed, including the apparent violations of NRC regulatory requirements. The licensee was aware that the issues involved are part of an ongoing investigation. The licensee did not offer any dissenting comments.

During the exit meeting, licensee representatives did not identify any documents or processes as proprietary in nature.

## **PARTIAL LIST OF PERSONS CONTACTED**

### **Licensee**

Raymond Boyd, Project Engineer  
\*Lincoln K. Swineford, Vice President, RSO  
Stanley J. Murphy, ECS Corporate RSO  
Douglas J. Cole, ECS Corporate Counsel

\* Attended exit meeting.