

INSPECTION RECORD

Region III Inspection Report No. 030-11906/10-01  
License No. 12-16941-01 Docket No. 030-11906

Licensee (Name and Address):  
Professional Service Industries, Inc.  
1901 South Meyers Road, Suite 400  
Oakbrook Terrace, Illinois 60181

Location (Authorized Site) Being Inspected: Temporary Job Site in Ponce, Puerto Rico

Licensee Contact: John Thornton, Corporate RSO Telephone No. 630-691-1490

Priority: 5 Program Code: 3121

Date of Last Inspection: 3/11/09 and 7/31/09 Date of This Inspection: 3/4/2010 with in-office review through 8/3/10 to review records of byproduct material shipments

Type of Inspection:  Initial  Announced  Unannounced  
 Routine  Special

Next Inspection Date: 08/2011 (no change)  Normal  Reduced

Summary of Findings and Actions:

- No violations cited, clear U.S. Nuclear Regulatory Commission (NRC) Form 591 or regional letter issued
- Non-cited violations (NCVs)
- Violation(s), Form 591 issued
- Violation(s), regional letter issued
- Followup on previous violations

Inspectors Andrew M. Bramnik  
Andrew M. Bramnik, Health Physicist, Region III

Date 8/17/2010

Approved Tamara E. Bloomer  
Tamara E. Bloomer, Chief, MIB, Region III

Date 8/17/10

**PART I-LICENSE, INSPECTION, INCIDENT/EVENT, AND ENFORCEMENT HISTORY**

**1. AMENDMENTS AND PROGRAM CHANGES:**

<u>Amendment No.</u>	<u>Date</u>	<u>Subject</u>
77	10/30/2009	Change of location of facility in Michigan

**2. INSPECTION AND ENFORCEMENT HISTORY:**

The licensee had no previous enforcement history from the last inspections in 2009.

**3. INCIDENT/EVENT HISTORY:**

None

## **PART II - INSPECTION DOCUMENTATION**

### **1. ORGANIZATION AND SCOPE OF PROGRAM:**

Professional Service Industries, Inc., (PSI) is an engineering firm with its corporate office in Oakbrook Terrace, Illinois. The company's NRC license authorizes the use, storage, and dispatch of portable moisture/density gauges from 12 locations listed in Condition 10 of the license. The license also authorizes their use at temporary job sites anywhere the NRC maintains regulatory jurisdiction. The company also maintains materials licenses from several Agreement States, including the State of Florida. The Corporate Radiation Safety Officer (RSO) is located at the corporate office, and is responsible for managing licensed activities at various authorized locations with the assistance of Site RSOs.

### **2. SCOPE OF INSPECTION:**

Inspection Procedure Used: 87124

Focus Areas Evaluated: Material Transfer and Compliance with Department of Transportation Requirements

This was an unscheduled inspection and was limited to the licensee's activities at a temporary job site in Ponce, Puerto Rico (Home Depot Construction site). This inspection was initiated during an inspection of another NRC licensee: Victor E. Rivera Associates. The inspector noted that a Troxler Model 3430 portable moisture/density gauge (serial No. 23471) was stored at the Victor E. Rivera Associates (VERA) facility, even though VERA's NRC license did not authorize possession of Troxler gauges. VERA personnel stated that this gauge was transferred to their facility by PSI. This prompted the inspection of PSI's activities at this job site.

Discussions with VERA's RSO indicated that the gauge belonged to the PSI branch office in Riviera Beach, Florida, and was being stored at VERA facility for use by one of PSI's authorized users (AUs). Records maintained by VERA indicated that the PSI Corporate Radiation Safety Department authorized use of the gauge at a temporary job site in Ponce, Puerto Rico, under PSI's NRC license. The gauge was shipped from Riviera Beach to the temporary job site in Ponce by PSI on October 13, 2009.

A review of gauge utilization logs indicated that the gauge arrived at the temporary job site in Ponce on October 13, 2009, via FedEx, and had been in use at the site since that date. The AU stated that he was employed by the PSI branch office in Riviera Beach, and confirmed that he transferred the gauge to the VERA facility at the end of each day for storage. On days when the AU did not use the gauge, it remained in storage at the VERA facility. The Corporate RSO informed the NRC on August 3, 2010, that this action was taken because there was no construction trailer or other structure where the AU could have secured the gauge at the job site. The AU did not contact either the Site or Corporate RSO when this took place, however. The Site and Corporate RSOs were not aware of this activity until the NRC inspection on March 4, 2010.

The storage of the gauge at the VERA facility constituted a transfer of possession of byproduct material from PSI to VERA. Prior to transferring the gauge to VERA, PSI failed to verify that VERA's license authorized them to receive Troxler gauges. As of March 4, 2010, the NRC license for VERA only authorized possession of Campbell

Pacific Nuclear gauges. After the on-site inspection, VERA requested an amendment to its license to authorize possession of Troxler gauges, and Region I approved this amendment request on March 18, 2010.

The AU possessed copies of the following documents:

1. PSI Materials License from State of Florida (No. 22-08);
2. PSI "Reciprocity" Authorization Application dated October 2, 2009, to Corporate Radiation Safety Department from John Jenkins of Riviera Beach, requesting authorization to conduct licensed activities at the Ponce location;
3. Memorandum dated October 2, 2009, from the Corporate RSO to John Jenkins of Riviera Beach, granting authorization to conduct portable gauge activities in Ponce under NRC License No. 12-16941;
4. "Shipper's Declaration for Dangerous Goods" form dated October 13, 2009. The document stated that the Shipper was PSI of Riviera Beach, the Consignee was Armando Barreras in Ponce, and the departure airport was Fort Lauderdale;
5. FedEx International Air Waybill indicating that on October 13, 2009, the gauge was shipped from Riviera Beach to Armando Berreras in Ponce;
6. PSI Leak Test Inventory/Report Form, that indicated that the gauge was leak tested on March 20, 2009; and
7. PSI Report of Radioactive Material Transfer, dated October 13, 2009, which indicated that PSI Office of Riviera Beach had transferred the gauge to the Project Home Depot in Ponce, and shipped the material via FedEx.

The documents did not include a correct Bill of Lading. The "Shippers Declaration for Dangerous Goods" was the shipping paper when the gauge was sent to the job site in Ponce from Riviera Beach. This declaration did not include the Transport Index (TI). A July 27, 2010, e-mail to the NRC from the Corporate RSO showed that the declaration was completed by hand at the time of shipping in order for the carrier to accept the package. Additionally, all of the documents listed above were stored inside the gauge transport container. The transport container was at the end of an open-bed pickup, and therefore was not readily accessible in case of an emergency. The AU stated that he always kept these documents inside the transport container while travelling to job sites.

A review of additional documents at the VERA facility indicated that on May 20, 2008, PSI's Corporate Radiation Safety Department authorized its Riviera Beach branch office to conduct licensed activities in Ponce under its NRC license. On June 3, 2008, the Riviera Beach branch office shipped a different Troxler Model 3430 gauge (serial No. 21022) directly to VERA. Prior to transferring the gauge to VERA, PSI failed to verify that VERA's license authorized them to receive Troxler gauges. Records indicated that this gauge remained in storage at the VERA facility until March 31, 2009, and was not used at any job site in Puerto Rico. The "Shippers Declaration for Dangerous Goods" for this shipment did not include the TI. Although the lack of a TI was a violation of regulatory requirements, it was determined to be of minor safety significance because the form may have been completed by hand, the TI was listed on the package labels, and the company completed corrective actions before the end of June 2010, to modify its computer template to require a TI before the form could be printed.

### **3. INDEPENDENT AND CONFIRMATORY MEASUREMENTS:**

None

4. **VIOLATIONS, NCVs, AND OTHER SAFETY ISSUES:**

- A. Title 10 Code of Federal Regulations (CFR) Part 30.41(c) requires that, prior to transferring byproduct material, the licensee 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) specifies acceptable methods for this verification.

Contrary to the above, on June 3, 2008, and on multiple occasions between October 13, 2009, and March 4, 2010, prior to the transfer of byproduct material, the licensee failed to verify that Victor E. Rivera Associates (the transferee) license authorized receipt of a Troxler portable moisture/density gauge containing sealed sources of cesium-137 and americium-241, by an acceptable method. Specifically, the gauge was held in storage at the transferee's controlled facility between June 3, 2008, and March 31, 2009, and on multiple occasions between October 13, 2009, and March 4, 2010.

The root cause of this violation was that the licensee did not originally intend to transfer the gauges to Victor E. Rivera Associates on either occasion. For the first example, the licensee was shipping multiple pieces of equipment to Ponce, and may have used the VERA facility as a single point-of-shipping address for a larger container that also included one Troxler gauge. A contributing cause of the second example was the licensee AU's belief that the gauge could not be adequately secured at the temporary job site between October 13, 2009, and March 4, 2010. The Riviera Beach Site RSO stated that there was no construction trailer or other structure where the AU could have secured the gauge at the job site. The AU believed that the VERA facility was allowable as a storage location because that licensee was authorized to possess portable gauges. Neither the Site nor Corporate RSOs were consulted until after the NRC inspector arrived at the job site. As immediate corrective actions, the licensee made arrangements to securely store their gauge at the temporary job site by acquiring a lockable intermodal container. The company also plans to increase training and awareness of the requirements when transferring material to another company. Additionally, VERA requested a license amendment to authorize possession of Troxler gauges, and Region I approved this amendment request on March 18, 2010.

This is a Severity Level IV violation (Supplement VI).

- B. 10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR 170 through 189.

49 CFR 177.817(a) requires that a carrier not transport a hazardous material unless it is accompanied by a shipping paper prepared in accordance with 49 CFR 172.200-203. Pursuant to 49 CFR 172.101, radioactive material is classified as a hazardous material.

Contrary to the above, on multiple occasions between October 13, 2009, and March 4, 2010, the licensee transported a Troxler portable moisture/density gauge containing sealed sources of cesium-137 and americium-241 outside the confines of its plant without a shipping paper. Specifically, the licensee transported the gauge between a

temporary job site and the Victor E. Rivera Associates facility, and did not possess a shipping paper for ground transportation.

The root cause of the second example was an oversight of transportation requirements. A contributing cause was the licensee AU's belief that the gauge could not be adequately secured at the temporary job site between October 13, 2009, and March 4, 2010. The licensee originally intended to ship the gauge from its branch office to the temporary job site where the gauge would remain. As such, there was no expected need for a shipping paper for local, ground transportation. However, the Riviera Beach Site RSO stated that there was no construction trailer or other structure where the AU could have secured the gauge at the job site. Therefore, because the licensee AU transported the gauge between the job site and the Victor E. Rivera Associates facility, a separate shipping paper was required. The Corporate RSO stated that there should have been a completed shipping paper in the AU's possession, regardless of his location. The Site RSO also stated that he provided two packets of information to the AU, along with a copy via e-mail, and that these documents should have contained the shipping paper. However, the AU could not provide a copy of the ground transportation shipping paper to the inspector. As corrective actions, the licensee plans to increase training and awareness of the requirements to possess shipping papers.

This is a Severity Level IV violation (Supplement V)

5. **PERSONNEL CONTACTED:**

# Armando Berreras, AU

\* John Thornton, Corporate RSO (via phone)

Use the following identification symbols:

# Individual present at March 4, 2010, entrance meeting

\* Individual present at August 3, 2010, telephone exit meeting

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