



## EXECUTIVE SUMMARY

S&R Engineering S.E.  
NRC Inspection Report No. 03036569/2009002

S&R Engineering, S.E. (S&R) possesses one portable moisture density gauge containing cesium-137 and americium-241 in sealed sources. In October 2009, the NRC issued an Order Revoking License (Order) to S&R revoking the license for non-payment of the annual license fee (ML093060122). The Order required, in part, that the licensee pay the annual license fee within 30 days or divest itself of all licensed material within 60 days. Since no annual fee had been paid by December 15, 2009, the NRC initiated an inspection to determine S&R's intentions in regards to the Order and to verify the location and security of the portable gauge. The NRC inspection was extended through April 19, 2011, because the S&R President, the key individual in the company organization, could not be contacted after August 2010 to discuss the NRC's issues of concern. These issues included S&R's lack of response to the Order and the statements provided by S&R personnel to the NRC regarding the whereabouts of the gauge. In addition, due to the NRC's questions regarding specific licensee communications, the NRC Office of Investigations (OI) initiated an investigation to determine if S&R personnel deliberately provided inaccurate information.

The NRC identified four apparent violations.

- S&R provided inaccurate information to the NRC on the location of its portable moisture density gauge.
- S&R Engineering did not reply to an Order Revoking License, did not pay the license fee, and did not dispose or arrange for the transfer of its licensed nuclear material to an authorized recipient.
- S&R Engineering did not afford to the Commission, at all reasonable times, opportunity to inspect materials, activities and records under the regulations.
- S&R Engineering used only one independent physical control to secure the gauge from unauthorized removal when it was not under the licensee's constant surveillance and control when stored at the licensee's facility.

## REPORT DETAILS

### I. **Management Oversight of the Program, and Material Use, Transfer, and Control**

#### a. Inspection Scope

The inspector reviewed the management oversight, and material use, transfer, and control of the licensee's program, reviewed records, and held discussions with licensee personnel. The inspector also discussed the terms of two NRC Orders for failure to pay its NRC license fees.

#### b. Observations and Findings

##### 1. Organization and Licensing Status

S&R Engineering S.E. (S&R) holds NRC licensee No. 52-30913-01 which authorizes the possession, use, and storage of CPN Model MC-3 portable moisture density gauges containing licensed material. At the time of the inspection, S&R was in possession of one gauge (S/N M340707502). Mr. Jaime Sánchez, President, manages the company's daily operations from the San Juan (main) office or from remote locations where contract work is performed. Mr. Hector Galarza, was appointed in April 2008 as the Radiation Safety Officer (RSO) with the responsibility to implement the radiation protection program.

In December 2008, the NRC issued S&R an NRC Order Revoking License due to non-payment of license fees. In February 2009, S&R paid the required fees and the Order was rescinded. In June 2009, S&R again failed to pay the required license fees and another Order Revoking License was issued on October 29, 2009. The Order restricted use of the gauge and required the licensee to dispose or transfer it to an authorized recipient within 60 days from the date revocation of the Order, which occurred on November 30, 2009. S&R did not respond to this Order and fees were not paid. Thus, S&R's license is in a revoked status.

##### 2. Inspection Chronology

The NRC conducted inspections of the S&R facility and activities between December 15, 2009, and April 19, 2011. The inspection and investigation chronology is as follows:

December 15, 2009. The inspector visited the site located at 15 Lepanto Street, Rio Piedras, PR, and met with the S&R Office Manager, who stated the gauge was in storage in the designated lockbox at that facility. The closed lockbox was found bolted to the floor and secured with two locks. Inspection of the lockbox found it to be empty. The Office Manager stated he had forgotten that the gauge was being stored at a temporary jobsite in Mayaguez, PR. The inspector requested he contact a field technician at the site who confirmed it was being stored there and not used, but he was not sure whether the gauge had been used on other days. Field personnel returned the gauge to the Rio Piedras office.

February 10, 2010. The inspector visited the S&R office and observed that the gauge had been returned to the main office and was properly maintained in secure storage. An electronic mail message from Mr. Sánchez dated February 24, 2010, provided additional information related to storage of the gauge and confirmation that it was not being used. In order to obtain information about the licensee's plans for final disposition of the gauge, the inspector placed several telephone calls to Mr. Sánchez at his office and personal cellular telephone, but no contact was made. Office and voice mail messages left by the NRC were not returned by Mr. Sánchez.

March 4, 2010. The NRC Office of Investigations (OI) initiated an investigation to determine if S&R personnel deliberately violated the NRC Order Revoking License by continuing to use the gauge after December 29, 2009.

April 12, 2010. As part of the OI investigation, an NRC site inspection revealed the gauge was still in S&R's possession. The inspector interviewed the President, RSO, and Office Manager to discuss arrangements to transfer the gauge. The individuals acknowledged they understood the gauge could not be used and should transfer it, but they did not provide a commitment or specific plan for its disposition.

June 22, 2010. The OI investigation was completed. Although S&R had not transferred or disposed of the gauge, the results of the OI investigation determined that S&R did not deliberately violate the Order prohibiting use of the gauge.

July 9, 2010. A certified letter was sent by the NRC to S&R requesting immediate transfer or disposal of the gauge and a response within 10 days of receiving the letter. The NRC confirmed that S&R received the letter but did not respond to it.

August 3, 2010. Since no response was received by the NRC, Mr. Sánchez was contacted by telephone to determine the status of the gauge. Mr. Sánchez stated that the gauge had been transferred to Western Soil, Mayaguez, PR, "over a month ago and the fees remained unpaid." NRC contacted Western Soil on August 4, 2010, to determine whether they received the gauge. Western Soil staff stated they were contacted by Mr. Sánchez for a possible transfer of the gauge, but could not accept it because it would exceed the maximum quantity of material allowed on the Western Soil license. In another call to Western Soil on August 16, 2010, their staff stated that Western Soil did not receive or possess the S&R gauge.

August 18, 2010. The NRC OI initiated an investigation to determine if S&R personnel failed to provide complete and accurate information to the NRC regarding the whereabouts of the gauge.

September 13-14, 2010. An NRC inspection and OI visit to the S&R office found Mr. Sánchez not present or available to meet with the NRC. Interviews with the RSO revealed that he was aware the gauge was in storage at the S&R office, but was unfamiliar with the RSO responsibilities to implement the program. The inspector observed the gauge was properly secured by two independent physical barriers, as required by 10 CFR 30.34(i). The RSO stated that he was not aware of the NRC Order to not use the gauge and to transfer or dispose of it. However, the RSO indicated that the owner had told him he had planned to transfer it.

The RSO also stated that he was not aware of the location of any records or paperwork related to the gauge (leak tests, inventories, shipping papers, etc.). When questioned about his responsibilities as the RSO and apparent lack of knowledge about the gauge program and the gauge transfer, the RSO responded that he was only an employee and that the decisions about the gauge were made by the S&R president.

October 3, 2010. The inspector visited the S&R facility, but the President and RSO were not available. Inspection of the gauge found that it was moved from the previous storage area, and locked inside the shipping case on the floor of an unlocked closet. Interviews with office staff indicated they did not know whether the gauge had been removed from the closet and used. However, despite access control of the main entrance to the S&R office, no additional physical barriers were noted, which is an apparent violation of 10 CFR 30.34(i).

September 2010 through January 2011. The inspector made numerous unsuccessful attempts to contact the President, S&R including placing telephone calls to the S&R office and the President's cell phone, conducting telephone calls with other S&R staff including the President's mother (an officer of the company), and sending a registered letter and electronic mail. The NRC was always informed that the owner was either in meetings or not present at the office.

April 19, 2011. OI completed the second investigation. Based on the evidence gathered during the investigation, OI concluded that the President, S&R deliberately failed to provide complete and accurate information to the NRC by stating that the gauge had been transferred when, in fact, it had not been transferred, which is a violation of 10 CFR 30.90. OI also substantiated that S&R had violated the NRC Order.

c. Conclusions

As a result of the NRC inspections and OI investigation, four apparent violations of NRC requirements were identified.

1. 10 CFR 30.9(a) states, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material respects.

Contrary to the above, on August 3, 2010, the S&R President told the NRC that S&R Engineering had transferred its portable moisture density gauge to another NRC licensee when, in fact, S&R Engineering still possessed the gauge.

2. 10 CFR 2.202(b) states, in part, that a licensee to whom the Commission has issued an Order must respond to the Order by filing a written answer under oath or affirmation in which the licensee specifically admits or denies each allegation or charge made in the Order.

An NRC "Order Revoking License Within 30 Days," dated October 29, 2009, required, in part, that S&R Engineering submit an answer to the order within 30 days of its issuance and that, unless full payment of license fees was made within 30 days, S&R Engineering must arrange for disposal or transfer to an authorized recipient of any licensed nuclear material acquired or possessed under the authority of License No. 52-30913-01. The

Order required such disposal or transfer to take place within 60 days from the date of the revocation of the License, which occurred on November 30, 2009.

Contrary to the above, S&R Engineering has not submitted an answer to the Order, has not paid the license fee, and has not disposed or arranged for the transfer of its licensed nuclear material to an authorized recipient.

3. 10 CFR 19.14(a) states, in part, that each licensee shall afford to the Commission at all reasonable times opportunity to inspect materials, activities and records under the regulations.

Contrary to the above, S&R Engineering did not afford to the Commission at all reasonable times opportunity to inspect materials, activities and records under the regulations. Specifically, between the period of September 2010, and January 2011, NRC inspectors made several attempts to contact the President, S&R Engineering by telephone, mail, electronic mail, and personal visits to the S&R Engineering facilities, to discuss inspection of licensed activities and records, but the President failed to respond to the inspectors' requests, and the S&R Engineering staff did not provide the requested information.

4. 10 CFR 30.34(i) states, in part, that each portable gauge licensee shall use a minimum of two independent controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever the portable gauge was not under the control and constant surveillance.

Contrary to the above, on October 3, 2010, S&R Engineering used only one independent physical control to secure a gauge from unauthorized removal when it was not under the licensee's constant surveillance and control when stored at the licensee's facility at 15 Lepanto Street, Rio Piedras, Puerto Rico. Specifically, the gauge was stored inside of its locked shipping case (providing one barrier), which was located in an unlocked closet.

## **II. Exit Meeting**

Preliminary findings were discussed with Jaime Sánchez, President, S&R Engineering, and Hector Galarza, RSO on August 3, 2010. However, since Mr. Sánchez could not be reached after August 2010, a formal exit meeting to discuss the NRC inspection results was not held. Multiple attempts were made in July 2011 to contact Mr. Sánchez by phone.

**PARTIAL LIST OF PERSONS CONTACTED**

J. Sánchez, President, S&R  
H. Galarza, Radiation Safety Officer, S&R  
L. Sánchez, Office Manager, S&R  
M. Acevedo, Office Assistant, Western Soils, Inc.

Factual Summary of Office of Investigations (OI) Case No. 1-2010-052: S&R Engineering – Failure to Provide Complete and Accurate Information to the NRC Regarding the Whereabouts of a Nuclear Gauge

S&R Engineering (S&R) had been issued a license by the NRC that authorized possession and use of portable moisture density gauges containing licensed material. S&R has one such gauge. On October 29, 2009, S&R was issued an NRC Order related to S&R's failure to pay the NRC licensing fees. The Order prohibited S&R from using its gauge and also revoked S&R's license unless S&R paid the fee within 30 days. If S&R failed to pay the fee within the required 30 days, the Order stipulated that S&R's license would be revoked and that S&R would be required to dispose of or transfer the gauge to an authorized recipient within 60 days of revocation (i.e., by January 27, 2010) and notify the NRC in writing of the disposition of the gauge. S&R did not pay the fee, and also did not notify the NRC of the disposition of the gauge, as required by the subject Order.

OI conducted a previous investigation (OI Case No.1-2010-022) to determine whether S&R was willfully using the gauge in violation of the Order. Through that investigation, OI verified that S&R still possessed the gauge, but did not conclude that S&R was using the gauge. Following the completion of that investigation, on August 3, 2010, the S&R President informed an NRC inspector that: 1) S&R had transferred the gauge to an authorized recipient (Western Soil (WS)) more than a month prior to that testimony; and, 2) he would provide the NRC record of this transfer (to date he has not done so).

The NRC inspector contacted WS on August 4, 2010, and on August 16, 2010, and inquired about the status of the gauge. WS staff informed the NRC inspector that the company had discussed with the S&R president the possibility of obtaining S&R's gauge, but that WS had not done so because WS would first have to have its NRC license amended to increase its possession limit. The NRC OI initiated this investigation on August 18, 2010, to determine whether the president of S&R willfully provided inaccurate information to the NRC regarding the whereabouts of S&R's portable moisture density gauge.

On September 13 and 14, 2010, an NRC OI investigator and an NRC inspector visited the S&R office, but were informed that the S&R President was not there and that he would be unavailable to meet with the NRC. The NRC investigator and NRC inspector interviewed the S&R Radiation Safety Officer (RSO) and the RSO showed them that the gauge was, indeed, in storage at the S&R office. Subsequently, the NRC OI investigator and NRC inspector made numerous unsuccessful attempts to contact the S&R president between September 2010 and January 2011, including placing telephone calls to the S&R office and the president's cell phone, conducting telephone calls with other S&R staff, and sending a registered letter and electronic mail to the president. Each communication attempt was unsuccessful and the S&R President has failed to respond to any NRC letters or messages.