

## **PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA**

Forsgren Associates, Inc.  
August 3, 2011

2:00 P.M.

Arlington, Texas

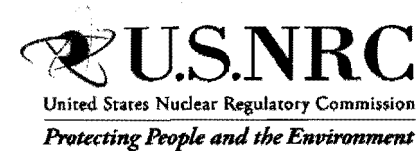
1. INTRODUCTIONS/OPENING REMARKS – ROY CANIANO, NRC
2. ENFORCEMENT PROCESS – RAY KELLAR, NRC
3. APPARENT VIOLATIONS & REGULATORY CONCERNS – MICHAEL VASQUEZ, NRC
4. LICENSEE PRESENTATION- FORSGREN ASSOCIATES, INC.
5. BREAK - 10 MINUTES
6. RESUMPTION OF CONFERENCE
7. CLOSING REMARKS – FORSGREN ASSOCIATES, INC.
8. CLOSING REMARKS – ROY CANIANO, NRC



## Today's Conference

- No final decision has been made.
- Today, is an opportunity to provide your perspective on:
  - Whether any violations occurred;
  - Identification and corrective actions; and
  - Our characterization of the violation(s) in the OI Factual Summary.
- Today is also an opportunity to provide any other information you want us to consider.

3



## NRC Enforcement Program

### Predecisional Enforcement Conference

**Forsgren Associates, Inc.**

**August 3, 2011**

**Arlington, Texas**

1



## Post PEC Decisions

- Whether violations occurred.
- Significance of the violations.
- Final Agency Decision on Enforcement action.

4



## NRC Enforcement Process

- Inspection and/or Investigation
- NRC Review of Issues
- EXIT with licensee
- Inspection Report with w/apparent violations
- **Predecisional Enforcement Conference (PEC)**
- NRC Review of ALL Information
- **FINAL AGENCY DECISION** on whether Enforcement Action is warranted

2

## Factors in Assigning Severity Levels

- Actual Consequences
- Potential Consequences
- Impact on Regulatory Process
- Associated Willfulness

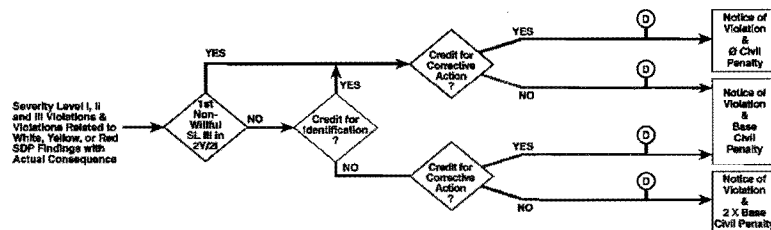
7

## Possible Outcomes

- No Enforcement Action
- Notice of Violation (NOV)
- NOV with Civil Penalty
- Order

5

## Civil Penalty Assessment



Primary considerations:

1. How the violation was identified
2. The promptness and completeness of any corrective actions taken

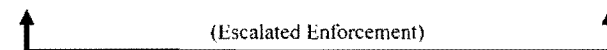
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## Determine Significance

**SEVERITY LEVEL – I**  
(most significant regulatory concern)

**SEVERITY LEVEL – II**  
(very significant regulatory concern)

**SEVERITY LEVEL – III**  
(significant regulatory concern)



(Non-Escalated Enforcement)

**SEVERITY LEVEL – IV**  
(less significant concern, but more than minor)

6

## Public Information

- If NRC takes enforcement action, it is generally **publicly available** on NRC's web site. Security-related information will not be publicly available
- In the event that a civil penalty or an order is issued, normally, a **press release** is issued.

11

## Appeal Rights

- Any NRC action may be challenged.
- Instructions for challenging an NRC action will be described in the action or the accompanying letter.

12

## Civil Penalties

- Civil Penalties are dependent on the type of licensee and the severity of the violation.
- For example, the base CP for a SL III violation for a small material licensee is \$3,500; while the base CP for a SL II violation for a contractor or waste disposal licensee is \$11,200.

9

## Discretion

- NRC may escalate or mitigate a civil penalty based on the circumstances of a case (more information is in the Enforcement Policy).
- Examples where the NRC might exercise discretion include - - willfulness, overexposures to members of the public, etc.

10

**Any questions?**

## **APPARENT VIOLATION A**

Title 10 Code of Federal Regulations Part 30.34(i) requires each portable gauge licensee 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.

Contrary to the above, on April 15, 2011, the licensee did not secure five portable gauges using two independent physical controls to prevent unauthorized removal, while in storage at the licensee's permanent storage facility in Rexburg, Idaho. Specifically, the licensee stored five portable gauges in a storage room in lower level of the building with only one lock to provide a tangible barrier to secure the portable gauges from unauthorized removal. The inspector determined that the locked door was the only independent physical control to form a tangible barrier in place at the time of the inspection. This was identified as an apparent violation of 10 CFR 30.34(i). This was a repeat violation from the last inspection.

**THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW  
AND MAY BE REVISED**

## **APPARENT VIOLATION B**

Title 10 Code of Federal Regulations Part 20.1101(c) requires that the licensee shall periodically (at least annually) review the radiation protection program content and implementation.

Contrary to the above, on April 15, 2011, the inspector requested to review the licensee's annual audits of the radiation protection program. The RSO indicated that he had not conducted any audits of the program. He indicated that being the RSO was only one of his job responsibilities and that he was not able to devote much time to the program. The inspector determined that the licensee had not performed any periodic reviews from June 22, 2006 to April 15, 2011. This was identified as an apparent violation of 10 CFR 20.1101(c). This was a repeat violation from the last inspection.

**THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW  
AND MAY BE REVISED**

## **APPARENT VIOLATION C**

License Condition 15 of NRC License 11-27091-01 requires that the licensee shall conduct a physical inventory every 6 months, or at intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license. An interval different from 6 months has not been requested by the licensee for review and approval by the Commission.

Contrary to the above, on April 15, 2011, the licensee provided documentation indicating that only one physical inventory was conducted since the last inspection on June 22, 2006. The licensee performed a physical inventory in June 2009. The licensee failed to perform physical inventories at 6 month intervals from June 22, 2006 through June 2009 and from June 2009 until the date of the inspection on April 15, 2011. Consequently, the licensee failed to conduct a physical inventory of the portable gauges at the required frequency of 6 months. This was identified as an apparent violation of License Condition 15 of the NRC License 11-27091-01.

**THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW  
AND MAY BE REVISED**



## **APPARENT VIOLATION D**

License Condition 13.A of NRC License 11-27091-01 requires that sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State. The Registry of Radioactive Sealed Sources and Devices safety evaluation sheet specifies an annual leak test frequency for the Troxler Model 3400 series portable gauge possessed by the licensee.

Contrary to the above, on April 15, 2011, the licensee only provided leak test records for tests conducted April 2007, February 2009, June 2010, and September 2010. A review of the licensee's utilization logs indicated that the portable gauges had been used at temporary job sites during periods in 2007, 2008, 2009, and 2010. This was identified as an apparent violation of License Condition 13A of NRC License 11-27091-01.

**THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW  
AND MAY BE REVISED**

July 6, 2011

Mr. Roy J. Caniano, Director  
Division of Nuclear Materials Safety  
United States Nuclear Regulatory Commission  
Region IV  
612 East Lamar Blvd, Suite 400  
Arlington, Texas 76011-4125

Note: Attachments Withheld  
due to security related  
material. (M.F.)

**SUBJ: NRC INSPECTION REPORT NO 030-32248/2011-001 – FORSGREN ASSOCIATES RESPONSE**

Dear Mr. Caniano,

As you are aware, the United States Nuclear Regulatory Commission (NRC) conducted a routine, unannounced inspection of the Forsgren Associates, Inc. facility in Rexburg, Idaho (License No. 11-27091-01) on April 15, 2011, wherein the NRC reviewed the activities conducted under the license as they relate to safety and security, conformance with the rules and regulations of the NRC, and the conditions of the license. Michelle M. Hammond, M.Sc., an inspector employed by the NRC conducted the inspection by examining selected procedures and representative records, observing the facilities, and interviewing personnel authorized to use the nuclear densometers. During that inspection, Ms. Hammond identified four apparent violations that were reported to the NRC for consideration for further enforcement. Those four apparent violations were:

1. To secure the portable gauge using two independent physical controls to prevent unauthorized removal, while in storage;
2. To perform (at least annually) a review of the radiation protection program;
3. To conduct physical inventories of sealed sources every 6 months; and
4. To test sealed sources for leakage annually.

Ms. Hammond also noted the first two apparent violations were also identified during a previous NRC inspection conducted in 2006.

To be sure, the management of Forsgren Associates, including Brent E. Crowther, P.E., Division Manager, and Richard Noll, P.E., President, understand the gravity of the apparent violations and take seriously the charge to correct the any existing deficiency as well as to implement policies and procedures to improve the management oversight, to increase the knowledge of qualified users of the gauges, and to correct the procedures for storage and transport of portable nuclear gauges.

Since the routine, unannounced inspection; we have endeavored to ameliorate our condition regarding the storage, transport, and use of the portable gauges by providing prompt and comprehensive information regarding our records and documentation of corrective actions instituted to address each of the four apparent violations. As reported in the Executive Summary of the NRC Inspection Report prepared by Ms. Hammond, our corrective actions corresponding with the apparent violations entailed:

1. To secure the portable gauge using two independent physical controls to prevent unauthorized removal, while in storage;
  - a. licensee took immediate corrective action by placing the gauges inside a locked storage closet within a locked storage room, which would meet the requirements of 10 CFR.34(i)
2. To perform (at least annually) a review of the radiation protection program;

**NRC INSPECTION RESPONSE  
FORSGREN ASSOCIATES, INC.**

**APRIL 2011**

- a. *The licensee developed an audit program and completed an audit on May 13, 2011.*
  - b. *The licensee has implemented a calendar with annual audit due dates.*
3. To conduct physical inventories of sealed sources every 6 months; and
  - a. *The licensee developed an official inventory sheet with the required information and completed an inventory on April 15, 2011.*
4. To test sealed sources for leakage annually.
  - a. *The licensee performed leak tests on all 6 gauges between May 17 and June 7, 2011. No leakage or contamination was detected.*

In an effort to communicate our understanding of this situation and our response to the apparent violations, please consider the descriptions on the following pages.

Respectfully,

Brent E. Crowther, P.E.  
Division Manager  
Forsgren Associates, Inc.

Attach: NRC Inspection 2011 - Forsgren Associates Response to Apparent Violation No. 1  
Inspection 2011 - Forsgren Associates Response to Apparent Violation No. 2  
Inspection 2011 - Forsgren Associates Response to Apparent Violation No. 3  
Inspection 2011 - Forsgren Associates Response to Apparent Violation No. 4

Cc: Michael Vasquez, Chief, Nuclear Materials Safety Branch A  
Michelle Hammond, M. Sc., Health Physicist, Nuclear Materials Safety Branch B  
Mark Dietrich, Administrator, Technical Services Division, IDEQ  
Richard Noll, P.E., President, Forsgren Associates, Inc.  
File



**NRC INSPECTION RESPONSE  
FORSGREN ASSOCIATES, INC.  
APRIL 2011**

**Apparent Violation No. 1**

The licensee failed to secure the portable gauge using two independent physical controls to prevent unauthorized removal, while in storage at the licensee's permanent storage facility in Rexburg, Idaho. This was identified as an apparent violation of 10 CFR 30.34(i) (Section 2).

**Response:**

**Description:**

The NRC conducted a routine, unannounced inspection on June 26, 2006 wherein they identified an apparent violation of 10 CFR 30.34(i) stated thus: *requires, in part, that each licensee 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.*

At the time of the 2011 inspection, Forsgren Associates believed our storage location was in compliance with 10 CFR 30.34. Following the inspection in 2006, the gauges were moved to the location observed during the inspection in 2011, which we assumed met the requirements based on our communication with NRC at that time. We believed that we had two locked, tangible barriers in place when the gauges were not under the control and surveillance of the licensee.

However, we have taken immediate steps to remedy the apparent violation cited in the 2011 inspection report by placing the gauges behind an additional locked, tangible barrier as shown in the attached figure and accompanying photographs.

**Prompt:**

In an effort to achieve compliance immediately, on Forsgren personnel moved the portable gauges behind an additional locked, tangible barrier on April 15, 2011; the day of the inspection.

**Comprehensive:**

Forsgren Associates took several actions to achieve compliance and to prevent any non-compliance in the future.

- Updated our RPP with instructions for portable gauge users regarding compliance with securing portable gauges.
- Added nuclear gauge status report to the safety agenda item for the monthly staff meeting.
- Implemented plans to construct a new permanent storage area.
- A description of our actions was emailed to Ms. Hammond on May 18, 2011.



**NRC INSPECTION RESPONSE  
FORSGREN ASSOCIATES, INC.**

**APRIL 2011**

**Apparent Violation No. 2**      The licensee failed to periodically (at least annually) review the radiation protection program content and implementation. This was identified as an apparent violation of 10 CFR 20.1101(c) (Section 2).

**Response:**

**Description:**                      Management was unaware audits were not being performed.

**Prompt:**                              Based on the discussion following the 2011 inspection, we have taken immediate steps to remedy the apparent violation cited in the 2011 inspection report by developing an audit form, scheduling audits during coming years, and completing a current audit on May 13, 2011. A copy of the current audit is presented for your review. The next scheduled audit will be performed by May 11, 2012. A description of our actions was emailed to Ms. Hammond on May 18, 2011

**Comprehensive:**                    The Forsgren Associates Radiation Protection Program outlines specific details for annual audits. The program states the following:

- The RSO, or person designated by the RSO, shall perform an audit on a yearly basis in accordance to the above-mentioned criteria.
- Currently, the NRC's emphasis in inspections is to perform actual observations of work in progress. As part of Forsgren Associates' audit program, unannounced audits of gauge users in the field will be performed to determine if Operating and Emergency Procedures are available and are being followed.
- It is essential that, once identified, problems be corrected comprehensively and in a timely manner. The NRC will review audit results and determine if the corrective actions are thorough, timely, and sufficient to prevent recurrence. Forsgren Associates RSO, or person(s) designated by the RSO, shall identify violations and take corrective action.
- Forsgren Associates shall maintain records of "... audits and other reviews of program content and implementation." Acceptable audit records shall include: date of audit, name of person(s) who conducted audit, persons contacted by the auditor(s), areas audited, audit findings, corrective actions, and follow-up. Updated our RPP with instructions for conducting an annual audit.

A yearly reminder has been set up on the outlook calendars for the current RSO (Bill McNaughton), the proposed RSO (Aaron Swenson), the Division Manager (Husk Crowther), and the Secretary's (Eva Wright) Outlook Calendars as well as the Forsgren Office Appointment calendar, which is frequently viewed and updated.

In addition, we are taking steps to replace our current RSO. Our new RSO will be Aaron Swenson, P.E.. Aaron is an experienced RSO having served in that capacity for a previous employer. Aaron's resume is also attached for your review.

**NRC INSPECTION RESPONSE  
FORSGREN ASSOCIATES, INC.**

**APRIL 2011**

**Apparent Violation No. 3** The licensee failed to conduct a physical inventory every 6 months to account for all sealed sources and/or devices received and possessed under the license. This was identified as an apparent violation of License Condition 15 of NRC License 11-27091-01 (Section 2).

**Response:**

**Description:** Forsgren Associates believed that the records indicating the disposition of each gauge sufficed to meet the inventory requirement. The policy and procedure has been that if a gauge is removed from permanent storage, it must be signed out by the user on the appropriate inventory form.

**Prompt:** Based on the discussion following the 2011 inspection, we have taken immediate steps to remedy the apparent violation cited in the 2011 inspection report by revising our inventory procedure, developing an inventory form, scheduling inventory activity at appropriate intervals in future years, and completing a current inventory on May 15, 2011. A copy of the current audit is presented for your review. The next scheduled audit will be performed by October 14, 2011. A description of our actions was emailed to Ms. Hammond on May 18, 2011

**Comprehensive:** To prevent future apparent violations, Forsgren Associates has taken more permanent action including updating our RPP. The Forsgren Associates Radiation Protection Program outlines specific details for physical inventories. Immediate actions are that an official inventory sheet has been updated and includes required information concerning:

- Radionuclide and amount (in units of becquerels or curies) of byproduct material in each sealed source;
- Manufacturer's name, model number, and serial number (if appropriate) of each device containing byproduct material;
- Location of each sealed source and device;
- Date of the inventory.

A semi-annual reminder has been set up on the outlook calendars for the current RSO (Bill McNaughton), the proposed RSO (Aaron Swenson), the Division Manager (Husk Crowther), and the Secretary's (Eva Wright) Outlook Calendars as well as the Forsgren Office Appointment calendar, which is frequently viewed and updated.

In addition, we are taking steps to replace our current RSO. Our new RSO will be Aaron Swenson, P.E.. Aaron is an experienced RSO having served in that capacity for a previous employer. Aaron's resume is also attached for your review.



**NRC INSPECTION RESPONSE  
FORSGREN ASSOCIATES, INC.**

**APRIL 2011**

**Apparent Violation No. 4**

The licensee failed to test the sealed sources contained in the portable gauge for leakage or contamination on an annual basis. This was identified as an apparent violation of License Condition 13.A of NRC License 11-27091-01 (Section 2).

**Response:**

**Description:**

While leak tests had been performed, during the inspection, Forsgren was unable to produce records documenting that gauges were tested for leakage or contamination an annual basis. Subsequently, most of the leak test records were later provided for 2007, 2009, and 2010. Unfortunately, not all leak test records could be located and the leak test provider was unable to provide records.

**Prompt:**

Based on the discussion following the 2011 inspection, we have taken immediate steps to remedy the apparent violation cited in the 2011 inspection report by revising our leak test procedure, scheduling leak test activity at appropriate intervals in future years, and completing current leak tests on all gauges by June 7, 2011. A copy of the leak tests is presented for your review. The next scheduled leak tests will be performed by June 2012. A description of our actions was emailed to Ms. Hammond on May 18, 2011

**Comprehensive:**

To prevent future apparent violations, Forsgren Associates has taken more permanent action including updating our RPP. The Forsgren Associates Radiation Protection Program outlines specific details for leak detection testing. Forsgren Associates requires that leak tests are performed every 12 months. Qal-Tek Associates of Idaho Falls is the authorized agency to perform these tests. Forsgren Associates shall keep records of all leak test data and results according to office standards:

A yearly reminder has been set up on the outlook calendars for the current RSO (Bill McNaughton), the proposed RSO (Aaron Swenson), the Division Manager (Husk Crowther), and the Secretary's (Eva Wright) Outlook Calendars as well as the Forsgren Office Appointment calendar, which is frequently viewed and updated.

In addition, we are taking steps to replace our current RSO. Our new RSO will be Aaron Swenson, P.E.. Aaron is an experienced RSO having served in that capacity for a previous employer. Aaron's resume is also attached for your review.

