September 25, 2009

EA-09-244

William Z. Hawkins, P.E. Director of Operations and Radiation Safety Officer Strand Associates, Inc. 629 Washington Street Columbus. IN 47201

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 030-37846/2009-001(DNMS) -

STRAND ASSOCIATES, INC.

Dear Mr. Hawkins:

On August 27, 2009, a Nuclear Regulatory Commission (NRC) inspector conducted an inspection at your facility in Columbus, Indiana. The purpose of this inspection was to examine activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions in your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel. The enclosed report presents the results of this inspection.

Based on the results of this inspection, one apparent violation was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at (http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html). The apparent violation involved a failure to use a minimum of two independent physical controls that form tangible barriers to secure a portable gauge, when the gauge was not under the control and constant surveillance of the licensee. The circumstances surrounding the apparent violation, the significance of the issues, and the need for lasting and effective corrective action were discussed with you at the initial inspection exit meeting on August 27, 2009, and a final inspection exit meeting by telephone on September 10, 2009. As a result, it may not be necessary to conduct a Predecisional Enforcement Conference (PEC) in order to enable the NRC to make an enforcement decision.

In addition, since your facility has not been the subject of escalated enforcement actions within the last two inspections, and based on our understanding of your corrective action, a civil penalty may not be warranted in accordance with Section VI.C.2 of the Enforcement Policy. The final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either: (1) respond to the apparent violation addressed in this inspection report within 30 days of the date of this letter or (2) request a predecisional enforcement conference. If a conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. Please contact Tamara Bloomer at (630) 829-9627 within seven days of the date of this letter to notify the NRC of your intended response.

If you choose to provide a written response, it should be clearly marked as a "Response to an Apparent Violation in Inspection Report No. 030-37846/2009-001(DNMS); EA-09-244" and should include for each apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violation. The guidance in the enclosed NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a predecisional enforcement conference.

In addition, please be advised that the number and characterization of apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

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If you have any questions concerning this matter, please contact Tamara Bloomer of my staff at (630) 829-9627.

Sincerely,

/RA/

Steven A. Reynolds, Director Division of Nuclear Materials Safety

Docket No. 030-37846 License No. 13-32716-01

Enclosures:

- Inspection Report
 NRC Information Notice 96-28

If you have any questions concerning this matter, please contact Tamara Bloomer of my staff at (630) 829-9627.

Sincerely,

/RA/

Steven A. Reynolds, Director Division of Nuclear Materials Safety

Docket No. 030-37846 License No. 13-32716-01

Enclosures:

- 1. Inspection Report
- 2. NRC Information Notice 96-28

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

Docket No. 030-37846

License No. 13-32716-01

Report: 030-37846/2009-001(DNMS)

Licensee: Strand Associates, Inc.

Location Inspected: 629 Washington St.

Columbus, Indiana

Inspection Date: August 27, 2009

Exit Meeting: August 27, 2009

Inspector: Geoffrey M. Warren, Health Physicist

Approved by: Tamara E. Bloomer, Chief

Materials Inspection Branch

EXECUTIVE SUMMARY

Strand Associates, Inc. Columbus, Indiana NRC Inspection Report 030-37846/2009-001(DNMS)

This was a routine inspection conducted on August 27, 2009, to review the activities conducted under the license as they relate to safety and compliance with the Commission's rules and regulations and with conditions in the license. This was the initial inspection of activities performed under the license.

The inspector identified an apparent violation of Title 10 Code of Federal Regulations (CFR) Part 30.34(i) associated with the licensee's failure to use a minimum of two independent physical controls that form tangible barriers to secure three portable gauges whenever the portable gauges were not under the control and constant surveillance of the licensee. This involved the use of only one barrier to prevent removal of the gauges while in storage at the licensee's facility in Columbus, Indiana. While the building was secured, the gauges were not further secured inside the building because the room where the gauges were placed had a 1.5-to 2-foot gap above the wall on three of the four sides of the room.

The inspector determined that the root cause for the apparent violation was that licensee personnel misunderstood the requirements in 10 CFR 30.34(i), believing that the lock on the gauge constituted a barrier to removal. Because of this, the licensee believed that the gauges were adequately secured.

As corrective action, the RSO committed to: (1) constructing a lockable enclosure inside the storage room where the gauges were stored, and (2) securing each gauge by chain to the wall inside the enclosure. Based on a telephone conversation with the RSO on September 1, 2009, this has been completed. The RSO further committed to training the two other gauge users on the requirement before the next use of the gauge, which was anticipated in the near future.

Report Details

1 Program Scope and Inspection History

Strand Associates, Inc., (licensee) used portable gauges to evaluate physical properties at road and bridge sites in southeastern Indiana. The licensee was authorized by NRC License No. 13-32716-01 to possess and use portable gauges at temporary job sites anywhere in the United States where the NRC maintains regulatory jurisdiction. At the time of the inspection, the licensee possessed three Seaman Nuclear Model C-200 gauges at the licensee's facility in Columbus, Indiana.

This was the initial inspection of activities under this license.

2 Security of Portable Gauges

2.1 <u>Inspection Scope</u>

The inspector reviewed the licensee's method of securing portable gauges by interviewing the licensee's radiation safety officer (RSO), observing selected licensed activities, and reviewing selected licensee records.

2.2 Observations and Findings

The inspector observed the storage of the gauges in the licensee's facility in Columbus, Indiana, and noted that the room where the gauges were stored, while locked, had a 1.5-to 2-foot gap between the top of the wall and the ceiling. Outside the room were tables and chairs which could be used to gain access through this gap. The building was secure; all entrances were locked when the office was closed, and employees in the building would notice and challenge other people entering the area. Both the gauges and the cases were locked while the gauges were in storage.

Title 10 Code of Federal Regulations (CFR) 30.34(i) requires that the licensee use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever the gauges are not under the control and constant surveillance of the licensee. The licensee's use of a single barrier, the building, to prevent removal of the gauges while in storage in the licensee's facility is an apparent violation of 10 CFR 30.34(i).

The root cause of the violation was licensee personnel's misunderstanding the requirements in 10 CFR 30.34(i). The RSO had believed that the lock on each gauge constituted a barrier, and that the gauges were therefore adequately secured. The RSO committed to implementing the following corrective actions to prevent a similar violation: (1) constructing a lockable enclosure inside the storage room where the gauges were stored, and (2) securing each gauge by chain to the wall inside the enclosure. Based on a follow-up telephone conversation with the RSO on September 1, 2009, these corrective actions have been completed. He further committed to training the two other gauge users on the requirement before the next use of the gauge, which was anticipated in the near future.

The RSO described how the gauges would be secured in a vehicle so that the vehicle could be left unattended with a gauge in the back of the truck. While the technique the RSO described did not meet the requirement in 10 CFR 30.34(i), the gauges had not been used since summer 2007, before NRC regulated the use of radium-226 in the State of Indiana. Because of this, no violation had occurred concerning the security of gauges in vehicles.

The RSO proposed that, based on his understanding of the requirement, licensee personnel would secure a gauge into a vehicle using two locks to secure the case closed and two chains to attach the case inside the back of the truck. The inspector determined that the proposed means of securing the gauge in the vehicle met 10 CFR 30.34(i). During a follow-up telephone conversation on September 1, 2009, the RSO stated that additional chains and locks had been acquired and made available to gauge users in order to secure the gauges as described inside a vehicle.

2.3 Conclusions

The inspector identified an apparent violation of 10 CFR 30.34(i) involving the licensee's failure to use a minimum of two independent physical controls that form tangible barriers to secure the portable gauge whenever the portable gauge was not under the control and constant surveillance of the licensee. The licensee committed to implementing corrective actions to prevent a similar violation.

3 Other Areas Inspected

3.1 <u>Inspection Scope</u>

The inspector reviewed other areas of the licensee's radiation safety program by reviewing selected licensee records, including dosimetry and training records, shipping papers, and emergency procedures; and interviewing the RSO.

3.2 Observations and Findings

The licensee performed gauge inventories and leak tests as required, and maintained a dosimetry program which demonstrated that no individual received a radiation exposure in excess of regulatory limits. Shipping papers containing all required information and other appropriate documents were kept in vehicle cabs while the gauge was in transport. Gauge users had received appropriate training and understood routine procedures and emergency procedures which would be followed if the gauge had been damaged.

3.3 Conclusions

No violations of NRC requirements were identified.

4 Exit Meeting Summary

The inspector discussed the preliminary conclusions, as described in this report, with licensee management during the initial exit meeting conducted at the licensee's facility on August 27, 2009, and a follow-up telephone conversation on September 1, 2009. The inspector discussed the activities reviewed, the inspection findings, and the apparent violation. The licensee did not identify any information reviewed during the inspection and proposed for inclusion in the inspection report as proprietary in nature.

LIST OF PERSONNEL CONTACTED

- * William Z. Hawkins, Director of Operations, RSO And other licensee personnel
- * attended the exit meeting on August 27, 2009