

EXECUTIVE SUMMARY

Savage Construction Company, Inc.
NRC Inspection Report No. 03029427/2012001

Savage Construction Company, Inc. (SCCI) is a road building contractor that provides highway and street construction support to the State of West Virginia. SCCI received a license renewal on October 24, 2011, which authorized the company to store and use two portable gauges (Troxler Models 3400 and 3411 series), each containing 9 mCi Cs-137 and 44 mCi Am-241 at their Wheeling, West Virginia office. On October 19, 2012, a routine inspection was performed at the licensee's main office. Based on the results of this inspection, four apparent violations of NRC requirements were identified.

The first apparent violation, which is being considered for escalated enforcement action, relates to the licensee's failure to use two independent physical controls that form tangible barriers to secure two portable gauges from unauthorized removal, at times when the portable gauges were not under the control and constant surveillance of the licensee, as required by 10 CFR 30.34(j). The inspector identified that the building entrance was controlled at all times to provide one independent physical control for the portable gauges, but the storage location did not have a lock or second independent physical control when the gauges were not under constant surveillance of the licensee.

This inspection also identified three other apparent violations of NRC requirements that are not being considered for escalated enforcement. These apparent violations were for the failure to conduct annual program implementation reviews (audits), conduct of physical inventories, and maintenance of utilization logs.

Immediately following the onsite inspection, the licensee took prompt corrective actions by locking the gauges in a storage cabinet to provide a second independent physical control, transferring the gauges to an authorized recipient, and requesting license termination.

REPORT DETAILS

I. Organization and Scope of the Program

a. Inspection Scope

The inspector reviewed the organization and scope of the radiation safety program.

b. Observations and Findings

Savage Construction Company, Inc. (SCCI) is a small road building company that provides highway and street construction support to the State of West Virginia. SCCI is owned and operated by the company President, Jack Savage. The Radiation Safety Officer (RSO), who was appointed to the position in July 2011, was the primary gauge user and responsible for implementation of the radiation safety program. The NRC approved the license renewal on October 24, 2011, which authorized the company to store and use two portable gauges (Troxler Models 3400 and 3411 series), each containing 9 mCi Cs-137 and 44 mCi Am-241 at their Wheeling, West Virginia office.

The inspector interviewed the company President, SCCI and the RSO, who stated that primary work contracts had been reduced and the company was no longer involved in contract work using the gauges. The RSO indicated that one gauge was used on single occasions in 2011 and 2012, while the second gauge was inoperable and not used. The President explained that business activities had become difficult in recent times and SCCI wanted to discontinue the gauge program. He designated the RSO with the task of dispositioning both gauges.

c. Conclusions

No violations were identified with regard to organization and scope of the program.

II. Material Receipt, Use, Transfer, and Control

a. Inspection Scope

The inspector reviewed the licensee's facilities for storage and control of two portable gauges.

b. Observations and Findings

The RSO indicated the gauges had been used routinely on local projects for the West Virginia Department of Transportation, but recent opportunities for State contract work which required gauges were limited. Inspection of the licensee's facilities revealed two gauges stored together inside a designated, unlocked two-door storage cabinet, which was located on a shelf in the building garage. The inspector observed that the gauges were in good condition although only one gauge was fully operable. Garage entrances were located through an inside door from the office area and an exterior roll up door. At the time of the inspection, garage access was controlled by licensee personnel.

Although the building entrance and exterior doors appeared to be controlled at all times, only one physical barrier to the gauges was noted, since the storage cabinet was found unlocked.

The inspector identified that SCCI possessed two portable gauges, but failed to maintain two independent controls to form a tangible barrier to secure its portable gauges from unauthorized removal. Specifically, the inspector identified that when the licensee's portable gauges were not under the control and constant surveillance by the licensee, the licensee stored the gauges inside of an unlocked box in the building garage. This is an apparent violation of 10 CFR 30.34(i).

Following the onsite inspection, the inspector and RSO discussed a plan for corrective actions. The RSO obtained new locks and secured the gauges in the storage cabinet on the following day. He then proceeded to make contact with various licensed entities to inquire about possible transfer of the gauges. On October 31, 2012, the RSO notified the NRC that the gauges were transferred to Cline's Technical Services (CTS), Ohio License No. 03225230000. CTS provided a receipt form to the licensee on November 1, 2012, and performed leak tests on each gauge. Leak test results were negative for removable contamination. On December 5, 2012, SCCI submitted NRC Form 314, "Certificate of Disposition of Materials," indicating the gauges were transferred to CTS, and requested termination of the NRC license. SCCI's amendment request to terminate the license is being coordinated with the NRC enforcement actions.

Based on inspection of other areas, the inspector noted that the licensee had maintained the radiation safety program at a basic level, but had not implemented all NRC requirements. Three apparent violations for non-escalated enforcement were identified with regard to required documentation in the areas of annual program implementation reviews (audits), conduct of physical inventories, and maintenance of utilization logs.

c. Conclusions

One apparent violation was identified that is being considered for escalated enforcement action.

10 CFR 30.34(i) requires, 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 portable gauges are not under the control and constant surveillance of the licensee.

Contrary to the above, on multiple occasions between 2011 and October 19, 2012, Savage Construction Co., Inc. (SCCI) failed to maintain two independent controls to form a tangible barrier to secure its portable gauge from unauthorized removal. Specifically, when SCCI's portable gauges were not under control and constant surveillance of the licensee, the licensee stored the gauges in a building with only a single physical barrier.

Three non-escalated apparent violations were identified:

1. 10 CFR 20.1101(c) requires that a licensee shall periodically (at least annually) review the radiation protection program content and implementation.

Contrary to the above, for calendar years 2009-2012, SCCI did not perform a review of the radiation protection program content and implementation.

2. NRC License No. 47-24859-01, Condition 15, requires, in part, that the licensee conduct a physical inventory every six months to account for all sources or devices received and possessed, and that records of such inventories be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers and the date of the inventory.

Contrary to the above, as of October 19, 2012, SCCI did not conduct a physical inventory every six months to account for all sources or devices received and possessed, and did not maintain records of such inventories for 5 years from the date of each inventory. Specifically, physical inventory of sources was not performed and records of inventories not maintained of the licensees portable nuclear density gauges in storage at the Wheeling, West Virginia office.

3. Condition 19 of NRC License No. 47-24859-01 requires, in part, that the licensee conduct its program in accordance with statements, representation, and procedures contained in the application dated October 13, 2011. Item 10 of Appendix B to the licensee's letter dated October 13, 2011, requires that the licensee develop, implement and maintain Operating and Emergency procedures that will meet the criteria in the section, entitled "Radiation Safety Program- Operating and Emergency Procedures," in NUREG 1556, Vol. 1, dated November 2001.

This requires, in part, that a gauge be signed out in a log book, including the dates of use, names of authorized users who will be responsible for the gauge, and the temporary job site where the gauge will be used.

Contrary to the above, as of October 19, 2012, the licensee did not maintain a log book that included the date of use, names of authorized users who will be responsible for the gauge, and the temporary job site where the gauge will be used.

III. Exit Meeting

The RSO was contacted by telephone on December 12, 2012 to discuss the preliminary findings of the inspection, which included confirmation that the gauges were transferred and that the NRC license would be terminated. He acknowledged the findings and apparent violations. A final exit meeting was conducted by telephone on January 31, 2013, at which time the four apparent violations were further discussed.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Savage, President, SCCI
T. Cunningham, Radiation Safety Officer

INSPECTION PROCEDURES USED

NRC Inspection Procedure 87124, "Fixed and Portable Gauge Programs"

ITEMS OPEN, CLOSED, AND DISCUSSED

One escalated and three non-escalated apparent violations were identified.