UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352
May 1, 2014

EN 49981
NMED 140187 (Closed)

Mr. Ken Sullivan, Radiation Safety Officer
Patriot Engineering and Environmental, Inc.
6330 E. 75th Street, Suite 216
Indianapolis, IN 46250-2700

SUBJECT: NRC REACTIVE INSPECTION REPORT NO. 03037878/2014002(DNMS) AND ACKNOWLEGEMENT OF WRITTEN REPORT DATED APRIL 15, 2014 – PATRIOT ENGINEERING AND ENVIRONMENTAL, INC.

Dear Mr. Sullivan:

On April 2, 2014, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a reactive inspection at your office in Indianapolis, Indiana. The purpose of the inspection was to review activities surrounding your report on April 1, 2014, concerning a stolen portable gauge. Robert P. Hays of my staff discussed with you and your staff the findings of the onsite inspection during an exit meeting on April 2, 2014. The enclosed report presents the results of this inspection.

During the inspection, the NRC staff examined activities conducted under your license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations as well as the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records and interviews with personnel.

The inspector determined that Patriot Engineering and Environmental, Inc., conducted licensed activities safely and followed sound radiation safety principles. Specifically, the inspector concluded that, based on demonstrations and selected staff member interviews, your staff implemented adequate security of the portable gauge while the gauge was not under constant surveillance; therefore, no violations of NRC regulatory requirements were identified during this inspection. You are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position.

In addition, this letter acknowledges receipt of your letter dated April 15, 2014, providing the written report concerning the stolen gauge as required by Title 10 of the *Code of Federal Regulations* (CFR) 20.2201(b). The NRC has reviewed your letter and has no further questions at this time.

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

Please feel free to contact Mr. Hays if you have any questions regarding this inspection. Mr. Hays can be reached at (630) 829-9819.

Sincerely,

/RA/

Patrick L. Louden, Director
Division of Nuclear Materials Safety

Docket No. 030-37878
License No. 13-32725-01

Enclosure:
Inspection Report No. 03037878/2014002(DNMS)

cc w/encl: Mr. John R. Phillips, Corporate Radiation Safety Officer
State of Indiana

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cc w/encl: Mr. John R. Phillips, Corporate Radiation Safety Officer
State of Indiana

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U.S. Nuclear Regulatory Commission
Region III

Docket No.	030-37878
License No.	13-32725-01
Report No.	03037878/2014002(DNMS)
Licensee:	Patriot Engineering and Environmental, Inc.
Facility:	6330 E. 75th Street, Suite 216 Indianapolis, IN 46250-2700
Inspection Date:	April 2, 2014
Exit Meeting Date:	April 2, 2014
Inspector:	Robert P. Hays, Health Physicist
Approved By:	Aaron T. McCraw, Chief Materials Inspection Branch Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

Patriot Engineering and Environmental, Inc.
NRC Inspection Report 03037878/2014002(DNMS)

An inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a reactive inspection on April 2, 2014, in response to a report of a stolen portable moisture/density gauge. Patriot Engineering and Environmental, Inc. (licensee), reported to the NRC the theft of a Seamen portable gauge (gauge) on April 1, 2014. During the early morning of April 1, 2014, a licensee authorized gauge user (technician) stopped at the licensee's office and picked up the gauge for use at a temporary job site later on that morning. The technician secured the gauge in the back of his personal pickup truck and drove to his residence for a few hours of rest and sleep before going to the temporary jobsite with the gauge. The technician arrived at his residence at approximately 1:30 a.m. At some time between the hours of 1:30 a.m. and 7:30 a.m., the gauge was stolen from the back of the technician's pickup truck by an unknown individual or individuals. The gauge was reportedly secured in the back of the technician's truck in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (CFR) 30.34(i), using a robust chain and three padlocks to create two tangible barriers. When the technician walked out of his residence and approached his pickup truck, he noticed the tailgate was down and the gauge missing from the back of the pickup truck. A close look by the technician at the crime scene determined that one padlock was missing and one padlock had been cut to release it from holding the chain in place. The majority of the chain and one padlock remained in the back of the pickup truck. Once the technician recognized that the gauge had been stolen, he immediately notified the Indianapolis Metropolitan Police Department and the company's Indianapolis site radiation safety officer (RSO). The police were unable to respond to the crime scene; however, the technician provided sufficient information to complete a theft report via telephone. The licensee subsequently notified the NRC Headquarters Operations Center the same day and subsequently submitted a 30-day report as required. No violations of NRC requirements were identified relating to this event.

REPORT DETAILS

1 Program Overview

Patriot Engineering and Environmental, Inc. was authorized under NRC Materials License No. 13-32725-01 to use licensed material in portable gauging devices for measuring physical properties of materials. Condition 10 of the NRC License authorized the use or storage of licensed material at specific addresses in five Indiana cities in addition to use at temporary job sites anywhere in the United States in areas of NRC jurisdiction. Each specific location has a named RSO on the license to oversee licensed activities at each of those locations. Licensee personnel used the gauges for engineering and construction projects.

2 Events surrounding theft of portable gauge

2.1 Inspection Scope

On April 2, 2014, the inspector reviewed the events surrounding the licensee's report on April 1, 2014, of a stolen gauge by interviewing licensee staff and reviewing procedures and actions taken by the authorized gauge user (technician).

2.2 Observations and Findings

According to the licensee, a technician is allowed to transport a gauge to his residence overnight, if it is more expedient for travel to the temporary job site the next day. However, overnight storage of a gauge at a technician's residence is not allowed, as a routine practice for technicians. In this case, the technician worked a second job as a security guard and after finishing his shift during the early morning of April 1, 2014, he drove to the licensee's office and signed out a Seamen Nuclear Corporation Model C-200 portable gauge, containing a nominal 4.5 millicuries of radium-226. The technician secured the gauge in the back of his personal pickup truck and drove to his residence for a few hours of rest and sleep before going to the temporary jobsite with the gauge. The technician arrived at his residence at approximately 1:30 a.m., and parked the pickup truck on the property of his residence. The gauge was stored in the open bed of the pickup truck and secured in the back of the technician's pickup truck in accordance with the requirements of 10 CFR 30.34(i), using a robust chain and three padlocks to create two tangible barriers as required by the regulation. At some time between the hours of 1:30 a.m. and 7:30 a.m., the gauge was stolen from the back of the technician's pickup truck by an unknown individual or individuals. At approximately 7:30 a.m., the technician walked out of his residence and approached his pickup. The technician noticed the tailgate had been lowered down and the gauge was missing from the back of the pickup truck. The technician assessed the scene and determined that one padlock was missing and another padlock had been cut to release it from holding the chain in place. The majority of the chain and one padlock remained in the back of the pickup truck. Once the technician recognized that the gauge had been stolen, he immediately notified the Indianapolis Metropolitan Police Department and the licensee's Indianapolis site RSO. The police were unable to respond to the crime scene; however, the technician provided sufficient information to complete a theft report via telephone. During the April 2, 2014, reactive inspection, the inspector discussed with the RSO and technician the method used to secure the gauge in the pickup truck. The inspector

asked the technician to demonstrate how the gauge was secured in his pickup truck on the morning of the theft. The inspector determined that the configuration of the chain being wrapped around the gauge transport case and use of the three padlocks created the required two tangible barriers. The inspector concluded that the licensee provided adequate security of the portable gauge while the gauge was not under constant surveillance and that no violations of NRC regulatory requirements occurred.

As a result of the event, the RSO has taken additional actions to prevent recurrence which included instructing all authorized gauge users to minimize the time between signing out a gauge for use and the actual use. The RSO also provided additional instruction in the proper procedure for securing and maintaining observation of the gauge.

2.3 Conclusions

The technician had secured the gauge in the bed of his pickup truck while the gauge was not under constant surveillance and unattended by the technician. The inspector concluded that the technician's configuration for securing the gauge to the pickup truck constituted two tangible barriers as required by 10 CFR 30.34(i). No violations of NRC regulatory requirements were identified with respect to the security of the gauge.

3 Reporting of event

3.1 Inspection Scope

The inspector reviewed the licensee's reporting of the stolen gauge event to the NRC by interviewing the RSO and reviewing the followup written report documenting the stolen gauge event.

3.2 Observations and Findings

On April 1, 2014, the licensee's Indianapolis site RSO became aware that a gauge had been stolen upon notification by the technician. The site RSO notified the corporate RSO. The site RSO subsequently reported the event to the NRC Operations Center by telephone as required by 10 CFR 20.2201(a)(1)(i). The telephonic report included all required information.

On April 16, 2014, the NRC received a letter dated April 15, 2014, providing a written report concerning the stolen gauge. A publicly available copy of the licensee's written response can be found in the NRC's Agencywide Documents Access and Management System using Accession Number ML14115A351. The letter was received within 30 days following the initial report, as required by 10 CFR 20.2201(b), and addressed all topics required by the regulation. As of April 15, 2014, the gauge has not been recovered.

3.3 Conclusions

The inspector identified no violations concerning the licensee's initial telephonic or written reports to the NRC about the stolen portable gauge.

4 Exit Meeting Summary

The NRC inspector presented preliminary inspection findings following the onsite inspection on April 2, 2014. The licensee did not identify any documents or processes reviewed by the inspectors as proprietary. The licensee acknowledged the findings presented.

LIST OF PERSONNEL CONTACTED

Ken Sullivan, Radiation Safety Officer
John Ackerman, Technician

Attended exit meeting on April 2, 2014.

INSPECTION PROCEDURES USED

87124: Fixed and Portable Gauge Programs