



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION IV
1600 E. LAMAR BLVD.
ARLINGTON, TX 76011-4511

December 31, 2015

EA-15-188

Ms. Maria Elizabeth V. Cristi, P.E.
Radiation Safety Officer
Pacific Soils Engineering & Testing
P. O. Box 20670 Guam Main Facility
Barrigada, Guam 96921

SUBJECT: NRC INSPECTION REPORT 030-17199/2015-001

Dear Ms. Cristi:

This letter refers to the routine, unannounced inspection conducted on June 24-25, 2015, at your facility located in Upper Tumon, Guam, with continued in-office review through November 30, 2015. The purpose of the inspection was an examination of activities conducted under your license as they relate to safety and security, and to confirm compliance with the U.S. Nuclear Regulatory Commission's (NRC) rules and regulations, and with the conditions of your NRC license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, independent radiation measurements, and interviews with personnel. On June 25, 2015, at the conclusion of the onsite portion of the inspection, the inspector discussed the preliminary inspection findings with you. A final exit briefing was conducted telephonically with you on December 3, 2015. The enclosed report presents the results of this inspection.

Based on the results of this inspection, two apparent violations were identified and one 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 being considered for escalated enforcement action involved the failure to use two independent physical controls to secure a portable gauge while in storage. During the December 3, 2015, telephone conversation, Jack Whitten of my staff discussed with you the circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective actions. Therefore, it may not be necessary to conduct a pre-decisional enforcement conference (PEC).

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 2.3.4 of the Enforcement Policy. The final decision will be based on you confirming on the license docket that the corrective actions previously described to the NRC staff have been or are being taken.

Before the NRC makes its enforcement decision, we are providing you an opportunity to (1) respond to the apparent violation(s) addressed in this inspection report within 30 days of the date of this letter or (2) request a PEC. If a PEC is held, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference. If you decide to participate in a PEC please contact Mr. Whitten at 817-200-1197 within 10 days of the date of this letter. A PEC should be held within 30 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in NRC Inspection Report 030-17199/2015-001; EA-15-188" 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; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. Additionally, your response should be sent to the NRC's Document Control Center, with a copy mailed to Mark Shaffer, Director, Division of Nuclear Materials Safety, Region IV, 1600 East Lamar Blvd., Arlington, Texas 76011-4511, within 30 days of the date of this letter. 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.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the PEC may include information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned. In presenting your corrective action, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violations. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. You can find the Information Notice on the NRC website at: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1996/in96028.html>.

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 "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or in 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

M. Cristi

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should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

If you have any questions concerning this matter, please contact Ms. Michelle Simmons at 817-200-1590.

Sincerely,

/RA/

Mark R. Shaffer, Director
Division of Nuclear Material Safety

Docket: 030-17199
License: 56-19242-01

Enclosure:
NRC Inspection Report 030-17199/2015-001
w/Attachment: Supplemental Information

cc: Vincent P. Arriola
Executive Director
155 Hesler Place
Hagatna, Guam 96910

M. Cristi

- 3 -

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cc: Vincent P. Arriola
Executive Director
155 Hesler Place
Hagatna, Guam 96910

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U.S. Nuclear Regulatory Commission
Region IV

Docket: 030-17199
Report: 030-17199/2015-001
EA: EA-2015-188
Licensee: Pacific Soils Engineering & Testing
Facilities: 894-C North Marine Corps Drive,
Location: Upper Tumon, Guam
Date: June 24, 2015 – December 3, 2015
Inspector: Michelle R. Simmons, Health Physicist
Nuclear Materials Safety Branch B
Approved By: Brooke G. Smith, Acting Chief
Nuclear Materials Safety Branch A

Enclosure

EXECUTIVE SUMMARY

Pacific Soils Engineering & Testing
NRC Inspection Report 030-17199/2015-001

This was an unannounced inspection of licensed activities conducted under a Nuclear Regulatory Commission (NRC) portable nuclear gauge license involving the use, storage, and security of byproduct material at the Pacific Soils Engineering & Testing (PSE&T) main office located at 894-C North Marine Corps Drive, Upper Tumon, Guam, and at a temporary job site at Andersen Air Force Base (AFB), Yigo, Guam. The inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel. The inspection included a review of the licensee's program for securing portable gauges at temporary job sites. This report describes the findings of the inspection.

Program Overview

PSE&T, is authorized to use and store byproduct material (cesium-137 and americium-241) in a portable moisture density gauging devices at a temporary job site located in Guam, under NRC Materials License 56-19242-01. The licensee possesses eight Troxler Electronic Laboratories, Inc., and two Campbell Pacific Nuclear International, Inc., moisture density gauges for environmental testing. (Section 1)

Inspection Findings

The licensee failed to secure a portable nuclear gauge, while in storage, with two independent physical controls as required by regulation. This was identified as an apparent violation of Title 10 of the Code of Federal Regulations (10 CFR) 30.34(i). The licensee failed to provide hazmat training once every three years to hazmat employees as required by 10 CFR 71.5 and Title 49 of the Code of Federal Regulations (49 CFR) 172.704(c)(2). (Section 2.2)

Corrective Actions

- On June 24, 2015, the licensee immediately secured the portable nuclear gauge with two independent physical controls. (Section 2.4)
- On June 24, 2015, the licensee provided additional training and counseling in portable nuclear gauge security procedures to the authorized user who failed to implement the licensee's security protocol after returning from a temporary job site. (Section 2.4)
- On August 26, 2015, the licensee trained all gauge authorized users in portable nuclear gauge security procedures. (Section 2.4)
- On August 26, 2015, the licensee provided hazmat training to all hazmat employees. (Section 2.4)

Report Details

1 Program Overview (87124)

1.1 Inspection Scope

The inspector reviewed the license and supporting documentation, interviewed licensee staff, and examined the storage location at the licensee's facility in Guam on June 24, 2015, and conducted an inspection of a temporary job site on June 25, 2015. Collectively, the documents reviewed described the licensee's implementation of requirements under their specific license and its radiation safety and security program. The last inspection was conducted in 2010. No violations were identified during that inspection.

1.2 Observations and Findings

Pacific Soils Engineering & Testing (PSE&T), is authorized under NRC Materials License 56-19242-01 to use and possess byproduct material in portable moisture density gauges. PSE&T conducts licensed activities on the island of Guam. The Majority of PSE&T's licensed activities are performed on Andersen Air Force Base (AFB) and Naval Base Guam. At the time of the inspection, the licensee possessed eight portable moisture density gauge and employed six authorized users. The gauges are dispatched from the main office in Upper Tumon, Guam, for work conducted throughout the island.

2 Inspection Findings (87124)

2.1 Inspection Scope

The inspector reviewed procedures and conducted interviews with licensee and portable gauge users. The inspector observed licensed activities at the main office and at a temporary job site on Andersen AFB. Licensed activities were examined as they relate to the safety and security of the portable gauges and the licensee's efforts to protect members of the public. The inspector assessed the licensee's implementation of the NRC's gauge security requirements when the portable nuclear gauge was not under the constant surveillance or direct control of an authorized user.

2.2 Inspection Observations and Findings

- Title 10 of the Code of Federal Regulations (10 CFR) 30.34(i) requires that each portable gauge licensee use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal whenever portable nuclear gauges are not under the control and constant surveillance of the licensee.

On June 24, 2015, the inspector arrived at the PSE&T main office location in Tumon, Guam, to conduct an unannounced routine inspection. The inspector observed that the licensee's portable gauge was stored on the licensee's truck and was not secured with two independent physical controls that form tangible barriers. At the time the licensee was not providing constant surveillance or control. The inspector observed, in reviewing the storage configuration of the portable nuclear gauge, that a

heavy weight metallic box on the back of the truck was not locked. Located inside of the metallic box, there was an unlocked yellow portable nuclear gauge storage container. The portable gauge was located inside the unlocked yellow storage container. The inspector took confirmatory radiation measurements and confirmed that the radioactive sources were present in the portable gauge. The licensee immediately secured the portable gauge inside the storage closet located inside the licensee's main office and provided on-the-spot security training to the portable nuclear gauge user.

On June 25, 2015, the inspector conducted an inspection of a temporary job site on Anderson AFB. A different PSE&T portable nuclear gauge user was working at this site. The inspector observed that the portable nuclear gauge was secured correctly when it was not under direct surveillance or control of the user.

Based on the June 24, 2015, inspection findings, the inspector determined that the licensee failed to maintain direct surveillance or adequate control of their portable nuclear gauge. The licensee's failure to use a minimum of two independent physical controls that formed tangible barriers to secure the portable nuclear gauge from unauthorized removal while the portable gauge was not under the control and constant surveillance of the licensee was identified as an apparent violation of 10 CFR 30.34(i). (030-17199/2015-001-01)

- License Condition 19 of NRC Materials License 56-19242-01, states that the licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material." 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside the site of usage, as specified in the NRC license, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the US Department of Transportation (DOT) regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transport.

Title 49 CFR 172.704(c)(2) requires, in part, that a hazmat employee must receive the training required by 49 CFR 172 Subpart H of DOT regulations at least once every three years.

At the time of inspection, the Radiation Safety Officer (RSO) stated that she was unaware of the requirement that each hazmat employee should receive hazmat training at a frequency of no longer than three years. The RSO indicated that as part of the licensee's business operations it uses the portable nuclear gauges on a daily basis at several temporary job sites on the island of Guam. The inspector observed one of the licensee's portable nuclear gauge users performing licensed activities at Andersen AFB. The portable nuclear gauge traveled on public highways in order to reach Andersen AFB. The inspector determined that the portable gauge users had transported licensed radioactive material on public highways and had not received hazmat training within the last three years, as required by DOT. This was identified as an apparent violation of License Condition 19 and 10 CFR 71.5(a). (030-17199/2015-001-02)

2.3 Conclusion

The inspector identified two apparent violations involving failures to: (1) use two independent physical controls to secure a portable gauge while in storage; and (2) provide hazmat training once every three years, as required by DOT regulations, to portable gauge users transporting licensed radioactive material on public roads.

2.4 Corrective Actions

On the day of the inspection, the licensee immediately secured the portable nuclear gauge after the inspector observed the portable nuclear gauge not under the licensee's control or constant surveillance. The licensee, after becoming aware of this lack of control or oversight, secured the portable gauge within the storage closet inside the main office facility, with two independent physical controls forming tangible barriers, to prevent unauthorized access to the stored portable nuclear gauge. The inspector noted that keys to the padlocks of the storage closet were kept under positive control by the only authorized user on site. Following this inspection, the licensee employed a representative from Troxler Electronic Laboratories, Inc., to provide portable nuclear gauge training and hazmat training to all of the licensee's portable gauge users. The portable nuclear gauge and hazmat employee training was conducted on August 26, 2015. On November 5, 2015, the licensee submitted documentation detailing the training.

3 Exit Meeting Summary

A preliminary exit briefing was conducted with the RSO/Owner at the conclusion of the on-site inspection. A final telephonic exit briefing was conducted with the RSO on December 3, 2015, to review the inspection findings as presented in this report. The RSO acknowledged the inspector's findings. No proprietary information was identified during the inspection.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

Maria Cristi, Radiation Safety Officer

Non-Licensee

Michael Clayton, Troxler Representative

INSPECTION PROCEDURES USED

87124 Fixed and Portable Nuclear Gauges

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-17199/2015-001-01 Apparent violation involving a failure 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.

030-17199/2015-001-02 Apparent violation involving failure to receive hazmat training once every three years.

Closed

None

Discussed

None

LIST OF ACRONYMS USED

AFB	Air Force Base
APV	Apparent Violation
CFR	<i>Code of Federal Regulations</i>
EA	Enforcement Action
NRC	U. S. Nuclear Regulatory Commission
PSE&T	Pacific Soils Engineering & Testing
RSO	Radiation Safety Officer