



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION IV  
1600 EAST LAMAR BLVD  
ARLINGTON, TEXAS 76011-4511

July 30, 2012

EA-12-124

Gayle Staton  
Radiation Safety Director  
Acuren USA  
101 Old Underwood Road, Building J  
La Porte, TX 77571

SUBJECT: NRC INSPECTION REPORT 030-36217/2012-001 AND NOTICE OF VIOLATION

Dear Ms. Staton:

This letter refers to the in-office inspection conducted by Mr. Jason Razo of my staff from April 5 through July 5, 2012. The purpose of the inspection was to review the circumstances surrounding an incident reported by Mr. Robert Jefferson, Acuren USA's radiation safety officer (RSO). The incident occurred near Prudhoe Bay, Alaska, on April 3, 2012, and involved radiographic operations conducted without the supervision of a radiographer. During the inspection, the NRC examined selected procedures and representative records, reviewed reports submitted by the licensee, and interviewed licensee personnel. The enclosed report presents the results of this inspection. The NRC conducted a final telephonic exit briefing with you on July 5, 2012, to discuss the results of the inspection.

The Prudhoe Bay incident involved two radiographer's assistants conducting radiography while not under the supervision of a radiographer, in apparent violation of 10 CFR 34.46. Initially, the crew had a radiographer present, but he was reassigned to a different crew and the licensee did not ensure that the first crew had the personnel required to perform radiography. The two radiographer's assistants performed 10 radiographic exposures, without any safety or security issues, before returning the radiographic exposure device to the licensee's authorized storage location. The radiographer believed that one assistant was a qualified radiographer. The radiographer's assistants each thought the other was qualified.

Later that day, during a routine debrief between the Detection Department and the RSO, the RSO recognized that the modified crew did not have a radiographer present, as required by NRC regulations. After taking immediate corrective actions, which included retraining the Detection Department Lead in the requirement to have at least one radiographer on each crew and the method for verifying a radiographer's qualifications, the RSO discussed the incident with the Acuren USA Prudhoe Bay Project Manager and the Corporate Radiation Safety Director. Acuren USA management decided that it would be prudent to initiate communication with the NRC to discuss the incident and ensure that corrective actions were adequate. Although not required, the licensee took the initiative to contact the NRC by e-mail on April 5, 2012.

Based on the results of the inspection, the NRC determined that a violation of NRC requirements occurred. The violation was evaluated 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](http://www.nrc.gov/about_nrc/regulatory/enforcement/enforce_pol.html). A violation of 10 CFR 34.46 is normally categorized at Severity Level III and considered for escalated enforcement action and proposed imposition of a civil penalty. However, review of the specific facts for this case identified that, amongst other considerations: (1) the violation was isolated to a single occurrence of brief duration and did not involve willful non-compliance; (2) your current procedure resulted in your identification of the incident within hours; (3) you promptly notified the NRC of the incident, when notification was not required, and afforded NRC the opportunity to review your corrective actions; (4) you took immediate and comprehensive corrective actions; (5) the incident posed no significant potential for safety or security consequences; and (6) programmatic weakness is not indicated. Therefore, the NRC has categorized this violation at Severity Level IV.

The violation is cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding it are described in detail in the enclosed inspection report. The violation is being cited in the Notice because it was identified by the licensee through an event.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to prevent recurrence, and the date when full compliance was achieved is already adequately addressed on the docket in your letters dated April 4 and 10 (ML12125A335) and May 14, 2012 (ML12138A385). Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

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 document 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 or proprietary information so that it can be made available to the Public without redaction.

Should you have any questions concerning this inspection, please contact Mr. Jason Razo at 817-200-1589 or Mr. Michael Vasquez at 817-200-1130.

Sincerely,

/RA/

Anton Vogel, Director  
Division of Nuclear Materials Safety

Docket: 030-36217  
License: 42-32443-01

Acuren USA

-3-

Enclosures:

1. Notice of Violation
2. Inspection Report 030-36217/2012-001

cc/ with Enclosures 1 and 2:

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RIV Materials Docket File  
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 EA-12-124.docx  
 FINAL: R:\ DNMS\2012\ ML12213A193

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## NOTICE OF VIOLATION

Acuren USA  
La Porte, Texas

Docket: 030-36217  
License: 42-32443-01  
EA-12-124

During an NRC inspection conducted from April 5 through July 5, 2012, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 34.46 requires that whenever a radiographer's assistant uses radiographic exposure devices, associated equipment, or sealed sources or conducts radiation surveys required by 10 CFR 34.49(b) to determine that the sealed source has returned to the shielded position after an exposure, the assistant shall be under the personal supervision of a radiographer. The personal supervision must include: (a) the radiographer's physical presence at the site where the sealed sources are being used; (b) the availability of the radiographer to give immediate assistance if required; and (c) the radiographer's direct observation of the assistant's performance of the operations referred to in this section.

Contrary to the above, on April 3, 2012, the licensee's radiographer's assistants used a radiographic exposure device and conducted radiation surveys required by 10 CFR 34.49(b) without being under the personal supervision of a radiographer. Specifically, at a temporary job site in Prudhoe Bay, Alaska, the radiographer was not physically present at the site where the sealed source was being used, was not available to give immediate assistance if required, and could not directly observe the assistants' performance of the operations referred to in 10 CFR 34.46.

This is a Severity Level IV violation (Section 6.3).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and prevent recurrence, and the date when full compliance will be achieved, is already adequately addressed on the docket in your letters dated April 4 and 10 (ML12125A335) and May 14, 2012 (ML12138A385). However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, EA-12-124, NRC Inspection Report 030-36217/2012-001," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001 with a copy to the Regional Administrator, Region IV, within 30 days of the date of the letter transmitting this Notice of Violation. If you choose to respond, your response 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>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within 2 working days of receipt.

Dated this 30th day of July 2012

ENCLOSURE



U.S. NUCLEAR REGULATORY COMMISSION

Region IV

Docket:	030-36217
License:	42-32443-01
Report:	2012-001
EA:	12-124
Licensee:	Acuren USA
Facilities:	Temporary Job Site
Location:	Prudhoe Bay, Alaska
Date:	April 5 through July 5, 2012
Inspectors:	Jason M. Razo, Health Physicist Nuclear Materials Safety Branch A
Approved By:	G. Michael Vasquez, Chief Nuclear Materials Safety Branch A
Attachment:	Supplemental Inspection Information

ENCLOSURE 2

## **EXECUTIVE SUMMARY**

Acuren USA  
NRC Inspection Report 030-36217/2012-001

This was a reactive inspection to review the circumstances surrounding an incident involving the use of byproduct material at a temporary job site located near Prudhoe Bay, Alaska. The incident occurred on April 3, 2012, and involved the use of a radiographic exposure device and sealed source to conduct radiography by two radiographer's assistants.

The reactive inspection consisted of selected examination of procedures and representative records pertaining to the incident and telephonic interviews with personnel involved in the incident. This report describes the findings of the reactive inspection.

### Program Overview

The licensee was authorized under NRC License 42-32443-01, Amendment 14, to use byproduct material to perform radiographic operations at field stations and temporary job sites in NRC jurisdiction. (Section 1)

### Inspection Findings

One apparent violation was identified during this inspection involving the failure by the licensee to ensure that radiographer's assistants were under the personal supervision of a certified radiographer. (Section 2)

### Corrective Actions

Immediate corrective actions included retraining the supervisors to ensure that at least one certified radiographer was on each radiography crew. Long-term corrective actions included implementation of a new scheduling policy that required the supervisor to reference the certified radiographer list before assigning or modifying a crew. In addition, the licensee changed its utilization log to require each crew member to note his or her certifications or qualifications. Finally, the radiation safety officer (RSO) trained all affected individuals at each of the licensee's field stations in the new procedures and forms. (Section 3)



## **Report Details**

### **1 Program Overview (87121)**

#### **1.1 Inspection Scope**

The inspector reviewed the NRC license and docketed inspection history with the NRC. Collectively, these items described the licensee's radiation safety program.

#### **1.2 Observations and Findings**

Acuren USA (licensee) was authorized under NRC License 42-32443-01, Amendment 14, to use byproduct material to perform radiography using radiographic exposure devices. The licensee was authorized to perform radiography at field stations and at temporary job sites within NRC jurisdiction.

The licensee typically has approximately 20 radiographers divided between two shifts at Prudhoe Bay, Alaska. The radiation safety program consisted of three different departments with radiographers and radiographer's assistants in each department. Each department performs gamma radiography; however, certain departments also have x-ray radiography and ultrasonic testing responsibilities. Supervisors were responsible for constructing and modifying radiography crews.

### **2 Inspection Findings (87121, 87103)**

#### **2.1 Inspection Scope**

The inspector reviewed the letters submitted by the licensee related to the incident dated April 10, 2012 (ML12125A335) and May 14, 2012 (ML12138A385). The inspector interviewed licensee staff and management by telephone to gather additional details of the circumstances surrounding the incident.

#### **2.2 Observations and Findings Considered for Escalated Enforcement**

On April 5, 2012, the licensee RSO, in consultation with licensee management, contacted the NRC to discuss a potential non-compliance related to radiographic operations. The RSO indicated that on April 3, 2012, at a temporary job site, in NRC jurisdiction, near Prudhoe Bay, Alaska, two radiographer's assistants performed radiographic operations without being under the supervision of a certified radiographer.

The licensee crew initially consisted of one radiographer and two radiographer's assistants. Due to the needs of a separate crew, the Detection Department Lead asked the radiographer to help the other crew. This second crew was not in the direct physical vicinity of the original crew. After the radiographer departed to assist the second crew, the two remaining radiographer's assistants completed 10 radiographic exposures. After completing the exposures and associated surveys, the radiographer's assistants safely returned the radiographic exposure device to its authorized storage vault without any incidents.

During a routine briefing later that day with the Detection Department Lead, the RSO realized that the radiographer that was removed from the original crew was the only

certified gamma radiographer on that crew. The Detection Department Lead stated that he mistakenly thought that one of the remaining radiographer's assistants was actually a certified radiographer. The individual was a certified x-ray radiographer but was not a certified gamma radiographer that met the requirements of 10 CFR 34.43.

The radiographer's assistants did not recognize the certification differences, and they assumed the x-ray radiographer met the certifications required by the NRC. In addition, due to the extensive experience of the other radiographer's assistant, the x-ray radiographer believed that the other radiographer's assistant was a certified radiographer.

This failure to ensure that radiographer's assistants use radiographic exposure devices and sealed sources only while under the direct observation of, and in the physical presence of, a certified radiographer was identified as an apparent violation of 10 CFR 34.46. (030-36217/12001-01)

## 2.3 Conclusions

The inspection identified an apparent failure by the licensee to ensure that radiographer's assistants were under the supervision of a radiographer when performing radiographic operations.

## 3 **Corrective Actions (87121, 87103)**

### 3.1 Inspection Scope

The licensee took immediate and long-term corrective actions associated with the isolated failure to supervise radiographer's assistants. The inspector reviewed the letters submitted by the licensee to document the corrective actions and interviewed selected licensee personnel by telephone.

### 3.2 Observations and Findings

The inspector reviewed and evaluated the immediate and selected long-term corrective actions initiated by the licensee. The inspector reviewed records and interviewed licensee staff in order to evaluate the effectiveness of the corrective actions. The inspector reviewed the letters and attachments the licensee submitted on April 4 and 10, 2012, and on May 14, 2012. The inspector evaluated whether the licensee identified the root cause of the apparent violation and whether the corrective actions would be effective at reducing the likelihood of identical or similar failures in the future.

#### 3.2.1 Immediate

- The RSO verified that all ongoing and scheduled crews had at least one certified radiographer.
- The RSO retrained the Detection Department Lead and the radiography personnel in the requirement to have at least one certified radiographer providing supervision of radiographer's assistants.

- The RSO provided a certified radiographer list to the Detection Department Leads to consult when assembling or modifying crews.

### 3.2.2 Long-Term

- The RSO generated a roster that Detection Department Leads would consult to determine whether an individual was a certified radiographer. The list would be consulted before each hitch change (approximately every 2 weeks, when crews are set up for the upcoming 2-week period) and during any crew change in the middle of a hitch.
- By May 27, 2012, the licensee modified the daily utilization/log form to identify the lead radiographer and to identify the certifications, or lack thereof, of all members of the crew. All affected staff were retrained in the new form and the requirements of 10 CFR 34.46, including those at field offices other than Prudhoe Bay, Alaska.
- By June 9\*, 2012, the event and corrective actions will be incorporated into the Annual Refresher Training Topics at the corporate RSO level.
- By June 9\*, 2012, the RSO shared the lessons learned with the Corporate Radiation Safety Director in order to apply pertinent corrective actions to other branches of the company.
- By June 9\*, 2012, the RSO completed re-training for all scheduling supervisors at all field stations listed on the license in the requirements to have a certified radiographer on each crew.
- By June 9\*, 2012, the RSO completed training with all radiographers on their responsibilities as crew leaders. The radiographers must not transfer crew responsibility to anyone without at least gamma radiographer certification. The new radiographer would document that certification on a new utilization log.

\*Due to shift schedules at Prudhoe Bay, Alaska, not all licensee personnel were available to receive training until June 9, 2012. Some staff were not in the Prudhoe Bay area for multiple weeks, but received the training upon return.

### 3.3 Conclusions

The licensee implemented immediate and long-term corrective actions that will provide a reasonable assurance that a similar failure to supervise radiographer's assistants will not occur in the future.

#### **4      Exit Meeting Summary**

A final telephonic exit was performed with Ms. Gayle Staton on July 5, 2012, to discuss the inspection findings as presented in this report. She acknowledged the inspector's findings. No proprietary information was identified.

## PARTIAL LIST OF PERSONS CONTACTED

### Licensee

R. Hardy, Prudhoe Bay Project Manager  
R. Jefferson, RSO  
G. Staton, Corporate RSO  
J. Tesch, Detection Department Coordinator  
S. Goodman, Detection Lead  
N. Smith, Radiographer  
R. Williamson, Assistant Radiographer  
A. Kahinu, Assistant Radiographer

## INSPECTION PROCEDURES USED

87121	Radiography
87103	Inspection of Material Licensees Involved in an Incident

## ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened

030-36217/12001-01	VIO	Violation involving the failure to supervise radiographer's assistants during radiographic operations.
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### Closed

None

### Discussed

None.

## LIST OF ACRONYMS USED

CFR	<i>Code of Federal Regulations</i>
EA	Enforcement Action
ML	ADAMS Mail Library accession number
NRC	Nuclear Regulatory Commission
RSO	radiation safety officer

ATTACHMENT