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

August 8, 2012

EA-12-058

Pennie Frye
Radiation Safety Officer
DBI, Inc.
1909 Salt Creek Highway
Casper, Wyoming 82601

SUBJECT: NRC INSPECTION REPORT 030-37817/2011-001 AND INVESTIGATION REPORT 4-2011-060

Dear Ms. Frye:

This letter refers to the inspection conducted on July 1, 2011, at a temporary jobsite located near Casper, Wyoming, and to the subsequent investigation conducted by the NRC's Office of Investigations. This inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's 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, observation of activities, and interviews with personnel. Preliminary inspection findings were discussed with your staff at the conclusion of the onsite portion of the inspection. After in-office reviews of all the information collected, a final telephonic exit briefing was conducted with you and other DBI Inc., personnel on July 17, 2012. The enclosed report presents the results of this inspection (Enclosure 1).

Based on the results of this inspection and investigation, four apparent violations were identified and are 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 violations involve failure to: (1) conduct a survey when approaching the radiography camera and guide tube as required by 10 CFR 34.49(b); (2) have at least one other qualified individual while performing radiography as required by 10 CFR 34.41; (3) supervise the assistant radiographer as required by 10 CFR 34.46; and (4) provide complete and accurate information to the Commission as required by 10 CFR 30.9(a). In addition, the NRC is concerned that willfulness might be associated with the second, third, and fourth apparent violations listed above.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) request a Predecisional Enforcement Conference (PEC), or (2) request Alternative Dispute Resolution (ADR). If a PEC is held, it will be open for public observation and the NRC may issue a press release to announce the time and date of the conference. If you decide to participate in a PEC or pursue ADR, please contact Mr. Michael Vasquez of my staff at 817-200-1130 within 10 days from the date of this letter. A PEC should be held within 30 days and

an ADR session within 45 days of the date of this letter.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on the apparent violation and any other information that you believe the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include the following: 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 to be taken. 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 violations. The guidance in the enclosed NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful.

In lieu of a PEC, you may also request ADR with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a third-party neutral. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC's program can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

Since the NRC has not made a final determination in this matter, no Notice of Violation is being issued for the four apparent violations at this time. 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.

If you have any questions concerning this matter, please contact Mr. Michael Vasquez of my staff at 817-200-1130.

Sincerely,

/RA/

Anton Vegel, Director
Division of Nuclear Materials Safety

Docket: 030-37817
License: 49-29301-01

Enclosures:
1. Inspection Report 030-37817/2011-001
2. OI Factual Summary 04-2011-060
3. NRC Information Notice 96-28

cc w/Enclosures 1 and 2:
Scott W. Ramsay
Radiological Services Supervisor
Wyoming Office of Homeland Security
5500 Bishop Blvd.
Door #1
Cheyenne, Wyoming 82009

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RIV ETA (Silas.Kennedy@nrc.gov)

Hard copy:
RIV Materials Docket File

ML12221A362
S:/DNMS/~Escalated Enforcement/Active Cases/DBI/PEC DBI IR 2011-001.docx

ADAMS: □ No **x Yes**	x SUNSI Review Complete	Reviewer Initials: MRP
	x Publicly Available	x Non-Sensitive
	□ Non-publicly Available	□ Sensitive
Choice Letter EA-12-058		

RIV:NMSB-A	RIV:NMSB-A	C:NMSB-A	ACES	C:ACES
DStearns	JThompson	MVasquez	RKellar	HGepford
/RA/	***/RA/***	***/RA/***	***/RA/***	***/RA/***
7/20/2012	8/8/2012	7/24/2012	7/24/2012	7/24/2012
OE	OGC	D:DNMS		
SWoods	MClark	AVegel		
E - RCBrowder	***E - NLO - RCB***	***/RA/***		
8/3/2012	8/6/2012	8/8/2012		

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Report:	030-37817/2011-001
OI Report:	04-2011-060
Docket:	030-37817
License:	49-29301-01
EA:	EA-12-058
Licensee:	DBI, Inc.
Facility:	Temporary Job Site
Location Inspected:	Temporary Job Site located near Casper, Wyoming
Inspection Date:	July 1, 2011
Inspectors:	James Thompson, Sr. Health Physicist Don Stearns, Health Physicist
Approved By:	G. Michael Vasquez, Chief Nuclear Materials Safety Branch A
Attachment:	Supplemental Inspection Information

Enclosure 1

EXECUTIVE SUMMARY

DBI, Inc.
NRC Inspection Report 030-37817/2011-001

This was an inspection of DBI, Inc. involving the use of byproduct material for industrial radiographic operations conducted on July 1, 2011, at a temporary job site located near Casper, Wyoming. The scope of the inspection was limited to the review of selected representative records and procedures, direct observations, and discussions with licensee personnel as related to radiation safety and security and to compliance with the Commission's rules and regulations, as well as the conditions of the license. This report describes the findings of the inspection.

Program Overview

DBI, Inc. is authorized to conduct industrial radiography under NRC License 49-29301-01 at temporary job sites throughout the United States and territorial Federal waters where the NRC maintains jurisdiction for regulating the use of licensed material. (Section 1)

Apparent Violations

- Failure to conduct a survey when the assistant radiographer approached the radiographic exposure device and the guide tube after completing a radiographic exposure. This was identified as an apparent violation of 10 CFR 34.49(b). (Section 2.2)

- Failure to ensure that radiography was conducted with at least one other qualified individual. This was identified as an apparent violation of 10 CFR 34.41(a). (Section 2.2)

- Failure to ensure that the radiographer's assistant was under the personal supervision of a radiographer while using radiographic exposure devices. This was identified as an apparent violation of 10 CFR 34.46(c). (Section 2.2)

- Failure to provide complete and accurate information to the Commission when the assistant radiographer was questioned about his knowledge of the requirements for conducting radiography with at least one other qualified individual and his knowledge of requirements for supervision of the radiographer's assistants. This was identified as an apparent violation of 10 CFR 30.9(a). (Section 2.2)

Corrective Actions

- By letter dated July 7, 2011, the licensee stated that the radiographer and the assistant radiographer had been suspended from performing any radiography until both had gone through retraining on radiation safety and the U.S. NRC regulations. Retraining was completed on July 15, 2011.

- An e-mail was distributed to the Operations Manager, Assistant Radiation Safety Officers (RSO), and radiographic personnel concerning the safety violations, with a verification sheet signed and dated to verify receipt of the email. The verification sheet was returned to the Corporate RSO by July 13, 2011.

- An internal investigation was completed on July 15, 2011, to determine the root causes of the violations.

- Unannounced field audits were performed and completed by August 31, 2011, to help ensure radiation safety was being implemented by the radiographers and assistant radiographers.

- A Safety Audit was performed by the corporate RSO on March 23, 2012.

- Field audits were performed by the corporate RSO on March 19, 2012, and March 20, 2012

REPORT DETAILS

1 Program Overview (87121)

1.1 Inspection Scope

On July 1, 2011, at the licensee's temporary job site located near Casper, Wyoming, the inspectors observed radiographic operations and reviewed the NRC license and correspondence, statements, representations, and procedures provided by the licensee in support of their application for the license. The inspectors reviewed records maintained by the licensee and interviewed licensee personnel. Collectively, the activities observed and the documents reviewed described the licensee's implementation of its NRC license requirements and its radiation safety program.

1.2 Observations and Findings

DBI, Inc. is authorized under NRC Materials License 49-29301-01 to possess and use byproduct material for industrial radiographic operations at locations specified on the license and at temporary job sites in the United States where the NRC maintains jurisdiction for regulating the use of byproduct material. At the time of the temporary job site inspection, the licensee was using licensed material at an industrial complex near Casper, Wyoming.

2 Inspection Findings (87121)

2.1 Inspection Scope

The inspectors conducted an unannounced review of licensed activities at a temporary jobsite near Casper, Wyoming, on July 1, 2011. The inspectors observed radiographic operations and conducted interviews with licensee personnel, which included a radiographer and an assistant radiographer, and reviewed documentation pertaining to licensee's operating and emergency procedures, transportation procedures, and annual refresher training.

2.2 Observations and Findings

Apparent Violation of 10 CFR 34.49(b)

10 CFR 34.49(b) requires, in part, that the licensee shall conduct a survey of the radiographic exposure device and the guide tube after each exposure when approaching the device or guide tube. On July 1, 2011, the inspectors observed an individual conducting radiography operations approach the radiographic exposure device without a survey instrument.

On July 1, 2011, the NRC inspectors approached a temporary jobsite location in an industrial complex, near Casper, Wyoming. The inspectors noticed a radiography vehicle parked near a facility within the industrial complex. The inspectors parked to observe the activities and turned on a survey meter to determine if radiography was

being performed. The radiography equipment was visible at the door of the facility. After a short time, the inspector's survey meter indicated that radiography was in progress and, within approximately 30 seconds, the survey meter returned to normal readings, indicating that the radiography exposure was complete.

The inspectors then observed one person approach the radiography camera without a survey instrument. After passing near the radiography camera and guide tube, the assistant radiographer retrieved a survey instrument located on top of a box approximately 5 feet past the camera, made a quick survey of the camera, and returned the survey instrument to the previous location. Based on the inspector's observation, the individual did not approach the radiography exposure device with a survey meter; he had to pass by the radiographic exposure device before obtaining the survey meter. In addition, the individual did not survey the guide tube as required. The failure to conduct a survey of the radiographic exposure device and the guide tube after each exposure when approaching the device or guide tube is an apparent violation of 10 CFR 34.49(b). (030-37817/11001-01)

Apparent Violation of 10 CFR 34.41(a)

10 CFR 34.41(a) requires, in part, that whenever radiography is performed at a location other than a permanent radiographic installation, the radiographer must be accompanied by at least one other qualified radiographer or an individual who has met the requirements of 34.43(c). The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry. Radiography may not be performed if only one qualified individual is present.

The inspectors then exited their vehicle and began interviewing the individual. The individual stated he was the radiographer's assistant and that the radiographer was inside the darkroom developing exposed film. The failure to have at least one additional qualified individual observe the operations and be capable of providing immediate assistance to prevent unauthorized entry was identified as an apparent violation of 10 CFR 34.41(a). (030-37817/11001-02)

Apparent Violation of 10 CFR 34.46

10 CFR 34.46 requires, in part, that whenever a radiographer's assistant uses radiographic exposure devices, associated equipment, or sealed sources, or conducts radiation surveys, the assistant shall be under the personal supervision of a radiographer. During the inspection, the NRC identified a failure of the licensee to supervise an assistant radiographer during use of a radiographic exposure device.

The inspectors observed that the radiographer was in the darkroom with the door closed developing exposed film and had not observed the radiographer's assistant using the radiographic exposure device and conducting the (inadequate) radiation surveys. The radiographer was also considered the Assistant Radiation Safety Officer (RSO) for DBI.

During the NRC's investigation which followed the inspection, the assistant radiographer stated that he had performed unsupervised radiographic operations on prior occasions.

Further, he stated that office personnel had instructed him not to do it again. Additional testimony during the investigation identified that, in approximately 2010, the assistant radiographer did perform radiography on his own, without direct supervision or direction to conduct the radiography shots. Further, as a result of this incident, he was provided with an explanation of the requirement that two persons be present during radiography (10 CFR 34.41(a)) and the requirement that the radiographer must observe the assistant radiographer perform radiography (as required by 10 CFR 34.46(a)). In addition, he was provided instruction to not perform radiography by himself again, as well as clarification that he needs to be seen by his supervising radiographer when performing radiography.

The failure to supervise a radiographer's assistant during use of a radiographic exposure device was identified as an apparent violation of 10 CFR 34.46. (030-37817/11001-03)

Apparent Violation of 10 CFR 30.9(a)

10 CFR 30.9(a) requires, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material respects. During the inspection and subsequent investigation, it was determined that the radiographer's assistant did not provide complete and accurate information to the inspectors when questioned about his knowledge of the regulations.

On July 1, 2011, the NRC inspectors questioned the radiographer's assistant about his knowledge of the requirements for conducting radiography with at least one other qualified individual and his knowledge of requirements for supervision of radiographer's assistants. The assistant replied that he was not aware of the "two-person rule." During the subsequent investigation conducted by the NRC's Office of Investigations, the radiographer's assistant admitted that he knew of the requirements but told the inspectors that he did not know. The failure to provide complete and accurate information was identified as an apparent violation of 10 CFR 30.9(a). (030-37817/11001-04)

2.3 Conclusions

The inspectors identified four apparent violations, involving the following: (1) failure to conduct a survey when approaching the radiography camera and guide tube, as required by 10 CFR 34.49(b); (2) failure to have at least one other qualified individual while performing radiography, as required by 10 CFR 34.41(a); (3) failure to supervise the assistant radiographer, as required by 10 CFR 34.46; (4) failure to provide the inspectors with complete and accurate information in accordance with the requirements of 10 CFR 30.9(a).

3 Corrective Actions

The licensee immediately suspended the radiographer and radiographer's assistant from performing radiography until both have been retrained on radiation safety and NRC regulations. Retraining was completed on July 15, 2011.

The licensee issued an email to the Operations Managers, Assistant RSO's, and radiographic personnel concerning the safety violations. A verification sheet was signed and dated on July 13, 2011, indicating that all personnel had received the email.

The licensee initiated an internal investigation to determine the root causes of the violations. The investigation, completed on July 15, 2011, determined that the radiographers were in a hurry to finish the job and failed to follow procedures.

The licensee performed unannounced field audits to help ensure radiation safety was being implemented by the radiographers and radiographer's assistants.

4 Exit Meeting Summary

A preliminary exit briefing was conducted at the conclusion of the onsite inspection with the radiography crew. A preliminary telephonic exit briefing with Pennie Frye, Corporate Radiation Safety Officer, was conducted on July 5, 2011, to review the findings as presented in this report. A final exit briefing was held telephonically with Ms. Pennie Frye on July 17, 2012. The licensee acknowledged the inspectors' findings. No proprietary information was discussed.

PARTIAL LIST OF PERSONS CONTACTED

President
Operations Manager
Pennie Frye, Corporate Radiation Safety Officer

INSPECTION PROCEDURES USED

87121 Industrial Radiography Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-37817/11001-01	APV	The licensee failed to conduct a survey when the radiographer's assistant approached the radiographic exposure device and the guide tube after completing a radiographic exposure. This was identified as an apparent violation of 10 CFR 34.49(b).
030-37817/11001-02	APV	The licensee failed to ensure that radiography was conducted with at least one other qualified individual. This was identified as an apparent violation of 10 CFR 34.41(a).
030-37817/11001-03	APV	The licensee failed to ensure that the radiographer's assistant was under the personal supervision of a radiographer while using radiographic exposure devices. This was identified as an apparent violation of 10 CFR 34.46(a).
030-37817/11001-04	APV	The licensee failed to ensure that information provided to the commission was complete and accurate in all material respects. This was identified as an apparent violation of 10 CFR 30.9(a).

Closed

None

Attachment

Discussed

None

LIST OF ACRONYMS USED

ADR Alternative Dispute Resolution
APV apparent violation
CFR *Code of Federal Regulations*
NRC Nuclear Regulatory Commission
PEC Predecisional Enforcement Conference
RSO Radiation Safety Officer

FACTUAL SUMMARY OF NRC INVESTIGATION

On July 25, 2011, the U.S. Nuclear Regulatory Commission's Office of Investigations (OI) Region IV Field Office, initiated an investigation to determine whether an assistant radiation safety officer at DBI Incorporated (DBI), Casper, Wyoming, willfully failed to provide a qualified radiographer to observe radiographic operations and willfully failed to supervise a radiographer's assistant while conducting radiographic operations. The initial investigation was completed on March 14, 2012, and documented in OI Report 4-2011-060. A supplemental investigation was documented in OI Report 4-2011-060, Supplemental Information, dated May 9, 2012.

On July 1, 2011, at the licensee's temporary job site located near Casper, Wyoming, the inspectors observed radiographic operations and reviewed the NRC license and documents referenced in the license. The inspectors observed an individual performing radiography while the second licensee employee was inside the dark room (with the door closed) and unable to observe the radiography. When questioned, the individual stated he was a radiographer's assistant and that the second individual inside the darkroom developing exposed film was the qualified radiographer and Assistant Radiation Safety Officer (ARSO). When asked, the radiographer's assistant informed the inspectors that he was not aware that two people were required to conduct radiography and that he was not aware he could not conduct radiography by himself.

During the investigation, the radiographer's assistant acknowledged performing radiography while the radiographer was in the darkroom, indicated that the radiographer had not instructed him to perform radiography while the radiographer was inside the darkroom, and that the radiographer was unaware that the radiographer's assistant was going to perform radiography without supervision from the radiographer. The assistant stated his knowledge of the requirements of the "two-person rule" (10 CFR 34.41(a)) and his awareness that by performing radiography as described above he was violating that rule. The assistant stated he understood that the radiographer was supposed to observe the radiographer's assistant whenever the assistant used the camera (as required by 10 CFR 34.46(a)). The assistant stated he understood, at the time of the violations, that he was causing violations of these requirements. Additionally, evidence from the investigation identified that the assistant was not instructed to complete additional radiography shots when the supervising radiographer went in to the darkroom.

The radiographer's assistant admitted he did not tell the inspectors the truth when he told them he was not aware of the "two-person rule." The radiographer's assistant stated that he was playing dumb with the inspectors. He appears to have known he was not providing accurate information to the NRC inspectors, in violation of 10 CFR 30.9.

The assistant stated that he performed unsupervised radiographic operations on prior occasions. Further, he stated that office personnel may have known about this situation and instructed him not to do it again.

Additional testimony during the investigation identified that, in approximately 2010, the radiographer's assistant did perform radiography on his own, without direct supervision or direction to conduct the radiography shots. Further, as a result of this incident, the assistant was provided with an explanation of the requirement that two persons be present during radiography (10 CFR 34.41(a)) and the requirement that the radiographer must observe the assistant radiographer perform radiography (as required by 10 CFR 34.46(a)). The radiographer's assistant was provided instruction to not perform radiography by himself again, as well as clarification that he needs to be seen by his supervising radiographer when performing radiography.

Based on the above information, the NRC is concerned that deliberate misconduct is associated with the apparent violations of 10 CFR 34.41(a) and 10 CFR 34.46(a). In addition, it appears that the radiographer's assistant engaged in deliberate misconduct when he provided inaccurate information to the NRC inspectors by telling them he was not aware of the requirements that the radiographer needed to be present during radiography.