

United States
Nuclear Regulatory Commission



Report of Investigation

H&G INSPECTION, INC.:

DELIBERATE VIOLATION OF REQUIRED RADIOGRAPHY
PRACTICES

Office of Investigations

Reported by OI: **RIV**

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FOIA- 98-328

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Title: H&G INSPECTION, INC.:

DELIBERATE VIOLATION OF REQUIRED RADIOGRAPHY PRACTICES

Licensee:

H&G Inspection, Inc.
9315 Summer Bell
Houston, TX 77074

Docket No.:

Case No.: 4-97-064

Report Date: May 5, 1998

Control Office: OI:RIV

Status: CLOSED

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TC Porters

SYNOPSIS

This investigation was initiated on November 12, 1997, by the Nuclear Regulatory Commission, Office of Investigations, Region IV, to determine if radiographers at H&G Inspection, Inc. (H&G) deliberately violated required radiography practices.

Based on the evidence developed during this investigation, testimony, and document review, the allegation that radiographers at H&G deliberately violated required radiography practices was not substantiated.

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LIST OF INTERVIEWEES

Exhibit

[REDACTED]	H&G.....	2	7c
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DETAILS OF INVESTIGATION

Allegation

Deliberate Violation of Required Radiography Practices

Applicable Regulations

10 CFR 19.13: Notifications and Reports to Individuals (1997 Edition)

10 CFR 30.9: Completeness and Accuracy of Information (1996 Edition)

10 CFR 30.10: Deliberate Misconduct (1996 Edition)

10 CFR 34.33: Personnel Monitoring (1996 Edition)

10 CFR 34.43: Radiation Surveys (1996 Edition)

10 CFR 34.42: Posting (1996 Edition)

Purpose of Investigation

This investigation was initiated on November 12, 1997, by the Nuclear Regulatory Commission (NRC), Office of Investigations (OI), Region IV (RIV), to determine if radiographers at H&G Inspection, Inc. (H&G) deliberately violated required radiography practices (Exhibit 1).

Background

On October 24, 1997, Christi HERNANDEZ, Radiation Specialist, NRC:RIV, was contacted by [REDACTED] with H&G, Evanston, Wyoming. [REDACTED] stated he had been fired by the licensee, which subsequently refused to provide him with a report of his radiation exposure data as required. [REDACTED] further stated that H&G employees do not always use survey instruments or personnel dosimetry or establish required boundaries while performing radiography. On November 10, 1997, an NRC:RIV Allegation Review Board requested that OI:RIV and the Division of Nuclear Materials Safety (DNMS), RIV, interview the alleged to obtain additional information about his concerns. 7C

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Interview with Alleged (b)(6) (Exhibit 2)

(b)(6) was interviewed on November 15, 1997, by OI and DNMS, RIV, and related the following information in substance:

(b)(6) said he worked for H&G as a (b)(6). (b)(6) said he was terminated by James FRANKLIN, Manager of H&G's Evanston office, because he (b)(6) did not help FRANKLIN move into his residence.

(b)(6) said he had tried repeatedly to obtain a copy of his radiation exposure history from H&G, but still had not received it. (b)(6) said when he talked to Harry GIBSON, President, H&G, about his radiation exposure history report, GIBSON told him he had been terminated for charging personal expenses and unauthorized items on his H&G credit card. (b)(6)

(b)(6) because "you gotta eat." In addition, (b)(6) said H&G's truck blew a tire the summer of 1997, which he replaced and charged to H&G without H&G's approval. (b)(6) said GIBSON told him he had to repay his personal charges to H&G's credit card.

(b)(6) said his first H&G job was (b)(6) on a pipeline outside of Rawlins, Wyoming. He was assigned to work with (b)(6) whose last name he believed was (b)(6) and (b)(6) from H&G's South Carolina office. (b)(6) said (b)(6) never used a survey meter and left his film badge on the visor of his truck. (b)(6) told him it was not necessary to survey anything because they were wearing alarming rate meters. (b)(6) said he knew that was not right because during his H&G training, he was told to survey and wear all required dosimetry.

(b)(6) said he wore his film badge, pocket dosimeter, and rate meter at all times. He said (b)(6) used a pocket dosimeter and recorded its readings on the paperwork as required, but he did not wear his film badge. (b)(6) said he believed the pocket dosimeter readings recorded were accurate. However, (b)(6) recorded survey meter readings which were falsified because he never used a survey meter. (b)(6) said he always surveyed prior to beginning radiography even though (b)(6) did not survey or post boundaries. (b)(6) said he did not post boundaries using barricades or signs

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because he had been taught that was up to the radiographer. (b) said H&G provided signs, but (b) always left them in the truck with the two survey meters provided by H&G. (b) said when he performed radiography, sometimes (b) observed him and sometimes he was in the darkroom. He said (b) never left the job site when he (b) was performing radiography, so he was available although not always observing him. K

(b) recalled a second H&G job assignment, in (b), when he worked on a job in Farmington, New Mexico, with (b) from H&G's Houston office. (b) said at the beginning of this job, (b) sometimes failed to survey, post with boundaries and signs, or wear all required dosimetry. He said (b) sometimes worked in the darkroom while he (b) performed radiography, but (b) never left the job site while (b) was "shooting." Shortly after the job started, Joe TERRACE, H&G's Office Manager, began showing up at the job site, and (b) began using all dosimetry, surveying, posting, and complying with requirements. K

Although (b) initially said "lots of guys" did not use dosimetry, he was only able to cite the two above incidents. (b) said he did not believe GIBSON was aware of these incidents because he was so far away, and he provided all required equipment and expected his employees to use it. (b) said he did not believe Lloyd KAY, Manager, H&G, was aware of (b) actions or TERRACE was aware of (b) actions. (b) said he never mentioned the radiographers' failure to comply with regulations to anyone. K

Coordination with NRC Staff

Richard LEONARDI, Radiation Specialist, NRC:RIV, conducted an inspection of H&G's Evanston, Wyoming, office the week of November 17, 1997. At that time, he learned the records had been sent to H&G's main office in Houston, Texas, and he was unable to review the Wyoming use records.

LEONARDI conducted a follow-up inspection at H&G's Houston office on January 9, 1998 (Exhibit 3). According to LEONARDI, during that inspection, GIBSON said H&G mailed (b) an exposure termination notification letter on July 28, 1997, but it was returned undeliverable. In addition, GIBSON provided a copy of a letter he sent to the NRC on September 23, 1997, which described H&G's attempt to provide (b) with his exposure termination report (Exhibit 5). According to LEONARDI, this letter was not contained in NRC's docket file for H&G. K

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During his January 9, 1998, inspection, LEONARDI reviewed H&G's Utilization Records, Source Records, Daily Radiation Job Sheets, and TLD/Dosimeter Comparison Records for the radiography performed near Rawlins, Wyoming, in October 1997. From a review of these records, LEONARDI determined that [REDACTED] had worked with [REDACTED] and not [REDACTED] in Wyoming. The records indicated that restricted area boundaries were posted, surveys were performed, and readings were recorded, which were consistent with what would be expected from routine surveys. There was a discrepancy between [REDACTED] pocket dosimeter readings, which indicated 72 mrem for October 12-28, 1997, and his TLD recorded dose which indicated "0" mrem for the entire month of October 1997. LEONARDI stated, based on this difference, it was possible that [REDACTED] wore his pocket dosimeter but not his ILD badge. However, differences in this amount were inconclusive due to the short time period involved and the relative inaccuracy of pocket dosimeters. 7C

During his inspection at H&G, LEONARDI also reviewed [REDACTED] records, which indicated [REDACTED] worked out of H&G's Farmington, New Mexico, office in [REDACTED] but he worked only in New Mexico (Exhibit 4). Consequently, his work fell under H&G's New Mexico license and not under NRC jurisdiction. 7C

Documentation Review

Letter from GIBSON to NRC, dated September 23, 1997 (Exhibit 5)

This letter stated that H&G sent [REDACTED] termination notice to him on July 28, 1997, but it was returned undeliverable. [REDACTED] sent a letter to H&G, dated September 16, 1997, requesting a copy of his radiation history, but provided no return address. 7C

Daily Radiation Job Sheets, Various Dates (Exhibit 6)

These sheets reflect survey and dosimeter readings for [REDACTED] and [REDACTED] in Rawlins, Wyoming, from October 14-26, 1996, and are signed by [REDACTED] 7C

TLD/Dosimeter Comparisons from October 11 to November 10, 1996 (Exhibit 7)

This document reflects that [REDACTED] pocket dosimeter indicated 83 mrem for this period, but his TLD indicated "0" mrem. 7C

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Testimony/Evidence

Interview of [REDACTED] (Exhibit 8)

[REDACTED] was interviewed on [REDACTED], by OI:RIV, about his employment with H&G and related the following information in substance:

[REDACTED] said he has worked in radiography off and on since 1972. He worked out of H&G's South Carolina office from [REDACTED]. The only time he worked an H&G job in Wyoming was for [REDACTED]. [REDACTED] said his helper on the Wyoming job was primarily a "kid" whose name he could not recall. When asked if that was [REDACTED] stated "yes."

[REDACTED] recalled that he kept all his dosimetry, including his TLD, rate meter, and pocket dosimeter, in his coat pockets in Wyoming. [REDACTED] emphatically stated that he always wore all his dosimetry during every H&G job. He always took his dosimetry from the truck, and when in Wyoming, asked [REDACTED] if he had his dosimetry before they left the truck. [REDACTED] said at first he performed radiography shots, worked in the darkroom, read the pocket dosimeters and survey meters, and recorded the results. After he trained [REDACTED] in some areas of radiography, [REDACTED] read his own pocket dosimeter and recorded the results, performed some radiography shots, and developed some film in the darkroom. [REDACTED] said he never left [REDACTED] in the darkroom alone nor did he allow him to shoot alone.

[REDACTED] said he always posted the area with signs and ropes, as required, even when he was working alone. [REDACTED] said he always surveyed the area before every shot. He showed [REDACTED] how to use a survey meter, and sometimes [REDACTED] performed the surveys. [REDACTED] said he completed all required survey meter and pocket dosimeter forms, and the data recorded on the forms was truthful and accurate. [REDACTED] denied falsifying any data. [REDACTED] said H&G provided signs, ropes, and two fully charged and calibrated survey meters on all trucks and expected the radiographers to use them. [REDACTED] said he was audited on one occasion, and the only problem identified was that he [REDACTED] did not have the correct H&G Wyoming state license with him.

[REDACTED] said he never worked with any other H&G radiographers, and he had no knowledge of any problems at H&G. He never heard any radiographers complain

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about H&G except to say they were overworked. (b) said, in his opinion, GIBSON believed in safety first, was conscientious, and H&G was better than most radiography companies. 7C

Agent's Analysis

(b) alleged H&G refused to provide him with his radiography exposure history. GIBSON showed he had attempted to provide this to (b), so the allegation was unsubstantiated. (b) initially stated "lots" of H&G radiographers failed to wear dosimetry, but when asked for specifics named only (b) and (b). (b) stated (b) worked in New Mexico, and the records reviewed indicated that (b) worked in New Mexico, which is not under NRC's jurisdiction. (b) denied failing to survey, post, or wear all required dosimetry, and stated he never falsified any records. Records reviewed at H&G appeared to be completed correctly. Although a comparison of (b) pocket dosimeter and TLD records indicates a possible discrepancy, the NRC inspector was unable to draw a conclusion that the TLD was not used. Consequently, (b) allegations regarding (b) were not substantiated by testimony or records. 7C

Conclusions

Based on the evidence developed during this investigation, testimony, and document review, the allegation that radiographers at H&G deliberately violated required radiography practices was not substantiated.

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LIST OF EXHIBITS

Exhibit
No.

Description

- 1 Investigation Status Record, dated November 12, 1997.
- 2 Report of Interview with (b)(6) dated (b)(6) TC
- 3 Memorandum from LEONARDI to OI:RIV, dated February 9, 1998.
- 4 E-mail from LEONARDI to OI:RIV, dated April 14, 1998.
- 5 Letter from GIBSON to NRC, dated September 23, 1997.
- 6 Daily Radiation Job Sheets, Various Dates.
- 7 TLD/Dosimeter Comparisons from October 11, 1996, to November 10, 1997.
- 8 Report of Interview with (b)(6) dated (b)(6)

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