KARGER KEY BARNES & SPRINGER, PC

PRACTICE LIMITED TO THE REPRESENTATION OF MANAGEMENT IN MATTERS INVOLVING LABOR, PERSONNEL AND GOVERNMENTAL RELATIONS

July 24, 2002

Via Facsimile (301) 415-1525 and
Certified Mail, Return Receipt Requested

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, Maryland 20852

RE: REPLY TO NOTICE OF VIOLATION
NRC INVESTIGATION REPORT NO: 2-2001-002

Dear Mr. Collins:

Attached please find the response of Jacobs Applied Technology to the above-mentioned Notice of Violation. The letter was sent via Federal Express and facsimile on Friday July 19, 2002 to the address provided in the Notice of Violation. It has since come to our attention that the address provided in the Notice of Violation was either incomplete or incorrect. Based on our conversation with the Nuclear Regulatory Commission in Atlanta, we have redirected the Federal Express package to the above address. We are also going to send an additional copy of the response letter by certified mail and facsimile. Upon receipt, please contact Lisa Patrick at 214-468-3050 to confirm our response has been received by the appropriate parties. I appreciate your patience in this matter.

Sincerely,

Darren Harrington

DSH:lkp

THE QUADRANGLE, 2828 ROUTH STREET, SUITE 725, DALLAS, TEXAS 75201 TELEPHONE (214) 468-3050 FACSIMILE (214) 468-3051

KARGER KEY BARNES & SPRINGER, PC

PRACTICE LIMITED TO THE REPRESENTATION OF MANAGEMENT IN MATTERS INVOLVING LABOR, PERSONNEL AND GOVERNMENTAL RELATIONS

July 19, 2002

Via Facsimile (202) 634-3343 and
FedEx 8330 1026 4550

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
2120 L. Street, NW
Washington, D.C. 20003

RE: REPLY TO NOTICE OF VIOLATION
NRC INVESTIGATION REPORT NO: 2-2001-002

Dear Mr. Collins:

In response to the above-referenced Notice of Violation, Jacobs Applied Technology, Inc. ("JAT") has conducted a thorough investigation of the findings by the Nuclear Regulatory Commission ("NRC"), and though JAT disputes certain allegations by the NRC, it has determined prompt and comprehensive corrective actions are appropriate. JAT does not dispute the Severity Level IV characterization of the alleged violations.

I. FACTS

On July 5, 1999, Jacobs Pan American ("JPA") assumed responsibility from Raytheon for certain operations at the Hovensa facility in St. Croix involving radiography work. Per 10 CFR 150.20(a), JAT was granted NRC approval to perform radiography work in St. Croix under a reciprocity program pursuant to the same terms and conditions of JAT's South Carolina License No. 205.

Condition 11 of Amendment No. 37 to South Carolina License No. 205 states, in part, that only those persons who have satisfactorily completed JAT's training program as described in its "Radiation Safety Procedures Manual" shall be authorized to act as radiographers and radiographer's assistants. Condition 11 further requires JAT to maintain records of training for individuals who have completed the program. Finally, section 3, paragraph 5.1 of the Radiation Safety Procedures Manual requires JAT to provide an eight-hour training course covering JAT's licensed equipment and emergency operating procedures to newly hired employees who have been previously employed as radiographers.

In July of 1999, upon taking over Raytheon's contract, JPA elected to retain ten employees who had been performing radiographic work for JPA's predecessor at the Hovensa

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site and provided each employee radiographic training[1], including the aforementioned eight-hour course. The host-operator, Hovensa, required these employees be available to perform non-radiographic work during the time the eight-hour course was to be administered. In order to allow for the availability of the employees while still completing the required training, the JAT RSO separated the course into shorter modules and provided instruction in each of the modules multiple times over the course of a week. Upon each employee's completion of the various modules, he was required to sign an attendance sheet so the RSO could properly track his progress through the eight-hour course.

Once an employee had attended every module necessary for the completion of the eight-hour course, he was given a written test administered by the RSO. If the employee scored eighty-percent or better on the test, the RSO would review any incorrect answers with the employee and then perform an audit of the employee's performance of radiographic work in the field. Once an employee passed the written test and demonstrated his ability to perform actual radiographic work in the field, he was issued a Certificate of Training. Each of the ten employees hired in July, 1999 successfully completed his training and was issued a certificate.

The NRC initiated an investigation on January 24, 2001, during which an unspecified number of these employees were interviewed and, according to the findings of the NRC, indicated they did not recollect receiving an eight-hour course. During the months between the employees' training and the NRC investigation, the RSO did not properly protect the documentation of the employees' attendance from being misplaced or misappropriated and thus could not locate the attendance sheets upon the NRC's request. Though, the RSO could not document each employee's completion of the eight-hour course, the employees' written exams and field audits were properly maintained and accessible for review by the NRC to verify the employees' understood the training provided in the eight-hour course.

On or about April 1, 2002, JPA ceased performance of radiographic operations at the Hovensa facility in St. Croix. The employees trained by JAT in July, 1999 are no longer employed by JAT/JPA or any affiliates.

II. ROOT CAUSE ANALYSIS

a. NRC Finding "A"

During 1999, the licensee willfully failed to provide several persons, previously employed as radiographers, with an eight-hour training course covering JAT's licensed equipment and emergency operating procedures prior to allowing these persons to perform industrial radiography.

[1] Prior to administering the eight-hour course, a third-party, the American Society of Non-Destructive Training ("ASNT"), was retained to provide the employees general radiographic safety training. Upon the conclusion of its course, ASNT administered written exams to each of the employees to verify the employees understood their training. Each of the employees passed the test and was issued a certification card by the ASNT.

JAT respectfully disagrees with the NRC's Finding "A" as described above, particularly in regards to the alleged "willful" misconduct, however JAT appreciates the NRC's concern that the training could not be verified with signed attendance sheets and agrees corrective action should be taken to prevent a similar failure in the future. With respect to Finding "A," the RSO responsible for conducting the eight-hour course recalls providing the training to each of the employees, documenting each employee's completion of the course, and administering the written exams and field audits to verify each employee understood his training.

JAT suggests the reason certain of the employees interviewed by the NRC do not recall receiving the actual training is due in part to their familiarity with the material and in part to the manner in which the course was administered. With regard to the latter, the course was not administered in one sitting but rather was divided into several smaller sections, or modules, to accommodate the needs of the host operator, Hovensa. Recognizing that Hovensa was going to regularly require various employees to perform non-radiographic work throughout the course of any given day, the RSO decided to divide the eight-hour course into smaller modules and offer each module numerous times over the course of a week to ensure each employee had an opportunity to attend the entire training program.

Upon attending each module, every employee was required to print his name, fill-in his job title, and sign his name on a training attendance sheet. Each attendance sheet identified the nature of the training, the name of the instructor, and the name of the supervisor. Once an employee had attended every module necessary for the completion of the eight-hour course, he was given a written test administered by the RSO. If the employee scored eighty-percent or better on the test, the RSO would review any incorrect answers with the employee and have the employee initial the correct answer. Upon completing and correcting the written exam, the RSO performed an audit of the employee's performance of radiographic work in the field. Once an employee passed the written test and demonstrated his ability to perform actual radiographic work in the field, he was issued a Certificate of Training. Each of the ten employees hired in July, 1999 successfully completed his training and was issued a certificate.

Per JAT's standard policy, the attendance sheets were to be maintained by the RSO in one central file. For reasons that are still unknown, the attendance sheets were misplaced or misappropriated during the months between the administration of the eight-hour course and the NRC's investigation. Despite this failure, JAT does have on file each employee's written exam, with his initialed corrections, and each employee's field audit to verify he understood his training.

JAT has concluded the reason certain employees interviewed by the NRC do not recall receiving the eight-hour course may be two-fold. First, in July, 1999, JAT provided a great deal of training to the employees retained from Raytheon in many areas in which the employees were already proficient. Perhaps the employees' familiarity with the material in the eight-hour course as well with the material in other courses, such as process safety management, hindered their ability to recall any one single course. Second, the eight-hour course was not administered in one sitting, but rather was divided into several smaller modules. Because the employees did not

actually sit for a single eight-hour period, they may not have recalled receiving a course that was, in total, eight hours in length.

Though JAT believes the RSO's recollection of designing and administering the course is reliable, JAT acknowledges its failure to produce documentation verifying the employees attended the course. Such being the case, JAT will take the corrective actions described in "Part III: Corrective Action" below.

b. NRC Finding "B"

During 1999, the licensee willfully failed to maintain complete and accurate training records. Specifically training records for several persons previously employed as radiographers by JAT indicated that the required eight-hour training covering JAT's licensed equipment and emergency-operating procedures had been provided when this required training had not been provided.

Similar to Finding "A," JAT respectfully disagrees with the conclusion drawn by the NRC in Finding "B" above that any failure on the part of the RSO to maintain training records was "willful" in nature. To the contrary, each of the employees retained from Raytheon in 1999 were provided the requisite training and, as such, the certificate issued to each employee accurately reflected the employee attended the eight-hour course, passed his written exam, and successfully demonstrated his ability to perform radiographic work in the field. In fact, the written exams and field audits verifying the employees understood the training were maintained in each employee's personnel file and were reviewed by NRC personnel. JAT does, however, agree with the NRC that the RSO's inability to verify the employees attended the course with sign-in sheets is a significant problem and corrective action is warranted.

JAT has reviewed its record-keeping procedure and determined that, at the time of the NRC investigation, it did not adequately ensure attendance records were properly protected from being misplaced or misappropriated. As noted above, each time an employee attended one of the modules comprising the eight-hour course, he was required to print his name, fill-in his job title, and sign his name on a training attendance sheet. Each attendance sheet identified the nature of the training, the name of the instructor, and the name of the supervisor.

Unfortunately, copies of the attendance sheets were not kept in each employee's individual personnel file, as were their written exams and field audits, nor were duplicates maintained at an off-site location. The only records of the employees' attendance were kept in one unprotected on-site location and, as such, were subject to being misplaced or misappropriated. JAT was unable to determine if the attendance sheets were misplaced or, in fact, misappropriated, but JAT has concluded the record-keeping system in place at the time of the NRC investigation warrants the corrective action discussed below.

III. CORRECTIVE ACTIONS

As previously noted, JPA ceased radiographic operations at the Hovensa facility on April 1, 2002, eliminating the need to conduct formal re-training of the individuals in question who are no longer employed with JAT/JPA. However, due to the serious issues raised by the NRC investigation, JAT has determined that corrective action needs to be taken regarding the record-keeping at its remaining operations.

JAT has determined the attendance sheets will be best protected from being misplaced or misappropriated if a copy of the records is simultaneously updated and maintained by a separate department. Currently, copies of the training attendance sheets, signed by each employee trained, are maintained in a single binder by the RSO. A second binder, with the same records, will be maintained by the on-site safety department where they can be readily accessed should an employee's training need to be verified. The safety department for JAT operations is accustomed to maintaining such records and, as a result, it has a reliable record-keeping system already in place.

In sum, JAT disagrees with the NRC's findings that the RSO both "willfully" failed to provide the requisite training to the experienced radiographers and "willfully" failed to properly maintain training records of their training, however JAT's shares the NRC's concern that the RSO was unable to verify the employees' training through written documentation. Though JAT disagrees with the specific findings of the NRC, the corrective actions being taken in regards to JAT's record-keeping system should address the NRC's underlying concerns and prevent any confusion in the future regarding the training received by a given employee.

JAT accepts the Severity Level IV characterization of the alleged violations and does not believe any further enforcement action is necessary. If you have any questions or concerns, please do not hesitate to contact me at (214) 468-3050.

Sincerely,

Darren Harrington

cc: Doug Collins, Director of Division of Nuclear Materials Safety

KARGER KEY BARNES & SPRINGER, PC

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FAX COVER SHEET

DATE: July 19, 2002

TO: U.S. Nuclear Regulatory Comm. #
ATTN: Document Control Desk # (202) 634-3343
Doug Collins # (404) 562-4900

FROM: Darren S. Harrington

RE:

TOTAL NUMBER OF PAGES (Including this Cover Sheet): 7

NOTE:

If there is any trouble receiving this message, please call: _____
at the Dallas office (214)468-3050.

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