



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30323

DEC 19 1990

Report No.: 52-17902-01/90-01

Licensee: Caribbean Soil Testing Co., Inc.
 Hato Rey, Puerto Rico

Docket No.: 030-13612

Facility Name: Caribbean Soil Testing Co., Inc.

Inspection Conducted: October 22-23, 1990

Inspector: H. Bermudez
 H. Bermudez, Radiation Specialist

12/12/90
 Date Signed

Approved by: William E. McA Alpine
 for Edward J. McA Alpine, Chief
 Radiation Safety Projects Section
 Nuclear Materials Safety and Safeguards Branch
 Division of Radiation Safety and Safeguards

12/13/90
 Date Signed

SUMMARY

Scope:

This routine unannounced inspection was conducted in the areas of Licensed Materials Programs, Transportation of Radioactive Materials, Radiation Protection, and Follow-up to previous inspection findings.

Results:

In the areas inspected, four apparent violations were identified. The apparent violations involved failure to keep copies of personnel training certificates, failure to carry shipping papers while transporting licensed material, failure to exchange film badges at a monthly frequency, and failure to evaluate an apparent radiation overexposure.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

W. Sanchez, Laboratory Supervisor
*A. Vazquez, President and Radiation Safety Officer

Other licensee employees contacted during this inspection included administrative personnel.

2. Licensed materials Programs (87100)

The inspector discussed with licensee representatives the organizational structure as it related to the implementation of the license. Licensee management indicated that since the previous inspection, management functions had been consolidated, in that the president assumed such role and control of the company approximately one and a half years prior to the inspection. The president indicated that since then, he had been solely responsible for the implementation of licensed activities. The president was assisted by a Laboratory supervisor, for whom five technicians carried out duties associated with the use of the licensee's portable gauges.

Condition No. 11 of License No. 52-17902-01 requires, in part, that the licensee maintain copies of the certificates of training of each authorized user of licensed material. The inspector saw the training certificates of all current authorized users, however, the licensee was unable to show to the inspector the training certificate of an authorized user which had left the company prior to the inspection. Licensee management was also unable to ascertain whether such individual had taken the manufacturer's training course in the safe use of the gauges. Subsequent to the inspection, the inspector learned from another licensee that the individual in question had indeed received proper training.

Failure to keep copies of training certificates for each authorized user is an apparent violation of License Condition No. 11.

The inspector reviewed receipt, transfer and leak test records associated with the use of the gauges and determined that the records were in order.

One apparent violation was identified.

3. Transportation of Radioactive Materials (86740)

10 CFR 71.5 requires the licensee to comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170 through 189. 49 CFR 172.200 requires the licensee to describe the licensed material

contained in the portable gauges on a shipping paper in the manner described therein while transporting its gauges.

Licensee management indicated that since at least 1987, they had not carried shipping papers while transporting the gauges.

Failure to carry shipping papers while transporting licensed material is an apparent violation 10 CFR 71.5.

The inspector examined the packages used to carry the gauges and determined that the packages complied with all other applicable DOT regulations regarding packaging. Through discussions with licensee representatives, the inspector also determined that the packages were being transported in a secure manner.

One apparent violation was identified.

4. Radiation Protection (83822)

The inspector discussed radiation protection practices with licensee representatives and inspected licensee provisions for security and storage of licensed material. The inspector determined that the licensee's operating and emergency procedures were implemented, manufacturer's instructions for devices used were readily available, and licensed materials were securely stored at the licensee's facility. Radiation levels measured by the inspector in unrestricted areas surrounding the storage area were within permissible limits. Appropriate signs and postings were in place and radiation exposure records were available. However, while reviewing radiation exposure records the inspector noted the following two deficiencies.

- a. Condition No. 16 the license requires, in part, that the licensee conduct its program in accordance with the statements contained in the licensee's letter dated July 20, 1988. Item I. C of the Enclosure to the letter dated July 20, 1988, requires that personnel monitoring badges be exchanged monthly. The licensee had been exchanging badges at a quarterly frequency.

Failure to exchange personnel monitoring badges at a monthly frequency is an apparent violation of License Condition No. 16.

- b. The radiation exposure record for the same individual to which reference is made in Paragraph 2 above showed a radiation exposure of 4.29 rems for the third quarter of 1989. 10 CFR 20.101 (a) requires that the licensee limit the whole body radiation dose of an individual in a restricted area to one and one quarter rems per calendar quarter, except as provided by 10 CFR 20.101(b), which did not apply.

When the inspector pointed out this apparent radiation overexposure, licensee management indicated that they were unaware of it because exposure reports had not been routinely reviewed.

In a confirmation of Action Letter dated November 1, 1990, the NRC documented licensee commitments regarding evaluation of the apparent overexposure. On November 17, 1990, the NRC received and evaluated the licensee's response. The licensee's evaluation indicated that the film badge reading was due to the fact that the employee stored the film badge inside the carrying case, next to the gauge, and therefore, the apparent overexposure did not occur. Based on information gained during the inspection and the licensee's subsequent evaluation, the NRC accepted the licensee's assessment of this situation.

10 CFR 20.201(b) requires the licensee to make such surveys as may be necessary to comply with the requirements of Part 20 and which are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present. As defined in 10 CFR 20.201(b), "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal or presence of radioactive materials or other sources of radiation under a specific set of conditions. Failure to promptly evaluate an apparent radiation overexposure during the third quarter of 1989 is an apparent violation of 10 CFR 20.201(b).

Two apparent violations were identified.

5. Action on Previous Inspection Findings (92702)

52-17902-01/87-01: Failure to keep exposure records. The inspector determined that the licensee had been keeping exposure records since the violation was brought to its attention. This issue is considered closed.

6. Exit Interview

The inspection scope and results were summarized on October 23, 1990, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed below.

Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

Apparent Violation - Failure to keep copies of training certificates

Apparent Violation - Failure to carry shipping papers when transporting licensed material

Apparent Violation - Failure to exchange film badges at a monthly frequency

Apparent violation - Failure to evaluate an apparent radiation overexposure