

ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 150-00004
License No.: California 5309-80
Report No.: 150-00004/96-17
Licensee: Construction Testing & Engineering, Inc.
Facility: Construction Testing & Engineering, Inc.
Escondido, California
Location: 2414 Vineyard Ave, Suite G
Escondido, California
Dates: December 11, 1996, through January 27, 1997
Inspector: Kent M. Prendergast
Radiation Specialist
Approved By: Linda Howell, Chief
Nuclear Materials Inspection and
Fuel Cycle/Decommissioning Branch
Division of Nuclear Materials Safety

ATTACHMENTS: Supplemental Inspection Information

EXECUTIVE SUMMARY

Construction Testing & Engineering, Inc.
Escondido, California
NRC Inspection Report 150-00004/96-17

Program Overview

- Construction Testing & Engineering, Inc. (CTE), is a large engineering firm licensed by the state of California to use byproduct material (cesium-137 and americium-241 sources) in moisture/density gauges to measure the properties of construction materials. CTE operates six offices in California and performs licensed activities under two licenses issued by the state (both authorize use of portable gauging devices).

Work Performed in Areas of Exclusive Federal Jurisdiction

- CTE submitted an NRC Form 241 in May 1996 to report proposed activities at federal facilities during the remainder of the calendar year. The inspection determined that in addition to numerous dates of work at federal facilities between May and October 1996, CTE had also performed licensable activities at military facilities considered areas of exclusive federal jurisdiction between January and May 1996, prior to CTE filing an NRC Form 241. This was identified as an apparent violation of 10 CFR 30.3.
- In reviewing CTE's activities, CTE was requested on several occasions to provide information about its activities in areas under NRC jurisdiction between January and May 1996. CTE responded in facsimile transmittals dated October 25 and December 12, 1996; however, information provided in these responses did not include all dates and locations of work in areas of exclusive federal jurisdiction. This was identified as an apparent violation of 10 CFR 30.9. CTE subsequently corrected the information and provided a full listing of its activities from January to May 1996 in a facsimile transmittal dated December 19.

Report Details

1 Program Overview (87100)

CTE is a large engineering firm with six offices in California. At the time of this inspection, CTE was authorized under a radioactive materials license issued by the state of California to possess and use up to 44 portable moisture/density gauges. The corporate office is located in Escondido, California. CTE also maintains a Modesto, California, office that is authorized to possess and use byproduct material in portable gauges under a separate license issued by the state of California. Although the state elected to issue two licenses to CTE, the inspector noted that the moisture/density gauges listed on the Modesto license were also authorized on the Escondido license and the training requirements for both licenses were the same.

Responsibility for the radiation safety program was recently transferred from the company vice president (VP) to an engineer who was designated as the radiation safety officer (RSO). This change became effective on August 7, 1996, when Amendment 11 to the CTE Escondido license was issued. According to the new RSO, this change was made to improve the radiation safety program and allow more attention to be devoted to the program.

CTE has performed licensed activities in areas of federal jurisdiction since 1993. The NRC first became aware that CTE used portable gauges at military facilities considered areas of exclusive federal jurisdiction in late 1993. An inspection was conducted to review CTE's activities and the NRC subsequently issued a Notice of Violation and Proposed Imposition of Civil Penalty (Notice) on March 24, 1994, for CTE's use of byproduct material from August 6 to 20, 1993, in areas of exclusive federal jurisdiction without authorization under either a specific or general NRC license. CTE responded to the Notice by letter dated April 4, 1994, indicating the reason for the violation was a lack of knowledge regarding special requirements for operations in federal jurisdiction. CTE's written response also indicated that CTE would continue to submit an NRC Form 241 on an annual basis.

Following the inspection performed at the licensee's facilities in late 1993, CTE submitted an NRC Form 241 on December 8, 1993, to report work proposed in areas of exclusive federal jurisdiction during calendar year 1994. CTE next submitted an NRC Form 241 on November 9, 1994, to report proposed activities in areas of exclusive federal jurisdiction during calendar year 1995. The NRC acknowledged receipt of the Form 241 submitted by CTE in November 1994 by letter dated December 29, 1994. With exception of correspondence related to the March 24, 1994, Notice and the Form 241 submitted in November 1994, the NRC had no further communications with CTE until 1996.

NOTE: Although a specific or general NRC license was required to possess and use byproduct material in an area of exclusive federal jurisdiction within an Agreement State during calendar years 1993-1996, as a matter of practice, the NRC has

accepted the submittal of an NRC Form 241, with the associated fee, in lieu of an application for a specific NRC license authorizing use of byproduct material in areas of exclusive federal jurisdiction in an Agreement State. Submittal of an NRC Form 241 is requirement for work performed under the general license pursuant to 10 CFR 150.20.

In December 1996, CTE submitted an application for a specific NRC license. A specific license authorizing use of portable gauging devices was issued to CTE on December 31, 1996.

1 **Work Performed in Areas of Exclusive Federal Jurisdiction (87100)**

a. **Inspection Scope**

The inspector reviewed records, including NRC Form 241s, submitted by CTE to the NRC Region IV office, and records maintained by CTE documenting activities performed at federal facilities in the state of California. Interviews were also conducted with CTE employees to confirm work activities performed by CTE during 1996.

b. **Observations and Findings**

CTE submitted an NRC Form 241 dated May 16, 1996, providing notification of proposed work activities at federal facilities during the remainder of calendar year 1996. CTE's submittal was acknowledged by NRC letter dated June 4, 1996. During a subsequent review of Form 241s submitted by Agreement State licensees, it was noted that the Form 241 submitted by CTE appeared inconsistent with past submittals because CTE had generally worked at federal facilities throughout the calendar year. CTE personnel were subsequently contacted by telephone on September 20, 1996, in preparation for the inspection.

During the September 20, 1996, telephone conversation, the VP (who was contacted because he was listed as the RSO on the May 16, 1996, Form 241) acknowledged that CTE may have worked in areas of federal jurisdiction prior to its May 16, 1996, submittal. The VP committed to review CTE's work activities and indicated that he would need a couple of weeks to obtain the required information from the other CTE offices. During this conversation other provisions relating to filing an NRC Form 241, such as clarification of work activities, were also discussed. NRC records indicate that the VP subsequently contacted the Region IV nuclear materials licensing staff on September 20, 1996, to further discuss notifications required of Agreement State licensees working in areas under NRC jurisdiction. During the latter conversation, the VP was informed of requirements for providing the NRC notification of each proposed date of work performed under the provisions of the general license pursuant to 10 CFR 150.20 (see note above). During the second September 20 conversation, the CTE VP committed to provide the NRC Region IV office with a complete list of CTE activities performed in areas of

May 16, 1996. The VP indicated that he had not obtained all of the information at that time and stated that he would try to provide the information to the inspector by October 16, 1996.

On October 25, 1996, the VP sent a facsimile transmittal to the inspector. The transmittal was a copy of an October 17, 1996, letter from the new CTE RSO to the Region IV nuclear materials licensing staff indicating he was providing the information requested of CTE. The letter was directed to the Region IV staff member who discussed requirements for submitting clarifications of work activities performed under the general license pursuant to 10 CFR 105.20 with the CTE VP on September 20, 1996. The letter indicated the RSO had completed his research into site activities for 1996 and enclosed a listing of CTE's activities in areas of exclusive federal jurisdiction for 1996. The list was substantial (10 pages) and identified locations where CTE had conducted licensable activities at federal facilities from June 3 to October 16, 1996 (after CTE submitted an NRC Form 241). There were no activities listed prior to June 3, 1996. (It should be noted that NRC staff did not verify whether each location identified on the list was an area of exclusive federal jurisdiction.) The letter further clarified that CTE was fully aware of, and understood, that notification to the NRC is required prior to performing work at federal facilities and that CTE would provide notification for dates of work at federal facilities as early as practicable in the future.

A site visit was conducted on December 11, 1996, at CTE's Escondido office. During this portion of the inspection, the inspector examined the material utilization logs for the Escondido office and noted a number of entries indicating that CTE worked at Camp Pendleton and other federal facilities on numerous occasions prior June 1996. Specifically, CTE worked at Camp Pendleton, which is an area of exclusive federal jurisdiction, on January 2 and 8, February 13 and 29, March 4, 7, 11, 12 and 14, and other days in 1996, prior to submitting an NRC Form 241 and receiving acknowledgement of the submittal by letter dated June 4, 1996. At the conclusion of the site visit on December 11, CTE's VP committed to provide the NRC with a complete list activities performed by CTE in areas of exclusive federal jurisdiction prior to its submittal of the NRC Form 241 on May 16, 1996.

On December 12, 1996, the RSO provided a letter which included a list of CTE's activities in federal jurisdiction and an explanation regarding CTE's failure to file for reciprocity prior to May 1996. The letter stated that as CTE had informed the inspector in September and October 1996, (during above noted telephone discussions), CTE had performed licensable activities at federal facilities during the period from January to May 1996, prior to CTE filing a Form 241. CTE further stated that the problem was due to a change in RSOs during that period and because filing the Form 241 was forgotten since "no notification of expiration" of the 1995 submittal was sent by the NRC. The letter noted that the listing provided documented the date(s) and each federal facility where CTE performed work between January and May 1996. However, the list indicated only 16 days of work at federal facilities. (The list did not identify each facility fully and did not identify

or note whether the facilities were considered areas of exclusive federal jurisdiction.)

The inspector reviewed CTE's December 12 letter and determined that the list was incomplete based on a comparison of information identified on the utilization logs reviewed at CTE's Escondido office on December 11, 1996. The inspector contacted the RSO by telephone and explained that the list was incomplete and again requested a complete list of dates and locations that CTE had performed licensed activities in areas of exclusive federal jurisdiction between January and May 1996. CTE subsequently provided a facsimile transmittal dated December 19, 1996, to the inspector which listed 83 dates on which CTE performed work using portable gauges at various federal facilities between January 2 and May 30, 1996. Again, this listing did not identify which facilities were considered areas of exclusive federal jurisdiction; however, several in the list were recognized as exclusive federal jurisdiction by the inspector.

CTE's failure to obtain authorization through either a specific or general NRC license prior to working in areas of exclusive federal jurisdiction from January to May 1996 was identified as an apparent violation of 10 CFR 30.3 (Apparent Violation 150-00004/9617-01). 10 CFR 30.3 requires, in part, that except for exemptions not applicable in this case, that no person may possess or use byproduct material except as authorized in a specific or general license issued pursuant to the regulations in Chapter 1, Title 10 of the Code of Federal Regulations. As noted above, CTE representatives indicated that this oversight was due, in part, to the fact that the VP, who was designated as the RSO in early 1996, was very busy and forgot to submit the Form 241 prior to May 1996. In addition, the VP was in the process of designating a new RSO during this period and the oversight was not noted until May 1996.

CTE's failure to provide complete and accurate information regarding activities performed using portably gauges in areas of exclusive federal jurisdiction between January and May 1996 in its October 25 and December 12, 1996, written responses was identified as an apparent violation of 10 CFR 30.9(a) (Apparent Violation 150-00004/9617-02). 10 CFR 30.9(a) requires, in part, that information provided to the Commission by a licensee be complete and accurate in all material respects. In subsequent discussions with CTE staff regarding this issue, the VP stated that he had requested that the RSO provide a listing of locations and dates where CTE had performed licensable activities in 1996 in response to his conversations with Region IV staff on September 20. The VP also noted that he informed the inspector that he believed that CTE may have worked in areas under NRC jurisdiction prior to May 1996 during conversations with the inspector in September and October 1996. However, no explanation was provided as to why a full listing was not included with the RSO's December 12 facsimile transmittal.

c. Conclusions

The inspection determined that CTE had performed work using byproduct material at military facilities which are considered areas of exclusive federal jurisdiction in the state of California throughout calendar year 1996, including the period from January through May 1996, before CTE submitted an NRC Form 241 to report proposed activities to the NRC. The use of byproduct material in an area of exclusive federal jurisdiction without authorization under either a specific or general NRC license from January to May 1996 was identified as an apparent violation of 10 CFR 30.3. In addition, in reviewing CTE's activities, several requests were made of CTE to submit information regarding CTE's activities during the above noted period. Information provided by CTE on October 25 and December 12, 1996, was not complete and accurate in that it did not include a full listing of dates and locations of work performed in areas of exclusive federal jurisdiction from January to May 1996. This was identified as an apparent violation of 10 CFR 30.9. This was subsequently corrected, at the NRC's request, in the licensee's facsimile transmittal on December 19, 1996.

ATTACHMENT 1
SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Ballard, Vice President
R. Jamma, RSO

NRC

K. Prendergast, Radiation Specialist

INSPECTION PROCEDURES USED

IP 87100: Licensed Materials Programs
IP 83822: Radiation Protection
IP 86740: Inspection of Transportation Activities

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

150-00004/96-17-01	APV	Use of byproduct material in areas of exclusive federal jurisdiction without authorization under either a specific or general NRC license.
150-00004/96-17-02	APV	Failure to provide clear and accurate information regarding CTE's activities in areas under NRC jurisdiction from January through May 1996.

LIST OF ACRONYMS USED

APV	Apparent Violation
CFR	Code of Federal Regulations
CTE	Construction Testing & Engineering, Inc.
RSO	Radiation Safety Officer
VP	Vice President