

Licensee/Facility:

CONSTRUCTION TESTING&ENGINEERING,IN
Construction Testing&engineeri
Springfield, Virginia
Dockets: 030-35689

Notification:

MR Number: 1-2009-0001
Date: 01/22/2009
Call from ENS
License No: 45-25554-01

Subject: Follow-up to Event Number 44796 Involving Damaged Troxler Portable Gauge

Discussion:

On January 22, 2009, at about 4 PM, the Headquarters Operations Center (HOC), through the National Response Center, was notified that the Fairfax County Fire Department Hazardous Material Team was requesting assistance from the NRC regarding a damaged device with radioactive material. Concurrently, Region I was notified by the Commonwealth of Virginia Department of Public Health (VDH), Radiation Control Program Manager that radiation surveys of a portable gauge which had been damaged at a housing construction project in Annandale, Virginia earlier that day, had initially indicated dose rates of 100 micro Roentgens per hour, however subsequent survey measurements were reported of approximately 7 Roentgens per hour (7 R/hr) on contact. Because of the changing conditions, VDH stated that its office was responding to the scene and should arrive around 6:30 PM. The Radiation Safety Officer for Construction Testing and Engineering, Inc., had previously responded to the scene after its portable gauge, staged for taking soil density measurements, was severely damaged when crushed by a large soil roller around 10:30 AM. Access to the scene was controlled by the Fairfax County police, but in the late afternoon, during the response and assessment activities coordinated with the licensee and the County Hazardous Material Team, the Cesium-137 (Cs-137) source became dislodged from the damaged equipment and separated from the shielding, leaving the Cs-137 source unshielded. The Americium-241 (Am-241) source appeared intact. The licensee notified the HOC at 4:50 PM that the police had identified that the Cs-137 source had a dose rate of 5 rem/hour on contact, and background readings at a distance of 20 feet.

Region I coordinated briefing discussions with the licensee, Fairfax County, the Commonwealth of Virginia and vendor representatives, to develop a plan to shield the source for safe transport to the licensee's secured storage facility. Fairfax County provided a lead shielded canister and lead shot to shield the Cs-137 source within the gauge transport case. The Am-241 source that remained in the gauge case was also loaded into the transport case. By 9 PM, both sources were packaged to meet transportation requirements with the highest dose rate being 6 millirem/hour on the outside of the transport case. The licensee planned to arrange for return of the damaged gauge and processing of its workers' dosimetry the following day. On January 23, 2009, an inspector from Region I was dispatched to the licensee's storage facility to assess the transportation arrangements for the gauge, review radiation survey records, and evaluate the licensee's radiation protection program, including emergency response procedures. Based on information discussed during the briefings and the described control of the area near the unshielded source, no significant radiation exposure would be expected to either the workers or the public; no contamination was identified.

Contact:

MILLER, MARIE T

Org:

R1

Phone No:

(610) 337-5205

Email:

Marie.Miller@nrc.gov