



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF PUBLIC AFFAIRS, REGION IV

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No. IV-01-021

May 22, 2001

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NRC PROPOSES TO FINE THE TEXAS A&M UNIVERSITY SYSTEM \$2,400 FOR ERRORS IN SHIPPING RADIOACTIVE MATERIAL

The U.S. Nuclear Regulatory Commission staff has proposed a fine of \$2,400 against the Texas Engineering Experiment Station/Texas A&M University System's Nuclear Science Center in College Station, Texas, which operates a small nuclear research reactor, for failure to properly secure a shipping container with radioactive material inside. The error could have resulted in transportation workers receiving radiation exposure in excess of federal limits.

The shipment, containing radioactive Bromine-82 with a 35 hour half-life, was made last December 4 from the Nuclear Science Center to Tru-Tec Services Inc., a company that performs industrial testing. When the shipment arrived in St. Croix, the Virgin Islands, on December 8, the shipping container was found unsecured with the radioactive liquid Bromine-82, packaged in three small containers, resting in a recessed area on top. Normally the 750 pound shipping container should be secured shut with the radioactive material properly shielded. A number of transportation companies were involved in this shipment.

Without appropriate shielding, any individuals standing within a few feet of the Bromine-82 for a few minutes, could have received a radiation dose greater than 0.1 rem, which is the federal limit for exposure from licensed material for members of the public. This amount of radiation is not considered sufficient to cause acute health effects. People receive an average of 0.3 rem from natural sources during a year, and radiation workers may receive up to an additional 5 rem annually from licensed material. The NRC investigation, while acknowledging the realistic likelihood that someone could have been exposed, did not find any individuals who could be verified as having received a radiation exposure in excess of the limit.

The NRC staff concluded that the failure of the Nuclear Science Center to properly install a securing device on the shipping container was one of the causes of this incident, which had a clear potential to expose members of the public to radiation in excess of federal limits. Accordingly, the NRC classified the violations as a Severity Level II problem. The NRC uses a four-level scale, with Level I being the most severe.

NRC officials decided to reduce the assessed fine by half because the error by the Nuclear Science Center was only one of the contributors to this very significant incident and the Center took prompt and comprehensive corrective actions. These actions included suspending radioactive shipments, a prompt evaluation of the incident, increased management supervision of shipping activities, and improved training of people involved in shipping.

The Texas Engineering Experiment Station/Texas A&M University System has 30 days to either pay the penalty or file a protest.

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