# NORTH DAKOTA DEPARTMENT OF HEALTH
## Environmental Health Section

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MEMO TO : All Portable Gauge, Industrial Radiography and Well Logging Licensees

FROM : Jeffrey L. Burgess, P.E.
Director, Division of
Air Quality

FILE

RE : NRC Notice 2001-11: "Thefts of Portable Gauges"

DATE : July 30, 2001

Enclosed is a copy of the United States Nuclear Regulatory Commission (NRC) information notice 2001-11: "Thefts of Portable Gauges". This information notice was issued to inform licensees of recent incidents involving thefts of portable gauges and to remind licensees of their responsibilities to prevent loss and damage to portable gauges.

Although this notice specifically discusses portable gauges, the same issues also apply to industrial radiographers, well-loggers and other licensees who regularly store radioactive material in temporary locations. It is expected that you will review this information for applicability to your licensed activities and consider actions, as appropriate, to ensure the safe and legal use of radioactive materials in the State of North Dakota.

This notice is for your information only. No specific action nor written response is required. If you have any questions concerning this issue, please contact the Radiation Control Program at 701(328)-5188.

JLB/JMG:csc
Enc:

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
WASHINGTON, D.C. 20555

July 13, 2001

NRC INFORMATION NOTICE 2001-11: THEFTS OF PORTABLE GAUGES

Addressees:

All portable gauge licensees.

Purpose :

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice (IN) to inform addresses of recent incidents of thefts of portable gauges, and to remind licensees of their responsibilities to prevent loss and damage to portable gauges. It is expected that recipients will review this information for applicability to their licensed activities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this IN are not new NRC requirements; therefore, no specific action or written response is required.

Description of Circumstances:

In the period January 1996 through October 2000, NRC and Agreement State licensees reported a total 156 thefts of portable gauges. Fifty-one occurred in the States of Texas and Florida. Most of the thefts occurred when gauges were stored in vehicles parked in areas vulnerable to theft. Only 40 percent of gauges reported stolen were reported as having been recovered. Two of the 156 events involved attempts to sell the stolen gauges. In both of these cases the gauge was returned to the owner. In another two events, gauges were found in scrap metal when radiation monitors alarmed. In one event, only the source rod was found. In the other case, the gauge was found intact.

In 83 percent of the thefts from vehicles, the vehicles were parked at locations other than the licensees' facilities or job sites. Of these cases, gauges were most frequently stolen from vehicles parked at private residences (37 percent). In most of the cases involving the theft of gauges from vehicles, the gauges were locked and secured, but frequently the gauges were locked in an open truck bed, visible to passers-by.

The following are examples of some typical cases.

Case 1: A portable moisture/density gauge was stolen from the back of a company truck parked at overnight lodging in Brownsville, Texas. The gauge contained a 1.48 GBq (40 mCi) Americium-241 source and a 0.30 GBq (8 mCi) Cesium-137 source. The licensee discovered the theft the next morning, September 25, 2000, at approximately 7:30 a.m., and informed the Texas Bureau of Radiation Control. The gauge case had been secured to the bed of the truck by chains. The security chains had been cut and the gauge and the operator's tool box stolen. A police report was promptly filed with the Brownsville Police Department.

Case 2: A moisture/density gauge was stolen from a company truck. The truck was located at the home of an employee of the licensee in Homestead, Florida. The gauge contained 1.48 GBq (40 mCi) of Americium-241 and 0.23 GBq (6.1 mCi) of Cesium-137. The licensee notified police and the Florida Bureau of Radiation Control. The Homestead Police prepared a press release and offered a reward for the return of the gauge. A private individual reported finding the gauge four days later, on July 6, 1999. The licensee stated that the gauge was not damaged. It was determined that the employee did not follow procedures that require gauges be stored at the licensee's facility.

Case 3: A portable moisture/density gauge was stolen containing 1.48 GBq (40 mCi) of Americium-241 and 0.3 GBq (8 mCi) of Cesium-137. The gauge was taken from the bed of a pickup truck parked at a motel in Jacksonville, Florida, on March 31, 2000, between midnight and 0600 a.m. The gauge was stored in an approved transportation package and was secured to the vehicle by a chain. The chain was cut and both the gauge and case were taken. The licensee notified the police of the theft.

Case 4: A portable moisture/density gauge was stolen when the pickup truck it was chained to was stolen from the home of an employee. The gauge contained a 1.48 GBq (40 mCi) Americium-241 source and an 0.30 GBq (8 mCi) Cesium-137 source. The gauge was locked in its transport container, which was chained in the back of the truck. The truck was stolen early on the morning of April 19, 2001. The theft was reported to the Tempe, Arizona, Police and a reward was offered.

Discussion:

Thefts involving portable gauges appear to be occurring most frequently when gauges are stored in vehicles parked in a non-work area. In addition to considering deterrents to thefts such as locks, security considerations for portable gauges containing radioactive material should extend to ways to minimize the threat of theft. The requirements for control and security of licensed material are given in 10 CFR 20.1801 and 20.1802. Control and security requirements may also be found on the NRC license and within U.S. Department of Transportation (DOT) regulations.

The NRC's analysis of five years of theft data for portable gauges indicates that a large number of gauges are stolen from trucks, even when they are secured with chains. To help reduce the number of thefts, licensees may want to consider taking further precautions, such as: (1) requiring gauges to be locked in covered vehicle compartments, (2) not parking vehicles in areas vulnerable to theft, and (3) including a discussion of this IN in periodic or special gauge user training, to increase awareness of this problem.

NRC licensees are reminded of the recent change to the NRC Enforcement Policy (Federal Register Notice 79139, dated December 18, 2000, regarding improper disposal of sources). Under this revised policy, licensees cited for inadequate security and the loss of control of moisture density gauges may face civil penalties of up to $15,000.

This IN notice requires no specific action or written response. If you have any questions about the information in this notice, please contact the technical contact listed below or the appropriate regional office.

Donald A. Cool, Director
Division of Industrial and
Medical Nuclear Safety
Office of Nuclear Material Safety
and Safeguards

Attachments:
1. List of Recently Issued NMSS Information Notices
2. List of Recently Issued NRC Information Notices

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