

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF FEDERAL AND STATE MATERIALS AND
ENVIRONMENTAL MANAGEMENT PROGRAMS
WASHINGTON, D.C. 20555

December 7, 2007

**NRC REGULATORY ISSUE SUMMARY 2007- 28
SECURITY REQUIREMENTS FOR PORTABLE GAUGES**

ADDRESSEES

U.S. Nuclear Regulatory Commission (NRC) portable gauge licensees and Agreement State Radiation Control Program Directors and Liaison Officers.

INTENT

The NRC is issuing this regulatory issue summary (RIS) to portable gauge licensees to increase awareness of the need to secure portable gauges, as specified in 10 CFR 30.34(i), "Security Requirements for Portable Gauges." No specific action or written response is required.

BACKGROUND

In accordance with 10 CFR 20.1801, licensees are responsible for the security of stored material. In addition, 10 CFR 20.1802 requires licensees to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. **Despite the requirements in 10 CFR 20.1801 and 20.1802, a review of NRC's Nuclear Materials Events Database for the period of 2001 through 2004 revealed that approximately 50 gauges were stolen per year and approximately 50 percent were recovered.** Approximately two-thirds of the portable gauges stolen were taken from vehicles. In most cases, the gauge was in its transportation case secured with a locked metal chain. Typically, the chain was cut or the transportation case was broken, and then the device was stolen. Prior to the new requirement in 10 CFR 30.34(i), NRC issued several "Information Notices" (IN-2001-11, IN-98-01, IN-93-18, IN-88-02, IN-87-55, and IN-86-67) to remind licensees of their regulatory responsibility to secure the devices; **however, the number of reported thefts was not appreciably reduced.**

In order to minimize the number of unauthorized removals of portable gauges by means such as thefts, and to thereby reduce any potential impact to public health and safety, the NRC conducted a rulemaking to amend 10 CFR 30.34, "Terms and Conditions of Licenses," governing the use of byproduct material in specifically licensed portable gauges. On January 12, 2005, the final rule was published in the *Federal Register*, "Security Requirements for Portable Gauges Containing Byproduct Material" (70 FR 2001), which became effective on July 11, 2005. The amendment imposed additional security requirements to reduce the potential for unauthorized removal of portable gauges by means such as theft. Section 30.34(i) was added to the regulations to require portable gauge licensees to **use a minimum of two independent physical controls** that form tangible barriers to secure portable gauges from unauthorized removal, whenever the device is not under the control and constant surveillance of the licensee.

The *Federal Register* notice for the proposed rule (68 FR 45172), August 1, 2003, included examples of acceptable independent physical controls to secure a portable gauge in various scenarios, such as: storage at an authorized location; securing the device in a vehicle; and securing the device at a temporary jobsite or at a location other than an authorized location listed on the license. The licensee has the flexibility in selecting the physical controls to be used in securing a portable gauge.

SUMMARY OF ISSUE

Although the quantity of radioactive material in portable gauges is relatively low, unauthorized removals of these gauges pose potential health and safety and security concerns. In light of the continuing theft of these devices, and expectations to reduce these occurrences, this RIS is being issued to remind licensees of the requirements and responsibilities concerning the security of portable gauges as specified in 10 CFR 30.34(i).

RELATED GENERIC COMMUNICATIONS

IN 2001-11, "Thefts of Portable Gauges"

IN 1998-01, "Thefts of Portable Gauges"

IN 1993-18, "Portable Moisture-Density Gauge User Responsibilities During Field Operations"

IN 1988-02, "Lost or Stolen Gauges"

IN 1987-55, "Portable Moisture/Density Gauges: Recent Incidents of Portable Gauges Being Stolen or Lost"

IN 1986-67, "Portable Moisture/Density Gauges: Recent Incidents And Common Violations of Requirements For Use, Transportation, and Storage"