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

January 15, 1998

NRC INFORMATION NOTICE 98-01: THEFTS OF PORTABLE GAUGES

Addressees:

All portable gauge licensees.

Purpose:

The Nuclear Regulatory Commission is issuing this information notice to share some recent incidents of thefts of portable gauges with addressees 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 information notice are not NRC requirements; therefore no specific action nor written response is required.

Description of Circumstances:

In the year and a half from February 1996 through August 1997, a total of 33 thefts of portable gauges were reported by NRC and Agreement State licensees. In almost all of these cases, the licensee complied with regulatory requirements by securing stored, licensed material from unauthorized removal or access.

Twenty-one of the thefts involved devices stored in vehicles (e.g., parked in shopping areas during the day, at gauge user residences overnight) and 12 thefts were from storage facilities (e.g., trailers at job sites, storage sheds). In three of the thefts, vehicles with the devices in them were stolen (one with the ignition key left in the vehicle). Out of the 21 thefts from vehicles, only one licensee appears to have not followed expected security requirements. Out of the 12 thefts from storage facilities, only one licensee appears to have not followed expected security requirements. Some representative examples of such thefts of portable gauges follow.

Case 1: A portable gauge was stolen from a vehicle parked at a private residence. The gauge was last accounted for during the evening, when it was located within a locked pickup truck. The gauge's source rod was locked in a shielded position and the entire gauge was in a locked transportation case chained to the truck bed. The gauge was identified as missing early the next morning. The truck had been broken open and the chain locking the gauge's transportation case to the truck was cut to access the portable gauge. The licensee reported the theft to the local media, the State, and NRC.

Case 2: A portable gauge was stolen from the back of a pickup truck at a stop while enroute back to the office. The gauge user was returning to the office after completing work at a job

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site. The source rod was locked in its shielded position and the gauge was locked in its transport case. The transport case was chained and locked to the bed of the pickup truck. When the gauge user returned to the truck, the cap of the truck was unlocked and the gauge, transport case, chains, and locks were missing. The licensee notified NRC and local police, who informed the media. The licensee also contacted the gauge manufacturer and requested that it place this gauge on the manufacturer's "stolen gauge list."

Case 3: Two portable gauges were stolen from a temporary job site over a holiday weekend. The gauges were stored in a locked, metal storage unit. The locks and chains securing the gauges were both cut. Also stolen were other tools and a pickup truck. The local police, NRC, and the gauge manufacturers were notified. The licensee issued a press release and offered a reward for the return of the gauges. Five days later police recovered the gauges from the garage of the thief who was arrested later that afternoon.

Case 4: A portable gauge was stolen from a locked storage shed at the licensee's corporate office. The gauge was in its shipping container and had been stored in a locked plywood cabinet within the locked storage shed. The licensee plans to move the storage location of its gauges to the basement of its building.

Discussion:

Portable gauges are used extensively by NRC and Agreement State licensees. Thefts involving gauges appear to be occurring more frequently, especially when gauges are left unattended. 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 Department of Transportation (DOT) regulations.

NRC licensees transporting portable gauges are subject to the regulations in 10 CFR Part 71. Section 71.5(a) incorporates certain regulations (49 CFR 170-189) of the Department of Transportation (DOT), to which these licensees are also subject. Licensees who transport gauges to and from temporary job sites in private vehicles are shippers acting as private carriers, and as such, must comply with DOT regulations governing both shippers and carriers. Title 49 CFR 177.842(d) requires that packages containing radioactive material (i.e., the gauge in its case) must be blocked and braced to prevent the movement of the package during transportation. For pickup trucks, this requirement is usually met when the gauge is secured within its case, and the case is secured and locked to the bed of the truck.

Licensees may want to consider taking further precautions such as concealing the gauge from view, increasing surveillance in high crime areas, and including a discussion of this IN in periodic or special gauge user training to heighten awareness to this growing problem.

Related Generic Communications:

- ▶ IN 93-18, "Portable Moisture-Density Gauge User Responsibilities during Field Operations," March 10, 1993.
- ▶ IN 88-02, "Lost or Stolen Gauges," February 2, 1988.
- ▶ IN 87-55 "Portable Moisture/Density: Recent Incidents of Portable Gauges Being Stolen or Lost," October 29, 1987.
- ▶ IN 86-67, "Portable Moisture/Density Gauges: Recent Incidents and Common Violations of Requirements for Use, Transportation, and Storage," August 15, 1987.
- ▶ IN 84-26, "Recent Serious Violations of NRC Requirements by Moisture Density Gauge Licensees," April 16, 1984.

This information notice requires no specific action nor 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

Technical Contact: Anthony S. Kirkwood, NMSS
(301) 415-6140
E-mail: ask@nrc.gov

Attachments:

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

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**LIST OF RECENTLY ISSUED
NMSS INFORMATION NOTICES**

Information Notice No.	Subject	Date of Issuance	Issued to
97-91	Recent Failures of Control Cables Used on Amersham Model 660 Posilock Radiography Systems	12/31/97	All industrial radiography licensees
97-89	Distribution of Sources and Devices Without Authorization	12/29/97	All sealed source and device manufacturers and distributors
97-87	Second Retrofit to Industrial Nuclear Company IR100 Radiography Camera, to Correct Inconsistency in 10 CFR Part 34 Compatibility	12/12/97	All industrial radiography licensees
97-86	Additional Controls for Transport of the Amersham Model No. 660 Series Radiographic Exposure Devices	12/12/97	Registered users of the Model No. 660 series packages, and Nuclear Regulatory Commission industrial radiography licensees
97-75	Enforcement Sanctions Issued as a Result of Deliberate Violations of NRC Requirements	09/24/97	All U.S. Nuclear Regulatory Commission licensees
97-72	Potential for Failure of the Omega Series Sprinkler Heads	09/22/97	All holders of OLs or CPs for nuclear power reactors and fuel cycle facilities
97-65	Failures of High-Dose-Rate Remote Afterloading Device Source Guide Tubes, Catheters, and Applicators	08/15/97	All high-dose-rate remote afterloader licensees
97-64	Potential Problems Associated with Loss of Electrical Power in Certain Teletherapy Units	08/13/97	All U.S. Nuclear Regulatory Commission medical teletherapy licensees

LIST OF RECENTLY ISSUED
NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
97-90	Use of Nonconservative Acceptance Criteria in Safety-Related Pump Surveillance Tests	12/30/97	All holders of OLs for nuclear power reactors except those who have ceased operations and have certified that fuel has been permanently removed from the vessel
97-89	Distribution of Sources and Devices Without Authorization	12/29/97	All sealed source and device manufacturers and distributors
97-88	Experiences During Recent Steam Generator Inspections	12/16/97	All holders of OLs for pressurized-water reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor
97-87	Second Retrofit to Industrial Nuclear Company IR 100 Radiography Camera, to Correct Inconsistency in 10 CFR Part 34 Compatibility	12/12/97	All industrial radiography licensees
97-86	Additional Controls for Transport of the Amersham Model No. 660 Series Radiographic Exposure Devices	12/12/97	Registered users of the Model No. 660 series packages, and Nuclear Regulatory Commission industrial radiography licensees
97-85	Effects of Crud Buildup and Boron Deposition on Power Distribution and Shutdown Margin	12/11/97	All holders of OLs for pressurized-water reactors, except those licensees who have permanently ceased operations and have certified that the fuel has been permanently removed from the reactor vessel

OL = Operating License
CP = Construction Permit

Related Generic Communications:

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