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

April 18, 2005

NRC REGULATORY ISSUE SUMMARY 2005-06
REPORTING REQUIREMENTS FOR GAUGES DAMAGED AT TEMPORARY JOB SITES

ADDRESSEES

All material licensees possessing portable gauges, regulated under 10 CFR Part 30.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform licensees who use portable gauges, containing byproduct material, of the reporting requirement associated with gauges damaged at temporary job sites. No specific action nor written response is required.

BACKGROUND

During the course of an inspection of a gauge licensee in August 2003, an NRC inspector found that gauges containing byproduct material had been damaged during licensed operations, but the damaged gauges were not reported to NRC. The inspector determined that, in three separate incidents, three different gauges had been damaged such that the gauges' ability to sufficiently shield the radiation sources was compromised. In the first two incidents, the gauges' locking mechanisms on the handle were damaged, and in the third incident, the index rod was broken approximately 1 inch above the base of the unit. Each of these incidents created the possibility that the source could inadvertently become unshielded.

In the fall of 1992, NRC's Office of Enforcement requested that the Office of Nuclear Material Safety and Safeguards (NMSS) clarify the conditions under which licensees should report damaged nuclear gauges. NMSS conducted a detailed analysis of the reporting requirements in 10 CFR Parts 20 and 30 that resulted in the publication of Health Physics Position 322 (HPPOS-322), in 1993. HPPOS-322 explained that reporting damaged gauges depended on one of several factors: 1) the extent of the damage; 2) the level of radiation in an unrestricted area; or 3) actual doses, to individuals, resulting from the damaged gauge.

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SUMMARY OF ISSUE

So that licensees are informed of the requirements for reporting damaged gauges, staff is republishing the specific conditions under which reporting is necessary. Therefore, in accordance with HPPOS-322, reporting the occurrence of damaged gauges is necessary when any one of the following conditions is met:

- The protective housing (i.e., shielding) is damaged such that the source is not fully shielded, or cannot be moved into the shielded position, in accordance with 10 CFR 30.50, "Reporting requirements";

- The source is left exposed in an unrestricted area such that the radiation levels exceed 10 times the limit of 2 mrem in any 1 hour (i.e., 20 mrem in any 1 hour) in accordance with 10 CFR 20.2203, "Reports of exposures, radiation levels, and concentrations of radioactive material exceeding the constraints or limits"; and 10 CFR 20.405, "Reports of over- exposures and excessive levels and concentrations" [1] .

- The incident results in doses in excess of limits in Part 20 or in the license, in accordance with 10 CFR 20.2203 and 10 CFR 20.405 [See Footnote 1.]

In addition, the NRC staff has become aware that there appears to be some confusion among licensees regarding the first item above, which explains the circumstances, in accordance with 10 CFR 30.50, that require the reporting of defective equipment. To reduce this confusion, licensees are hereby informed that they must file a telephone report within 24 hours of any incident that involves disabled equipment, or equipment that fails to function as designed:

1. When, in accordance with 10 CFR 30.50(b)(2)(i), the equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;

2. When, in accordance with 10 CFR 30.50(b)(2)(ii), the equipment is required to be available and operable when it is disabled or fails to function; and

3. When, in accordance with 10 CFR 30.50(b)(2)(iii), no redundant[2] equipment is available and operable to perform the required safety function.

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[1]The regulations in 10 CFR 20.405 refer to dose limits in a calendar quarter. Dose limits in a calendar quarter were eliminated with the revision of Part 20, which became effective on January 1, 1994. As a substitute, licensees should refer to the annual dose limits as stated in 10 CFR 20.1201(a)(1) (i)(ii) and (a)(2)(i)(ii).

[2]In this context, "redundant" means similar equipment with safety features equivalent to the safety features of the disabled equipment.

Licensees are also required to file a written report within 30 days of the telephone report. For details that must be included in both the telephone and written reports, licensees should review 10 CFR 30.50(c)(1) and 10 CFR 30.50©)(2).

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because this RIS is informational, and does not represent a departure from current regulatory requirements.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT

NRC has determined that this action is not subject to the Small Business Regulatory Enforcement Fairness Act of 1996.

PAPERWORK REDUCTION ACT STATEMENT

This RIS does not contain information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.).

This RIS requires no specific action nor written response. If you have any questions about this RIS, please contact the technical contact listed below, or the appropriate regional office.

CONTACT

Please direct any questions about this matter to the technical contact listed below.

/RA/ Thomas H. Essig for
Charles L. Miller, Director
Division of Industrial and
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Attachment: “List of Recently Issued NMSS Generic Communications”

Note: NRC generic communications may be found on the NRC public Web site, http://www.nrc.gov, under Electronic Reading Room/Document Collections.

Recently Issued NMSS Generic Communications

Date	GC No.	Subject	Addressees
04/07/05	IN-05-010	Changes to 10 CFR Part 71 Packages	All 10 CFR Part 71 licensees and certificate holders.
04/01/05	IN-05-007	Results of HEMYC Electrical Raceway Fire Barrier System Full Scale Fire Testing	All holders of operating licenses for nuclear power reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel, and fuel facilities licensees.
02/28/05	RIS-05-003	10 CFR Part 40 Exemptions for Uranium Contained in Aircraft Counterweights - Storage and Repair	All persons possessing aircraft counterweights containing uranium under the exemption in 10 CFR 40.13(c)(5).
03/10/05	IN-05-005	Improving Material Control and Accountability Interface with Criticality Safety Activities at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.
02/11/05	BL-05-011	Material Control and Accounting at Reactors and Wet Spent Fuel Storage Facilities	All holders of operating licenses for nuclear power reactors, decommissioning nuclear power reactor sites storing spent fuel in a pool, and wet spent fuel storage sites. Note that this bulletin relates to material control and accounting (MC&A) programs and is, therefore, being withheld from public disclosure in accordance with 10 CFR 2.390.

Note: NRC generic communications may be found on the NRC public website, http://www.nrc.gov, under Electronic Reading Room/Document Collections.