

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
WASHINGTON, DC 20555-0001

November 14, 2005

**NRC REGULATORY ISSUE SUMMARY 2005-21
CLARIFICATION OF THE REPORTING REQUIREMENTS IN
10 CFR 20.2201**

ADDRESSEES

All U.S. Nuclear Regulatory Commission (NRC) licensees and Part 76 certificate holders authorized to possess licensed material.

INTENT

NRC is issuing this regulatory issue summary (RIS) to clarify the reporting requirements regarding lost, stolen, or missing licensed material in 10 CFR 20.2201. This RIS does not transmit any new requirements or new staff positions. No specific action or written response is required.

BACKGROUND

There has been an increased interest in ensuring the security of NRC-licensed material during the last several years. In addition, every radiation protection program, to be both efficient and effective, requires accountability of its licensed material. For these reasons the reporting requirements for lost, stolen, or missing sources as specified in 10 CFR 20.2201 are being clarified.

SUMMARY OF ISSUE

Section 20.2201 mandates that each licensee report, by telephone, its discovery of any lost, stolen, or missing licensed material, including sources. The regulations require, in 10 CFR 20.2201(a)(1)(I), an immediate report by telephone if the material in question is equal to or greater than 1000 times the quantity specified in Appendix C to 10 CFR Part 20, under such circumstances that an exposure could result to persons in unrestricted areas. In accordance with 10 CFR 20.2201(a)(1)(ii), each licensee shall report by telephone, within 30 days after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, licensed material that is greater than 10 times the quantity specified in Appendix C to Part 20,

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that is still missing at the time. A written report is required by 10 CFR 20.2201(b), within 30 days of either telephone call; the information required in the written report is described in 10 CFR 20.2201(b)(1)(I) - (vi). Subsequent to the written report, 10 CFR 20.2201(d) requires the licensee to report any additional substantive information on the loss or theft of the licensed material within 30 days after the licensee learns of such information.

This RIS clarifies the term *immediately* in the context of reporting the occurrence of lost, stolen, or missing licensed material, how the term *exposure could result* is used, and the licensee's responsibility to inform the NRC of the recovery of lost or stolen licensed material.

The NRC staff has reviewed the reporting requirements for 10 CFR 20.2201 and has included clarifications for the following requirements:

10 CFR 20.2201, Reports of theft or loss of licensed material

(a) Telephone reports.

(1) Each licensee shall report by telephone as follows:

(i) *Immediately* after its occurrence becomes known to the licensee, a lost, stolen, or missing licensed material in an aggregate quantity equal to or greater than 1000 times the quantity specified in Appendix C, to Part 20, under such circumstances that it appears to the licensee that an *exposure could result* to persons in unrestricted areas.

10 CFR 30.50(a), 40.60(a), and 70.50(a) indicate NRC reporting requirements for an event that involves exposure to byproduct, source, and special nuclear material, respectively, in excess of applicable limits. These paragraphs require an immediate report, and each licensee shall notify NRC as soon as possible, but not later than 4 hours, after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits, or releases of licensed materials that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.). Therefore, for the immediate reporting requirements of 10 CFR 20.2201, NRC desires notification within 4 hours after the occurrence becomes known to the licensee of any lost, stolen, or missing licensed material, including sources.

In the context above, the phrase "exposure could result" connotes having the possibility to result in exposure to a person, and a licensee would be required to report unless exposure to a person was not possible.

(ii) Within 30 days after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, all licensed material in a quantity greater than 10 times the quantity specified in Appendix C to Part 20, that is still missing at this time.

10 CFR 30.9(a), 40.9(a), and 70.9(a) require that information provided to the Commission by a licensee shall be complete and accurate in all material respects. Thus, when licensed material is recovered that has been reported under 10 CFR 20.2201 as lost, stolen, or missing, the licensee must notify the NRC of the recovery.

NRC desires that licensees make a telephone report within 4 hours regarding the recovery of any lost, stolen, or missing licensed material that is equal to or greater than Category II levels. Category II material and level are defined in the International Atomic Energy Agency, "Code of Conduct on the Safety and Security of Radioactive Sources" 2004, and in the NRC proposed rule for the National Source Tracking of Sealed Sources (70 FR 43646; July 28, 2005). Below is a table that provides the thresholds for Category II material and level:

Radionuclide	Quantity of Concern (TBq)	Quantity of Concern (Ci)
Am-241	0.6	16
Am-241/Be	0.6	16
Cf-252	0.2	5.4
Cm-244	0.5	14
Co-60	0.3	8.1
Cs-137	1	27
Gd-153	10	270
Ir-192	0.8	22
Pm-147	400	11,000
Pu-238	0.6	16
Pu-239/Be	0.6	16
Se-75	2	54
Sr-90 (Y-90)	10	270
Tm-170	200	5,400
Yb-169	3	81

(b) Written reports.

(1) Each licensee required to make a report under paragraph (a) of this section shall, within 30 days after making the telephone report, make a written report setting forth the information contained in 10 CFR 20.2201(b)(1)(i) through (vi).

(c) A duplicate report is not required, under paragraph (b), if the licensee is also required to submit a report pursuant to paragraphs 10 CFR 30.55(c); 40.64(c); 50.72; 50.73; 70.52; 73.27(b); 73.67(e)(3)(vii); 73.67(g)(3)(iii); 73.71; or 150.19(c), of chapter 1 of the regulations.

(d) Subsequent to filing the written report, the licensee shall also report any additional substantive information on the loss or theft, within 30 days after the licensee learns of such information.

The above paraphrases most of 10 CFR 20.2201, and additional information was cited to help clarify what is meant by the terms *immediately* and *exposure could result*. Consult the regulations for the full text.

This clarification of the requirements from 10 CFR 20.2201 does not exempt licensees from meeting the requirements from other sections in the regulations in regards to reporting.

BACKFIT DISCUSSION

This RIS requires no action nor written response and is, therefore, not a backfit under 10 CFR 50.109. Consequently, the staff did not perform a backfit analysis.

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 OF 1996

The information collections contained in this RIS are covered by the requirements of 10 CFR 20, 30, 40, and 70, which were approved by the Office of Management and Budget, approval numbers 3150-0014, 0017, 0020, and 009.

PUBLIC PROTECTION NOTIFICATION

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement, unless the requesting document displays a currently valid OMB control number.

CONTACT

Please direct any questions about this matter to the technical contact or the appropriate regional office.

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Attachment: List of Recently Issued NMSS Generic Communications

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

Recently Issued NMSS Generic Communications

Date	GC No.	Subject	Addressees
2/11/05	BL-05-01	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.
10/28/05	RIS-05-22	Requirements for the Physical Protection During Transportation of Special Nuclear Material of Moderate and Low Strategic Significance: 10 CFR Part 72 vs. Regulatory Guide 5.59 (1983)	All holders of licenses for the possession of special nuclear material (SNM) that ship Category II and III quantities of this material.
9/27/05	RIS-04-17, Rev. 1	Revised Decay-in-Storage Provisions for the Storage of Radioactive Waste Containing Byproduct Material	All licensees regulated under 10 CFR Parts 30, 32, 33, 35, 39, and 50.
8/25/05	RIS-05-18	Guidance for Establishing and Maintaining a Safety Conscious Work Environment	All licensees, applicants for licenses, holders of certificates of compliance, and their contractors subject to NRC authority
8/10/05	RIS-05-16	Issuance of NRC Management Directive 8.17, "Licensee Complaints Against NRC Employees"	All licensees and certificate holders.
8/3/05	RIS-05-15	Reporting Requirements for Damaged Industrial Radiographic Equipment	All material licensees possessing industrial radiographic equipment, regulated under 10 CFR Part 34.
7/13/05	RIS-05-13	NRC Incident Response and the National Response Plan	All licensees and certificate holders.
7/11/05	RIS-05-12	Transportation of Radioactive Material Quantities of Concern NRC Threat Advisory and Protective Measures System	Licensees authorized to possess radioactive material that equals or exceeds the threshold values in the Additional Security Measures (ASM) for transportation of Radioactive Material Quantities of Concern (RAMQC) under their 10 CFR Part 30, 32, 50, 70, and 71 licenses and Agreement State licensees similarly authorized to possess such material in such quantities under their Agreement State licenses.
7/11/05	RIS-05-11	Requirements for Power Reactor Licensees in Possession of Devices Subject to the General License Requirements of 10 CFR 31.5	All holders of operating licenses for nuclear power reactors and generally licensed device vendors.

Date	GC No.	Subject	Addressees
6/10/05	RIS-05-10	Performance-Based Approach for Associated Equipment in 10 CFR 34.20	All industrial radiography licensees and manufacturers and distributors of industrial radiography equipment.
4/18/05	RIS-05-06	Reporting Requirements for Gauges Damaged at Temporary Job Sites	All material licensees possessing portable gauges, regulated under 10 CFR Part 30.
4/14/05	RIS-05-04	Guidance on the Protection of Unattended Openings that Intersect a Security Boundary or Area	All holders of operating licenses or construction permits for nuclear power reactors, research and test reactors, decommissioning reactors with fuel on site, Category 1 fuel cycle facilities, critical mass facilities, uranium conversion facility, independent spent fuel storage installations, gaseous diffusion plants, and certain other material licensees.
2/28/05	RIS-05-03	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).
10/31/05	IN-05-28	Inadequate Test Procedure Fails to Detect Inoperable Criticality Accident Alarm Horns	All licensees authorized to possess a critical mass of special nuclear material.
10/07/05	IN-05-27	Low Dose-Rate Manual Brachytherapy Equipment Related Medical Events	All medical licensees.
7/29/05	IN-05-22	Inadequate Criticality Safety Analysis of Ventilation Systems at Fuel Cycle Facilities	All licensees authorized to possess a critical mass of special nuclear material.
6/23/05	IN-05-17	Manual Brachytherapy Source Jamming	All medical licensees authorized to possess a Mick applicator.
5/17/05	IN-05-13	Potential Non-conservative Error in Modeling Geometric Regions in the Keno-v.a Criticality Code	All licensees using the Keno-V.a criticality code module in Standardized Computer Analyses for Licensing Evaluation (SCALE) software developed by Oak Ridge National Laboratory (ORNL)
5/17/05	IN-05-12	Excessively Large Criticality Safety Limits Fail to Provide Double Contingency at Fuel Cycle Facility	All licensees authorized to possess a critical mass of special nuclear material.
4/7/05	IN-05-10	Changes to 10 CFR Part 71 Packages	All 10 CFR Part 71 licensees and certificate holders.

Date	GC No.	Subject	Addressees
4/1/05	IN-05-07	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.
3/10/05	IN-05-05	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.

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