

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

February 20, 1997

**NRC INFORMATION NOTICE 97-03: DEFACING OF LABELS TO COMPLY WITH  
10 CFR 20.1904(b)**

Addressees

All material licensees involved with disposal of medical waste.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to alert addressees to an issue involved with the defacing of labels, to comply with 10 CFR 20.1904(b). It is expected that recipients will review the information for applicability to their facilities 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

Section 20.1904(b) of 10 CFR Part 20 requires licensees to remove or deface radioactive material labels, or otherwise clearly indicate that the containers no longer contain radioactive material, before disposing of them as non-radioactive waste. NRC became aware of the disposal of used syringes/needles that had been held for decay-in-storage, without licensees removing or defacing the radioactive material labels or otherwise indicating that the containers no longer contained radioactive material. In this situation, licensees had placed used syringes/needles into opaque plastic inserts, which had then been capped and placed inside unit dose shields. Used syringes/needles are considered both biohazardous and radioactive waste. The sealed plastic inserts are placed into waste barrels, along with other radioactive waste, for decay-in-storage. The barrels are sealed and labeled with radioactive material labels and held for 10 half-lives for decay and surveys prior to disposal. Although the waste is no longer considered radioactive, it is still biohazardous. The sealed barrels' radioactive material labels are defaced, and then the barrels are disposed of as biohazardous waste by incineration.

Discussion

The radioactive material labels on the used syringes/needles cannot be defaced without opening the waste barrels and the plastic inserts, actions that would expose employees to

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Updated on 2/25/97

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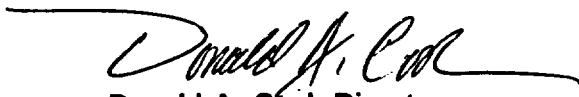
the risk of injury from the needles. Additionally, these actions would place licensees in violation of the Occupational Safety and Health Administration regulation 29 CFR 1910.1030(d)(1), which requires precautions to prevent contact with blood or other potentially infectious materials, including recommendations not to manipulate used syringes/needles by hand. The "Statements of Consideration" for 10 CFR 20.1904(b) indicate that the rule only applies to "visible" labels, and that when compliance with the regulations is not feasible, other methods are acceptable. Such methods include placing placards or labels with the word "empty" on the containers, or compacting the waste, provided that there are no visible labels remaining. Incineration would be another means of ensuring that there are no visible labels remaining. The "Statements of Consideration" also indicate that the rule primarily pertains to shipping and other outer containers that do not ordinarily contain radioactive materials in and of themselves, but serve as secondary barriers.

If licensees determine that waste disposal procedures are needed to address defacing of labels to comply with 10 CFR 20.1904(b), the procedures must ensure that no visible labels remain before transfer for disposal. In one case, a nuclear pharmacy licensee proposed, and NRC approved, the following procedure for disposing used syringes/needles without defacing the radioactive material labels on the used syringes/needles:

1. The radioactive material labels visible on the outer waste barrels/containers will be defaced or removed before transfer to the waste disposal firm;
2. Waste barrels are sealed before delivery to the waste disposal firm;
3. Waste barrels/containers will be delivered directly from the licensee's facility to a waste disposal firm for disposal;
4. Medical waste is incinerated, and not sent to a medical waste landfill; and
5. The waste disposal firm will be notified that the barrels must not be opened at any point, and for any reason, before incineration.

Licensees must continue to comply with the waste disposal procedures described in 10 CFR 35.92, or equivalent disposal procedures for non-medical licensees.

This information notice requires no specific action nor written response. If you have additional 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: Sally L. Merchant, NMSS  
(301) 415-7874  
E-mail: slm2@nrc.gov

**Attachments:**

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

*Attachment filed in Jacket*

**LIST OF RECENTLY ISSUED  
 NMSS INFORMATION NOTICES**

Date of Notice No.	Subject	Issuance	Issued to	Information
96-72	Undetected Failures that May Occur During Patient Treatments with Teletherapy Devices	12/24/96	All teletherapy licensees	
96-70	Year 2000 Effect on Computer System Software	12/24/96	All U.S. Nuclear Regulatory Commission licensees, certificate holders, and registrants	
96-66	Recent Misadministrations Caused by Incorrect Calibrations of Strontium-90 Eye Applicators	12/13/96	All U.S. Nuclear Regulatory Commission Medical Use Licensees authorized to use strontium-90 eye applicators	
96-63	Potential Safety Issue Regarding the Shipment of Fissile Material	12/05/96	All U.S. Nuclear Regulatory Commission licensees authorized to possess special nuclear material in unsealed quantities greater than a critical mass	
96-57	Incident-Reporting Requirements Involving Intakes, During a 24-Hour Period that May Cause a Total Effective Dose Equivalent in Excess of 0.05 Sv (5 rem)	10/30/96	All U.S. Nuclear Regulatory Commission licensees	
96-54	Vulnerability of Stainless Steel to Corrosion When Sensitized	10/17/96	All material licensees	
96-53	Retrofit to Amersham 660 Posilock Radiography Camera to Correct Inconsistency in 10 CFR Part 34 Compatibility	10/15/96	All industrial radiography licensees	

**LIST OF RECENTLY ISSUED  
NRC INFORMATION NOTICES**

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<b>Information Notice No.</b>	<b>Subject</b>	<b>Date of Issuance</b>	<b>Issued to</b>
97-02	Cracks Found in Jet Pump Riser Assembly Elbows at Boiling Water Reactors	02/06/97	All holders of OLs or CPs for boiling water nuclear power reactors models 3, 4, 5 and 6, except those licenses that have been amended to possession-only status
97-01	Improper Electrical Ground- ing Results in Simultaneous Fires in the Control Room and the Safe-Shutdown Equip- ment Room	01/08/97	All holders of OLs or CPs for nuclear power reactors
96-72	Undetected Failure that May Occur During Patient Treatments with Teletherapy Devices	12/24/96	All teletherapy licensees
96-71	Licensee Response to Indi- cations of Tampering, Van- dalism, or Malicious Mis- chief	12/27/96	All holders of OLs or CPs for nuclear power reactors

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OL = Operating License  
CP = Construction Permit

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**Original Signed By**

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

Technical contact: Sally L. Merchant, NMSS  
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OFF	IMAB		IMAB		IMAB		OGC		Tech. Ed.	
NAME	TTaylor		SLMerchant		LWCemper		STreby*		EKraus*	
DATE	1/24/97		1/28/97		1/28/97		11/21/96		12/9/96	

OFF	IMNS		IMNS	
NAME	FCCombs		DACool	
DATE			1/31/97	