

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

June 7, 1991

NRC INFORMATION NOTICE NO. 91-35: LABELING REQUIREMENTS FOR TRANSPORTING  
MULTI-HAZARD RADIOACTIVE MATERIALS

Addresses:

All U.S. Nuclear Regulatory Commission (NRC) licensees.

Purpose:

This notice is provided to inform licensees of the U.S. Department of Transportation (DOT) requirements for labeling packages containing hazardous materials that meet the definition of more than one hazard (e.g., Radioactive and Poison). It is expected that licensees will review this information and consider action, if appropriate, to ensure that packages containing multi-hazard materials are properly labeled. However, suggestions contained in this notice do not constitute new requirements; therefore no written response is required.

Description of Circumstances:

A licensee was found to have labeled its multi-hazard packages only for the radioactive hazard and not for the additional hazard. An inspection revealed that the licensee inappropriately applied the exceptions for small quantities as stated in Section 173.4 of Title 49 of the Code of Federal Regulations (49 CFR 173.4) to package labeling. The NRC has received information that other licensees who are shipping dual hazard materials may also be labeling the packages only for the radioactive hazard and not for the additional hazard.

Discussion:

The DOT regulates the transportation of hazardous material packages. Under DOT rules, a shipper must classify a product according to its primary hazard. Unless a specific exception from labeling is granted, every package containing a hazardous material must be labeled in accordance with this classification decision. In addition to labeling for the specific class, labeling is often required for secondary hazards for materials meeting more than one hazard definition.

Specifically, DOT requires that each package containing hazardous materials be labeled (49 CFR 172.400). Additionally, Sections 172.402(a)(1) and 172.403(e) require that packages containing materials that meet the definitions of radioactive and any other hazards must be separately labeled for each hazard. Section 173.4 provides an exception from most of the DOT regulations, including labeling, for small quantities of materials that meet the definition for one or

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more hazard. For the exception to apply, the packaged material must meet all applicable hazard quantity limitations (49 CFR 173.4(a)(1)(i-iv)).

In the circumstances described herein, the material met the small quantity limit for the poison but did not meet the small quantity radioactive level limit. Therefore, the exceptions provided in 49 CFR 173.4 do not apply, and the packages must be labeled in accordance with 49 CFR 172.402(a)(1) and 172.403(e). In this case, the regulations require that both RADIOACTIVE and POISON labels be affixed to the package.

This information notice does not require any written response. If you have any questions on this matter, please contact the technical contact listed below or the appropriate NRC regional office.



Robert F. Burnett, Director  
Division of Safeguards and  
Transportation  
Office of Nuclear Materials Safety  
and Safeguards

Technical Contacts: J. R. Cook, NMSS  
(301) 492-0458

K. M. Ramsey, NMSS  
(301) 492-0534

Office of Hazardous Materials  
Standards, DOT  
(202) 366-4488

Attachments:

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

LIST OF RECENTLY ISSUED  
NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
91-34	Potential Problems in Identifying Causes of Emergency Diesel Generator Malfunctions	06/03/91	All holders of OLs or CPs for nuclear power reactors.
91-33	Reactor Safety Information for States During Exercises and Emergencies	05/31/91	All holders of OLs or CPs for nuclear power reactors.
91-32	Possible Flaws in Certain Piping Systems Fabricated by Associated Piping and Engineering	05/15/91	All holders of OLs or CPs for nuclear power reactors.
91-31	Nonconforming Magnaflux Magnetic Particle (14AM) Prepared Bath	05/09/91	All holders of OLs or CPs for nuclear power reactors.
91-30	Inadequate Calibration of Thermoluminescent Dosimeters Utilized to Monitor Extremity Dose at Uranium Processing and Fabrication Facilities	04/23/91	All fuel cycle licensees and other licensees routinely handling unshielded uranium materials.
86-21, Supp. 2	Recognition of American Society of Mechanical Engineers Accreditation Program for R Stamp Holders	04/16/91	All holders of OLs or CPs for nuclear power reactors and all recipients of NUREG-0040, "Licensee Contractor and Vendor Inspection Status Report" (White Book).
91-29	Deficiencies Identified During Electrical Distribution System Functional Inspections	04/15/91	All holders of OLs or CPs for nuclear power reactors.
91-28	Cracking in Feedwater System Piping	04/15/91	All holders of OLs or CPs for pressurized water reactors (PWRs).

OL = Operating License  
CP = Construction Permit

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91-30	Inadequate Calibration of Thermoluminescent Dosimeters Utilized to Monitor Extremity Dose at Uranium Processing and Fabrication Facilities	04/23/91	All fuel cycle licensees routinely handling unshielded uranium materials.
91-26	Potential Nonconservative Errors in the Working Format Hansen-Roach Cross-Section Set Provided with The Keno and Scale Codes	04/02/91	All fuel cycle licensees and other licensees, including all holders of operating licenses for nuclear power reactors, who use physics codes to support criticality safety in the use of fissile material.
91-23	Accidental Radiation Overexposures to Personnel due to Industrial Radiography Accessory Equipment Malfunctions	03/26/91	All Nuclear Regulatory Commission (NRC) licensees authorized to use sealed sources for industrial radiography.
91-16	Unmonitored Release Pathways from Slightly Contaminated Recycle and Recirculation Water Systems At A Fuel Facility	03/06/91	All fuel cycle facilities.
91-14	Recent Safety-Related Incidents at Large Irradiators	03/05/91	All Nuclear Regulatory Commission (NRC) licensees authorized to possess and use sealed sources at large irradiators.
91-03	Management of Wastes Contaminated with Radioactive Materials ("Red Bag" Waste and Ordinary Trash)	01/07/91	All medical licensees.

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OFC	:SGTB	:SGTB	:SGTB	:NRR	:IMNS	:SGTR	:SGTB	
NAME	:Mwagner/ij	:MLusardi	:JCook	:CEMacDonald	:CBerVinger	:RCunningham	:EQTenEyck	:RFBurnett
DATE	:6/5/91	:6/5/91	:6/5/91	:6/6/91	:6/6/91	:6/6/91	:6/6/91	:6/6/91

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