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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

APR 19 1979

VIRGINIA COMMONWEALTH UNIVERSITY
CHAIRMAN, ISOTOPE COMMITTEE
1200 EAST BROAD STREET
RICHMOND VA 23219

Gentlemen:

The enclosed IE Circular 79-06 is forwarded to you for information. If there are any questions related to your understanding of the suggested actions, please contact this office.

James P. O'Reilly
Regional Director

Enclosure:
IE Circular No. 79-06

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

April 19, 1979

IE Circular No. 79-06

FAILURE TO USE SYRINGE AND BOTTLE SHIELDS IN NUCLEAR MEDICINE

Description of Circumstances:

The Nuclear Regulatory Commission (NRC) is taking this opportunity to reinforce the importance of the use of radiation shields for syringes and bottles for nuclear medicine. In many cases they are not always being used by persons preparing and administering doses of radiopharmaceuticals. This is a potentially unsafe practice as these shields reduce the radiation dose to the fingers and hands of persons handling the syringes and bottles and can result in unnecessary and undesirably high total dose to the fingers over a period of time. Calculations and studies show that failure to use the protective shields can result in a radiation dose rate to fingers of hospital staff personnel on the order of 100 mrads to one rad per minute, or a projected lifetime dose to the fingers in some cases of about 4,000 to 100,000 rads.

Notice to Medical Licensees:

Medical licensees are required to have and use these protective shields. This requirement is imposed by either a specific condition of the NRC license or by procedures which are incorporated into the license. As part of their routine audit program, NRC licensees authorized to use byproduct material pursuant to 10 CFR 35 should take the following actions:

a. Verify that protective shields are available and that nurses and other medical personnel are using them, except in special circumstances, such as pediatric cases, when the use of syringe shields would compromise the patient's well-being.

b. Inform the people involved in this type of work of the potentially high and serious radiation doses that can be received by the hands and fingers if the protective shields are not used.

The information contained in this Circular should be brought to the attention of all personnel who prepare and administer licensed radiopharmaceuticals to patients.

No written response to this Circular is required. If you require additional information regarding this subject, please contact the Director of the appropriate NRC Regional Office.

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LISTING OF IE CIRCULARS ISSUED IN
LAST TWELVE MONTHS

Circular No.	Subject	Date of Issue	Issued To
78-01	Loss of Well Logging Source	4/5/78	All Holders of Well Logging Source Licenses
78-02	Proper Lubricating Oil for Terry Turbines	4/20/78	All Holders of Reactor OLs or CPs
78-03	Packaging Greater Than Type A Quantities of Low Specific Activity Radioactive Material for Transport	5/12/78	All Holders of Reactor OLs, CPs, Fuel Cycle, Priority I Material and Waste Disposal Licenses
78-04	Installation Error That Could Prevent Closing of Fire Doors	5/15/78	All Holders of Reactor OLs or CPs
78-05	Inadvertent Safety Injection During Cooldown	5/23/78	All Holders of Reactor OLs or CPs
78-06	Potential Common Mode Flooding of ECCS Equipment Rooms at BWR Facilities	5/23/78	All Holders of Reactor OLs or CPs
78-07	Damaged Components of a Bergen-Paterson Series 25000 Hydraulic Test Stand	5/31/78	All Holders of Reactor OLs or CPs
78-08	Environmental Qualification of Safety Related Equipment at Nuclear Power Plants	5/31/78	All Holders of Reactor OLs or CPs
78-09	Arcing of General Electric Company Size 2 Contactors	6/5/78	All Holders of CPs

LISTING OF IE CIRCULARS ISSUED IN
LAST TWELVE MONTHS

Circular No.	Subject	Date of Issue	Issued To
78-10	Control of Sealed Sources Used in Radiation Therapy	6/14/79	All Medical Licensees in Categories G and G1
78-11	Recirculation M-G Set Overspeed Stops	6/15/78	All Holders of BWR OLs or CPs
78-12	HPCI Turbine Control Valve Lift Rod Bending	6/30/78	All Holders of BWR OLs or CPs for plants with HPCI Terry Turbine
78-13	Inoperability of Multiple Service Water Pumps	7/10/78	All Holders of Reactor OLs and CPs except for plants located in: AL, AK, CA, FL, GA, LA, MS, SC
78-14	HPCI Turbine Reversing Chamber Hold Down Bolting	7/12/78	All Holders of BWR OLs or CPs for plants with a HPCI Terry Turbine excepting Duane Arnold and Monticell
78-15	Checkvalves Fail to Close In Vertical Position	7/20/78	All Holders of Reactor OLs or CPs
78-16	Limitorque Valve Actuators	7/26/78	All Holders of Reactor OLs or CPs
78-17	Inadequate Guard Training/ Qualification and Falsified Training Records	10/13/78	All Holders of and applicants for Reactor OLs

LISTING OF IE CIRCULARS ISSUED IN LAST TWELVE MONTHS

Circular No.	Subject	Date of Issue	Issued To
78-18	UL Fire Test	11/6/78	All Holders of Reactor OLs or CPs
78-19	Manual Override (Bypass) of Safety Actuation Signals	12/28/78	All Holders of CPs
79-01	Administration of Unauthorized Byproduct Material to Humans	1/12/79	All Medical Licensees except Teletherapy Medical Licensees and each Radiopharmaceutical Suppliers
79-02	Failure of 120 Volt Vital AC Power Supplies	2/16/79	All Holders of Reactor OLs and CPs
79-03	Inadequate Guard Training-Qualification and Falsified Training Records	2/23/79	All Holders of and applicants for Special Nuclear Material Licenses in Safeguards Group I
79-04	Loose Locking Nut On Limitorque Valve Operators	3/16/79	All Holders of Reactor OLs or CPs
79-05	Moisture Leakage in Stranded Wire Conductors	3/20/79	All Holders of Reactor OLs or CPs