

TERRE HAUTE  
REGIONAL  
HOSPITAL

*DOD/DCB*

November 20, 1990

*License File*  
*13-09649-01*

William H. Schultz, Chief  
Nuclear Material Safety, Section 1  
U.S. Nuclear Regulatory Commission, Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Dear Mr. Schultz:

In response to your letter dated November 8, 1990 and its accompanying Notice of Violation, please be advised that the hospital has acted promptly to correct the violations found during the October 11, 1990 inspection.

Specifically, with regard to the violation outlined in item 1, on October 15, 1990, a qualified source handler from Theratronics, Inc. installed a new electric door interlock to prohibit the initiation or continuation of the primary radiation beam with the door ajar. The interlock was placed in the upper inner corner of the door frame above the door knob so that any movement of the door would immediately affect the interlock's status. The operation of the interlock was rigorously tested at the time of installation and is checked daily during the routine quality assurance checks of the machine. The daily check consists of shutting the door firmly, initiating the primary radiation beam, and subsequently pushing the door slightly ajar, just breaking contact with the interlock. With the cessation of the radiation, the door is closed; machine indicators and the radiation monitor are checked to insure the radiation remains off until re-engaged via the console.

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601 Hospital Lane  
Terre Haute, Indiana 47802  
Telephone (812) 2-0021

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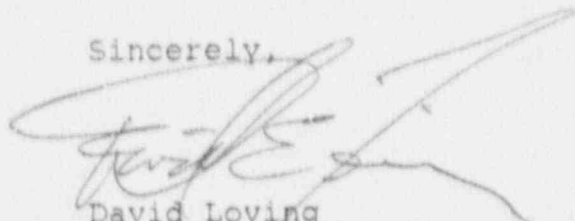
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With regard to the violation detailed in item 2, on October 26, 1990, the hospital equipped the radiation monitor with a battery to supply backup power should the primary and emergency power sources fail. This tertiary power supply was monitored for proper operation at the time of installation and is checked on a routine basis as a part of the quality assurance checks of the machine's operation. The battery's function is tested by removing the cable to the battery from the adaptor, exiting the room, shutting the door, initiating the primary radiation beam, checking the radiation monitor visually (through the window) during the exposure to insure it indicates the presence of radiation throughout the trial, and also indicates the cessation of radiation. Afterwards, the cable is reattached to provide power for recharging the battery.

The violations as described in the Notice of Violation have been corrected in full as of October 26, 1990. The devices utilized in correcting these violations will be checked in an ongoing manner, and maintained properly to insure continuing compliance. If you have any further questions, please contact Jennifer Hann, MS, at 812-234-7756.

Sincerely,



David Loving  
Assistant Administrator

DL:ns

cc: Jennifer Hann, M.S.  
Ralph Fisher, R.T.T.