

HARVARD MEDICAL SCHOOL

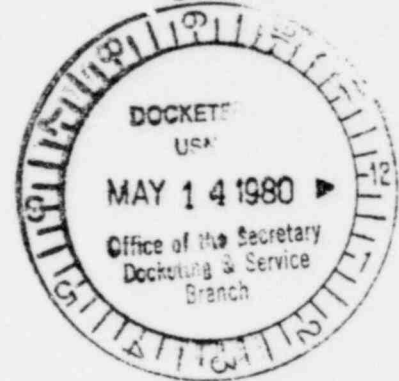
DEPARTMENT OF RADIATION THERAPY
DIVISION OF PHYSICS



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PROPOSED RULE
(45 FR 20493)

12 May 1980



Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Docketing and Service Branch

Dear Sir/Madam:

Attached are comments for your consideration with regard to the Certification of Personnel Dosimetry Processors, proposed rule making, Federal Register 45, 20493, 28 March 1980.

Thank you for your consideration.

Sincerely,

Kenneth R. Kase, Ph.D.

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cc: Mr. Robert E. Alexander
Office of Standards Development, USNRC

Mr. George Holeman, Chairman
Radiation Protection Committee, AAPM

Acknowledged by card. 5/19/80...mdv...

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COMMENTS ON PERSONNEL DOSIMETRY PROCESSORS

Regulation of personnel dosimetry processors is long overdue and this proposal is generally good. Some detailed comments follow.

1. Processor certification is the backbone of such regulations and the process must be properly established. I believe the certification laboratory(s) should be either contracted by the NRC or an independent Federal Government laboratory. A possibility for the former alternative would be an NRC contract with the Regional Calibration Laboratories which are now operated by various independent organizations for the purpose of calibrating dose measuring instrumentation for use in radiological physics applications. These labs are certified by the American Association of Physicists in Medicine under agreement with the NBS. A possibility for the second alternative would be the NBS itself or one of the Department of Energy contractor national laboratories. I believe that NRC-operated or processor-established laboratories would not be appropriate from the standpoint of efficiency, credibility and conflict of interest.
2. Certification procedures should certainly be adequate to verify monitoring capabilities for radiations encountered. Test energies should extend to Co-60 gamma rays. Mixed β - γ field irradiations should emphasize the determination of the gamma dose since it is generally more important in radiation exposure control. The beta dose not only is less important, but is more difficult to interpret in a way that is meaningful to organ dose determination. Otherwise the program tested by University of Michigan is a good one.