



UNIVERSITY OF MISSOURI

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PROPOSED RULE DR - misc Notices Reg Guide

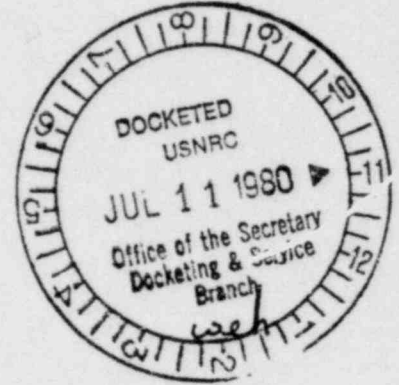
Radiation Safety Office

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Columbia, Missouri 65201
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July 7, 1980

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

Attn: Docketing and Service Branch
Ref: OH 902-1



Gentlemen:

In response to your invitation to comment on the content of the "Instruction Concerning Risk From Occupational Radiation Exposure," dated May 1980, and identified as OH 902-1, I am pleased to offer observations and suggestions in an effort to improve what is already a very fine exposition of the subject. We have arranged for the printing and distribution of 1,100 copies of this publication to our employees engaged in use of ionizing radiation sources, so we clearly are comfortable with the content. These observations and suggestions to follow are ordered in the same sequence as they occur in the text:

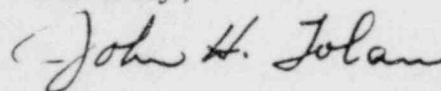
1. Beginning on page 6, equivalent doses in rem are given for the several effects related to them. In view of the intent to convert the rem to the sievert (Sv) in the near future, a footnote to this effect will prepare the reader for the change.
2. On page 7 in question 6, the statement: "...a higher than normal incidence of cancer is observed." is made as though this was invariably the case. Of course, this conclusion is relative to how "highly exposed" they are, but it is possible that some are not observed. It is suggested that the statement be modified to be "usually observed" or "sometimes observed" rather than "always observed" as is implied.
3. On page 13 in Table 2, an estimated loss of life expectancy is given for exposure to natural background radiation. To say that an exposure as large as the natural background but in excess of it will reduce life expectancy by this amount is alright, but as presented the quantities are contradictory. Since there is no way to live without exposure to natural background, it is inappropriate to say life is shortened by such exposure.
4. In the same Table 2, "X-rays" is printed as a proper noun in the plural form with the first letter capitalized, but it is used as a common noun. Even though it is not applied uniformly, the convention is to not capitalize the x in x ray unless it is used as a

proper noun and to not use the hyphen unless it is a modifier as in x-ray protection.

5. On page 15 in question 12, the statement of the current occupational dose equivalent is given, but isn't this the subject of a proposed rulemaking? Or was the original proposal of February 1979 to change these limits dropped in favor of the recent announcement of intent to rewrite Part 20?
6. On pages 15 and 16 in question 13, the answer implies that the individual worker applies ALARA practices. The benefit-risk evaluation is prepared by management, and the operating procedures derived from the evaluation must be followed by the worker else chaos will result. On the other hand, the worker must be represented in the management-organized evaluation.
7. On page 16 in question 14, the question addresses individual rate effects and the answer addresses collective doses. It is not clear what this item contributes. The following question and answer treats the collective dose concept much better.
8. On page 19 in question 20, a statement: "...is not considered acceptable to the NRC." is made, when actually society represented by the U.S. Congress is the judge of acceptability and the NRC is its designated agent.
9. On page 23 in question 25, there is another use of X-rays when x rays is preferred. This occurs again on page 24 in question 26 in two instances.

If adopted, these observations and suggestions will not alter the content significantly. A good job has been done, and improvements will be difficult.

Sincerely,



John H. Tolan
Radiation Safety Officer

JHT:mh