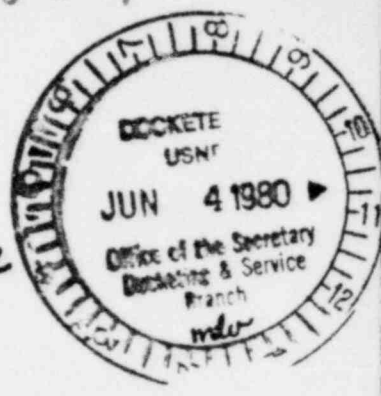
OH 902-4

May 30, 1980

515 West Point Avenue
University City, Missouri 63130




Attn: Docketing and Service Branch
Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

DOCKET NUMBER
PROPOSED RULE PR-Misc. Notice
Reg Guide

Dear Docketing and Service Branch:

Regarding the Draft Regulatory Guide, "Instruction Concerning Risk from Occupational Radiation Exposure," Division 8, Task OH 902-1, May 1980: The NRC radiation dose limits on page 15 mention a permissible 12 rem radiation maximum--but fail to mention in that paragraph that a worker may also breathe or swallow an additional 5 rems per year. Although the worker's internal exposure is mentioned on page 25, along with the fact that the exposure to internal emitters is permitted over and above the external dose limit, I wonder if it might not be more in line with the intent of Part 19 to include a mention of the internal dose in the answer to question 12--and to quantify the internal whole-body dose annual maximum at 5 rems--thereby making the potential exposure 17 rems a year. Even a person who begins working as young as age 21 is apparently "entitled" to be exposed to 5 rems internal plus 12 rems external his first year, and an additional 8 rems external, plus 5 rems internal his second year. A person who starts working at age 31, for example, could work at 17 rems (internal plus external) for over eight years before his permissible dose would have to be reduced to 10 rems (5 external plus 5 internal). I think it is particularly important to warn older transient and moonlighting workers that the occupational dose is not 5 rems, but is 17.

Although you mention the NRC's concern about exposure to neutron radiation on page 22, do you think you should also mention the fact that NRC licensees presently are not required to provide neutron dosimeters for their workers--and that therefore the 17 rem maximum does not reflect the exposure to neutron radiation which a worker may also experience?

I did not notice a discussion of the cumulative nature of exposure to radiation--that is, the risks from an accumulation of fractionated doses as compared with an acute exposure. Workers may not realize that small doses do mount up.

Also, do you not feel the need to mention life-shortening or premature aging effects of exposure to radiation--such as muscular deterioration, circulatory and respiratory illnesses, and loss of teeth, to mention a few health effects experienced by veterans exposed to atom bomb test radiation?

Sincerely,

Kay Drey

Mrs. Leo A. Drey (Kay)

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Acknowledged by card. 6/4/80 mdv...