



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 29 1979

MEMORANDUM FOR: R. Minogue, Director, Office of Standards Development
FROM: H. Denton, Director, Office of Nuclear Reactor
Regulation
SUBJECT: REVIEW OF INTERNAL DOSIMETRY STANDARDS FOR TRITIUM

The Environmental Evaluation Branch has reviewed the subject standard and approves it with comments. Our comments are shown in the attachment. They are principally editorial with the single exception of a recommendation for removal of an assumption for calculating tritium dose commitment. We consider this standard to be suitable for implementation as a Regulatory Guide.

This is really editorial also

A handwritten signature in cursive script, appearing to read "H. R. Denton".

H. R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
As stated

Contact: S. Block, EEB/DOR
28066

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PDR REGGD
OB. XXX C PDR

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Original Signed by
H. R. Denton

H. R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure:
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Ms 1/24/79
HRDenton 1/26
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1/28/79

* SEE PREVIOUS YELLOW FOR CONCURRENCES.
RETYPE PER M. GROFF.

OFFICE	EEB/DOR	EEB/DOR	EEB/DOR	RAB/DSE	AD/EP/DOR	D/DOR
SURNAME	SBlock/vg	LBarrett	GKnighton	WKreger	BGrimes	VStello
DATE	1/16/79	1/18/79	1/18/79	1/19/79	1/19/79	1/19/79

- 1) Pg 18, Table 10 - For Hc >3 Rem include action (5) in the summary of actions to be taken so that it reads "Take actions (1), (2), (3), (5) and (6). . . ." OK
- 2) Pg 14, Section 9.4 - It is stated that for calculations described in section 9, concentrations measured to be less than 2 μ Ci/liter may be taken to be zero. 2 μ Ci/liter provides a dose of >200 mrem/yr (see page 29). This may not be an insignificant exposure for chronic tritium intake (equation iv of section 9.8) if NRC uses this standard as a regulatory Guide. Therefore, it is suggested that this assumption be removed from the standard since its elimination does not present an unnecessary hardship on those doing the dose calculations.
- 3) Pg 20, Section 11.3.2 - The last three words of the first sentence refer to an "internal dose commitment." This is not consistent with Hc which delineates an internal dose commitment as a "committed dose equivalent" throughout the standard. Therefore, these referenced words should be changed accordingly. I suggest
NRC

4) Table 5 and
Table 10

- It seems inappropriate to label the first table in the standard as Table 5 and the second table as Table 10 just because they fall in sections 5 and 10 respectively. We don't think this is consistent with ANSI standard practice based on precedence. Calling them Table 1 and Table 2 would seem more appropriate. OK

5) Pg 21 - last
two paragraphs

- Are "specific activity" and "concentrations of the material" synonymous? If so, the wording should be consistent since the former can be calculated while the later is usually measured. Therefore, replace "specific activity" with "concentrations of the material" since I don't believe "specific activity" was intended. OK