

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

JAN 27 1982

MEMORANDUM FOR: Robert E. Alexander, Chief
Occupational Radiation Protection Branch
Office of Nuclear Regulatory Research

FROM: Leonard I. Cobb, Director
Division of Fuel Facilities, Materials and Safeguards
Office of Inspection and Enforcement

SUBJECT: REVIEW OF DRAFT REGULATORY GUIDE, APPLICATIONS OF BIOASSAY
OF TRITIUM

The subject draft guide has been reviewed as requested by your memo of January 8, 1982. We offer the following major comments and recommendations for your consideration:

1. We believe the regulatory position regarding the required conditions has been well developed to take into account the situations where bioassay is required. We believe Regulatory Positions 1b and 1c to be unneeded and suggest they be deleted from the text.
2. We disagree with using a Q of 1.7. Especially when it is done in the name of ALARA. Generally, we disagree with the "shopping" technique through documents to find the most conservative number. If we are finally going to use ICRP-26 and 30, use these numbers consistently throughout the document.
3. The "guide" in reality is worded like a regulation; i.e., all licensees who process (or use at one time or in one year) quantities under conditions stated in table 1 will be required to have a bioassay program-- and this program will be incorporated as a condition of a license. Why don't we change the regulations?
4. 20.108 states that the licensee may be required to furnish copies of bioassay reports to the Commission. The guide is silent on this issue.

JAN 5, 1962

5. How do the quantities in table 1 compare with quantities (and risks) of other radionuclides where bioassay programs are required? Would we require bioassay programs at other material licensee facilities which handle different radioisotopes but pose the same risk?
6. It is not clear how the footnote to 20.103 (footnote 1) is factored into the calculation at the bottom of page 3. See comments on page 3 of the draft guide.

Additional comments are provided on a marked up copy of the draft guide.

We believe that Appendix A should be retained as an integral part of the guide at least until it has received public comment. After public comments it could be published as an appendix to the guide or referenced in the guide and published as a NUREG.

If you have questions on these comments, please contact D. K. Sly of my staff.

Leonard I. Cobb, Director
Division of Fuel Facilities,
Materials and Safeguards
Office of Inspection and Enforcement

cc: S. Block/C. Hinson, NPR
V. Miller, NMSS

CONTACT:
D. K. Sly
x29896