Regulatory Guide Periodic Review

Regulatory Guide Number: 8.32, Revision 0

Title: Criteria for Establishing a Tritium Bioassay Program

Office/division/branch: RES/DSA/RPB Technical Lead: Casper Sun

Staff Action Decided: Reviewed with issues identified for future

consideration

1. What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?

RG 8.32, Revision 0, was issued in 1988 to provide criteria acceptable to the NRC staff for developing and implementing a bioassay program for any licensee handling or processing tritium, either as pure gas or in various chemical compounds. It also provides guidance to such licensees on selecting workers who should participate in a program to detect and measure possible internal radiation exposure and comply with 10 CFR Part 20.1406(c), "Minimization of contamination," of 10 CFR Part 20, "Standards for Protection Against Radiation."

The guide includes outdated references, including the American National Standards Institute (ANSI) standard N13.14 (1983), "Dosimetry-Internal Dosimetry Programs for Tritium Exposure-Minimum Requirements," which has been withdrawn with no replacement.

2. What is the impact on internal and external stakeholders of <u>not</u> updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?

RG 8.32 has no impact on licensing activities since the NRC staff is not expecting any new or renewal applications in the next several years.

However, revising the RG will assist licensees in developing procedures needed for their facility to perform occupational radiation dose calculations, and will assist inspectors in determining if regulatory requirements are being adequately implemented.

3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?

An estimate of the effort needed to correct the identified issues is 0.1 FTE.

4. Based on the answers to the questions above, what is the staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?

Reviewed with issues identified for future consideration.

5. Provide a conceptual plan and timeframe to address the issues identified during the review.

The staff will consider any regulatory or technical information that may be available during the next periodic review of the guide to determine if an update of the guide is needed.

NOTE: This review was conducted in October 2017 and reflects the staff's plans as of that date. These plans are tentative and are subject to change.