

Regulatory Guide Periodic Review

Regulatory Guide Number: **8.28**

Title: **Audible-Alarm Dosimeters**

Office/Division/Branch: **RES/DSA/RPB**

Technical Lead: **Casper Sun**

Recommended Staff Action: **Revise**

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

Regulatory Guide 8.28, revision 0, "Audible-Alarm Dosimeters," was published in August, 1981. The RG discusses a program for the appropriate use of audible-alarm dosimeters, including certain conditions under which they should not be relied upon to perform their intended function. The staff's review of this guide has identified both technical and administrative changes that need to be incorporated in the guidance. Such changes include better alignment with current 10 CFR part 20 regulations and availability of new standards for endorsement (e.g., ANSI N42.20, "American National Standard Performance Criteria for Active Personnel Radiation Monitors," and ANSI N42.49A, "American National Standard Performance Criteria for Alarming Electronic Personal Emergency Radiation Detectors (PERDs) for Exposure Control.") The current version of RG 8.28 uses ANSI N13.27 (1981), "Performance Specifications for Pocket-Sized Alarming Dosimeters /Ratemeters," has been superseded.

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

This RG applies to both reactor and materials NRC and Agreement State licensees. Since the RG is outdated the NRC staff and licensees have been using industry guidance for inspection and licensing dosimeter applications.

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?

The revision effort is approximately 0.5 FTE to complete documentation of the technical evaluations of the current technology of alarming and other dosimeters and alignment with current 10 CFR part 20 regulations. No contractor support is anticipated.

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)?

Revise RG 8.28.

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

The staff has developed a draft DG-8043, "Electronic Dosimeters," to include all electronic dosimeters which is currently under internal informal NRC review and comment resolution. The staff plans to develop a final version of this draft guide by the second quarter of FY15, and issue it for public comment by the fourth quarter of FY15.

References

1. ANSI N42.20, "American National Standard Performance Criteria for Active Personnel Radiation Monitors," New York, NY, February 2004.¹
2. ANSI N42.49A, "American National Standard Performance Criteria for Alarming Electronic Personal Emergency Radiation Detectors (PERDs) for Exposure Control," New York, NY, June 2011.

NOTE: This review was conducted in September 2014 and reflects the staff's plans as of that date. These plans are tentative and subject to change.

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Copies of American National Standards Institute (ANSI) documents may be purchased through their Web site at: <http://webstore.ansi.org/>.