Regulatory Guide Periodic Review

Regulatory Guide Number:	**3.56, Revision 0**
Title:	**General Guidance for Designing, Testing, Operating, and Maintaining Emission Control Devices at Uranium Mills**
Office/Division/Branch:	**NMSS/DUWP/URLB**
Technical Lead:	**Ronald A. Burrows**
NRC 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)?

The RG 3.56 was issued in May 1986. Since 1986, Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20, "Standards for Protection Against Radiation," has been revised. Consequently, some of the citations to the regulations are incorrect in RG 3.56. Other references in the RG should be updated as well.

This RG has been used by the U.S. Nuclear Regulatory Commission (NRC) and Agreement State regulatory staff and applicants for implementing the requirements of 10 CFR 40, Appendix A, “Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for their Source Material Content,” specifically Criterion 8 regarding reductions of airborne effluent releases.

RG 3.56 does not include advancements in certain technologies, particularly yellowcake low-temperature vacuum dryer technology and more recent uranium milling technologies. In addition, certain components of air effluent controls on low-temperature vacuum dryers are not addressed in RG 3.56, including condensers, vacuum pumps, and seal water separators.

In addition, the RG should include a discussion of emission control devices used for more recent uranium mill technologies, such as in situ recovery (ISR), heap leach, and ablation. The References section should also be updated.

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?

There is no impact on NRC licensing reviews since the NRC staff does not anticipate any new or renewal applications in the next several years. The NRC staff expects minimal impact on inspection activities as there is currently only one licensed conventional mill and it has not produced uranium since 2015.

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 estimate level of effort needed to address the identified issues is between 0.1 and 0.2 FTE.

4. Based on the answers to the questions above, what is the NRC 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 NRC staff will consider the identified issues as part of the next periodic review.

NOTE: This review was conducted in July 2019 and reflects the NRC staff plans as of that date. These plans are tentative and are subject to change.