



NUCLEAR REGULATORY COMMISSION

[NRC-2020-0278]

Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft regulatory guide; request for comment.

SUMMARY: The Nuclear Regulatory Commission (NRC) is issuing for public comment draft regulatory guide (DG), DG-1377, “Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste.” This DG is proposed revision 3 of Regulatory Guide (RG) 1.21 of the same name. The proposed revision describes an approach that is acceptable to the staff of the NRC to meet regulatory requirements for; (1) measuring, evaluating, and reporting plant related radioactivity in effluents and solid radioactive waste shipments from NRC licensed facilities, and (2) assessing and reporting the public dose to demonstrate compliance with NRC regulations.

DATES: Submit comments by **[INSERT DATE 45 DAYS AFTER THE DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date. Although a time limit is given, comments and suggestions in connection with items for inclusion in guides currently being developed or improvements in all published guides are encouraged at any time.

ADDRESSES: You may submit comments by any of the following methods; however, the NRC encourages electronic comment submission through the **Federal Rulemaking Web Site:**

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0278**. Address questions about Docket IDs to Jennifer Borges; telephone: 301-287-9221; e-mail: Jennifer.BorgesRoman@nrc.gov. For

technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **Mail comments to:** Office of Administration, Mail Stop: TWFN-7A06, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. ATTN: Program Management, Announcements and Editing Staff.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Steven Garry, Office of Nuclear Reactor Regulation, telephone: 301-415-2766, e-mail: Steven.Garry@nrc.gov, and Kyle Song, Office of Nuclear Regulatory Research, telephone: 301-415-3637, e-mail: Kyle.Song@nrc.gov. Both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

SUPPLEMENTARY INFORMATION:

I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID **NRC-2020-0278** when contacting the NRC about the availability of information regarding this action. You may obtain publicly available information related to this action by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2020-0278**.

- **NRC’s Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select “Begin Web-based ADAMS Search.” For problems with ADAMS, please contact the NRC’s Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. DG-1377 is available in ADAMS

under Accession No. ML20287A423 and the regulatory analysis for DG-1377 is available in ADAMS under Accession No. ML20287A434.

- **Attention:** The PDR, where you may examine and order copies of public documents is currently closed. You may submit your request to the PDR via e-mail at pdr.resource@nrc.gov or call 1-800-397-4209 or 301-415-4737 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

B. Submitting Comments

The NRC encourages electronic comment submission through the **Federal Rulemaking Web Site** (<https://www.regulations.gov>). Please include Docket ID **NRC-2020-0278** in your comment submission.

The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC posts all comment submissions at <https://www.regulations.gov> as well as enters the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Additional Information

The NRC is issuing for public comment a DG in the NRC's "Regulatory Guide" series. This series was developed to describe methods that are acceptable to the NRC staff for implementing specific parts of the NRC's regulations, to explain techniques that the staff uses in evaluating specific issues or postulated events, and to describe information that the staff needs in its review of applications for permits and licenses.

The DG, titled, "Measuring, Evaluating, and Reporting Radioactive Material in

Liquid and Gaseous Effluents and Solid Waste,” is a proposed revision temporarily identified by its task number, DG-1377 (ADAMS Accession No. ML20287A423). The draft guide is proposed revision 3 of RG 1.21 of the same name (ADAMS Accession No. ML091170109). The guide proposes revised guidance for measuring, evaluating, and reporting plant-related radioactivity in effluents and solid radioactive waste shipments from NRC licensed facilities. This guidance provides clarity and consistency regarding the assessing and reporting the public dose to demonstrate compliance with part 20 of title 10 of the *Code of Federal Regulations* (10 CFR), “Standards For Protection Against Radiation” and 40 CFR part 190, “Environmental Radiation Protection Standards for Nuclear Power Operations.”

Substantial changes are integrated in this revision. This revision provides (1) guidance on acceptable methods for calibration of accident-range radiation monitors and accident-range effluent monitors, (2) updated guidance on reviewing and updating long-term, annual average χ/Q and D/Q values used for determining dose to individual members of the public, (3) clarification on reporting requirements for low-level waste shipments from the site that waste classification does not need to be reported, and (4) clarification that drinking water sampling would only be performed under the guidance when the calculated dose from I-131 is greater than 1 mrem/yr. This guide also incorporates the risk-informed principles of the Reactor Oversight Process. A risk-informed, performance-based approach to regulatory decision making combines the “risk informed” and “performance based” elements discussed in the staff requirements memorandum to SECY 98-144, “Staff Requirements—SECY-98-144—White Paper on Risk-Informed and Performance-Based Regulation,” dated February 24, 1999 (ADAMS Accession No. ML003753593). In particular, the guidance in this RG gives licensees the option of deciding on what effluents to monitor based on a risk-significance basis.

The staff is also issuing for public comment a draft regulatory analysis (ADAMS Accession No. ML20287A434). The staff develops a regulatory analysis to assess the value of issuing or revising a regulatory guide as well as alternative courses of action.

III. Backfitting, Forward Fitting and Issue Finality

The draft regulatory guide (DG-1377), if finalized, would not constitute backfitting as defined in 10 CFR 50.109, "Backfitting," and as described in NRC Management Directive (MD) 8.4, "Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests." It also would not constitute forward fitting as that term is defined and described in MD 8.4; or affect the issue finality of any approval issued under 10 CFR part 52. As explained in DG-1377, applicants and licensees would not be required to comply with the positions set forth in DG-1377.

Dated: December 30, 2020.

For the Nuclear Regulatory Commission.

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