

U.S. Nuclear Regulatory Commission Public Meeting Summary

October 26, 2022

Title: Discuss the Proposed Rulemaking “Harmonization of Transportation Safety Requirements with International Atomic Energy Agency Standards” (RIN 3150-AJ85; NRC-2016-0179)

Meeting Identifier: 20221078

Date of Meeting: October 26, 2022

Location: Virtual Webinar

Type of Meeting: Information Meeting

Purpose of the Meeting(s):

To engage with the public to promote an understanding of the proposed rule, “Harmonization of Transportation Safety Requirements with International Atomic Energy Agency Standards,” and the revision to the associated draft regulatory guide DG-1107, “Standard Format and Content of Part 71 Applications for Approval of Packages for Radioactive Material” to facilitate meaningful comments on the proposed rule and the revised guidance.

General Details:

On October 26, 2022, The U.S. Nuclear Regulatory Commission (NRC) conducted a virtual public meeting to discuss the proposed rule, “Harmonization of Transportation Safety Requirements with International Atomic Energy Agency (IAEA) Standards.” The purpose of the public meeting was to promote an understanding of the proposed rule to facilitate the development of meaningful comments. Comments on the proposed rule were not accepted at the public meeting. The meeting started at 12:30 p.m. eastern time and concluded at 3:10 pm eastern time. There were approximately 67 participants, including 21 NRC staff and management; 3 U.S. Department of Transportation (DOT) staff; and 43 other participants.

James Firth from the Office of Nuclear Material Safety and Safeguards started the meeting by welcoming the attendees and describing the purpose, agenda, and meeting logistics. James Firth indicated that the NRC was not accepting comments on the proposed rule during the meeting and that ways to provide comments would be provided later in the meeting. Tara Inverso, Deputy Director of the Division of Rulemaking, Environmental, and Financial Support provided opening remarks.

James Firth provided background on the proposed rulemaking and the status of the rulemaking. The NRC conducts periodic rulemakings to harmonize its regulations with the IAEA’s safety standards regulations and to maintain compatibility with the DOT’s regulations. In 2016, the NRC issued a white paper on potential revisions to the NRC’s transportation safety requirements (81 FR 83171; November 21, 2016) and published a draft regulatory basis for comment (84 FR 14898; April 12, 2019). On April 30, 2019, the NRC held a public meeting on the draft regulatory basis. The NRC’s proposed rule was published in the *Federal Register* on September 12, 2022 (87 FR 55708) for a 75-day public comment period. The NRC also published draft regulatory guide DG-7011, “Standard Format and Content of Part 71 Applications for Approval of Packages for Radioactive Material,” for public comment with a 75-day public comment period. The comment period closes on November 28, 2022. Locations for the proposed rule and the supporting documents (i.e., draft regulatory analysis, draft environmental assessment, and draft supporting statement

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for the information collection, and draft guidance) were provided. A forthcoming correction notice was discussed. The discussion included the corrections and a mention of the extension to the comment period on the amended information collection until November 28, 2022. The corrections included changing the number of responses and the number of respondents for the amended information collection where the overall burden did not change. The draft regulatory analysis was republished to correct a publication error, where some pages were not rendered properly. The NRC will be making an unofficial redline/strikeout comparison of DG-7011 available in the online docket to assist those reviewing the draft guidance to identify the proposed changes. Comments should be made on the draft guidance itself and not on the unofficial comparison document.

David Pstrak, Drew Barto, Bernard White, Aaron Thomlinson, and Michelle Beardsley presented information on the proposed changes in the proposed rule. Dave Pstrak provided background on issue 2, “revision of reduced external pressure test for normal conditions of transport,” issue 6, “deletion of Low Specific Activity-III leaching test,” Issue 7, “inclusion of new definition of *surface contaminated object*,” issue 15.2, “revision of the definition of *Low Specific Activity*,” and issue 15.3, “revision of tables containing A_1 and A_2 values and exempt material activity and consignment limits.” Drew Barto provided background on issue 1, “revision of fissile exemptions,” issue 13, “deletion of Type A package limitations in fissile material general licenses,” and issue 14, “deletion of ^{233}U restriction in fissile general license.”

Bernard White provided background on issue 3, “inclusion of Type C package standards,” issue 4, “revision of insolation requirements for package evaluations,” issue 5, “inclusion of definition for *radiation level*,” issue 8, “revision of uranium hexafluoride package requirements,” issue 9, “inclusion of evaluation of aging mechanisms and a maintenance program,” issue 10, “revision of transitional arrangements,” issue 11, “inclusion of head space for liquid expansion,” issue 15.1, “deletion of duplicative reporting requirements,” and issue 15.5, “deletion of references to irradiated reactor fuel in Part 71 advance notification requirements.”¹

Aaron Thomlinson provided background on issue 12, “revision of quality assurance program biennial reporting requirements.” Michelle Beardsley provided background on issue 15.4, “revision to Agreement State compatibility categories.” Michelle Beardsley verbally mentioned a correction to the compatibility information on slide 34, clarifying that the compatibility category designation for §§ 71.109, 71.111, 71.113, 71.115, 71.117, 71.119, 71.121, 71.123, and 71.125 would be revised from Compatibility Category NRC to Compatibility Category B.² Michelle Beardsley provided information about the different compatibility categories and how they affect the corresponding Agreement State regulations. Bernard White provided information on the proposed changes to the guidance, which is reflected in DG-7011.

James Firth described the specific questions that the NRC included in the proposed rule for which the NRC specifically requested comment. These included:

¹ Errata for slide 31, “Deletion of references to Irradiated Reactor Fuel in Part 71 Advance Notification Requirements”: this is discussed as issue number 15.5, not issue number 15.1 as indicated in the reference box in the upper right of the slide.

² Errata for slide 34, “Revision to Agreement State Compatibility Categories”: in the reference box in the upper right of the slide and the first bullet under summary, The current and proposed compatibility categories for §§ 71.109, 71.111, 71.113, 71.115, 71.117, 71.119, 71.121, 71.123, and 71.125 are Compatibility Category NRC and Compatibility Category B, respectively.

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- The IAEA Changes in SSR-6 (2018 Edition) that are not within the scope of the proposed rule,
- Whether Tables A-1 Through A-4 in Appendix A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 71, “Packaging and Transportation of Radioactive Material,” which duplicate information in the DOT’s regulations should be removed from Part 71, and
- The merits of requiring a biennial report to the NRC when there have been no changes to a quality assurance program.

The NRC is also seeking input on the cumulative effects of regulation associated with the proposed amendments.

Antonio Gomez described the results of the draft regulatory analysis. The draft regulatory analysis indicates there will be a net savings of \$3,354,982 but certificate of compliance holders and Agreement States will see increased costs. James Firth described the draft environmental assessment, which indicates there are no significant environmental impacts from the proposed action.

James Firth provided information for submitting comments and how interested persons can submit comments (i.e., through www.regulations.gov, by email to Rulemaking.Comments@nrc.gov, or by mail to the Secretary of the NRC (Attn: Rulemakings and Adjudications Staff). The NRC will be coordinating the publication and compliance dates of the final rule with the DOT. Currently, the NRC staff is scheduled to provide a draft final rule to the Commission in February 2024 for their consideration.

Public Participation Themes:

The following highlights several questions and points of discussion participants raised during the meeting:

- The history behind the divergence between the NRC’s fissile material exemptions and those in the IAEA safety standards requirements
- The effects of divergence between the values in the NRC’s external pressure test requirement and in the IAEA safety standards requirements for international transport
- The reasoning for the deletion of the Low Specific Activity-III leaching test and the applicability of the test for spent nuclear fuel
- The consideration of aging effects for the contents of the transportation package
- The effects of the proposed changes to consider insolation on legacy analyses (e.g., those done for packages approved in the 1980s)
- Aging management related to things that may not be readily inspectable
- The removal of the duplicative reporting requirements in 10 CFR 71.95 and whether that would affect customer (user) reporting that may duplicate the reporting made by the supplier of the package
- The changing package numbering for packages affected by the transitional arrangements
- Why the increased enrichment for high-assay, low-enriched uranium (HALEU) (enriched between 5% and 20%) was not included in this rulemaking
- How the changes to insolation could complicate the submittals related to previously approved packages

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- The IAEA's focus on the plug end of the uranium hexafluoride package, when the plug is more robust than the valve
- Whether NUREG-1608, "Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects," needs to be updated to address the addition of the third group of surface contaminated objects (SCO-III) to the definition of surface contaminated object
- The cost estimates for the changes to insolation if three-dimensional modeling is needed rather than the one dimensional or two-dimensional modeling that were used in the analyses for previously approved packages
- Whether the changes to the compatibility categories would result in automatic changes or would it wait until the States change their regulations
- Why the quality assurance requirements in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," is used as the benchmark for the consistency in the reporting frequency for quality assurance programs that do not have changes and the high administrative burden associated with even reporting that there have been no changes
- What is the timing for the implementation for the final rule
- The timing for the transitional arrangements

Action Items/Next Steps:

The correction notice for the proposed rule was published on Friday, October 28, 2022.³ The correction notice extends the public comment period for the amended information collection until November 28, 2022. The unofficial redline/strikeout version of DG-7011, "Standard Format and Content of Part 71 Applications for Approval of Packages for Radioactive Material," has been added to the Part 71 rulemaking docket on the Federal rulemaking website, www.regulations.gov, under docket ID NRC-2016-0179⁴. The public comment period on the proposed rule and DG-7011 will close on November 28, 2022. Three options were presented for submitting comments on the proposed rule: 1) through www.regulations.gov, 2) by email to Rulemaking.Comments@nrc.gov, and 3) by mail. After the comment period closes, the NRC staff will prepare a draft final rule, which is currently due to the Commission in February 2024.

Attachments:

- Meeting Agenda – ML22287A173
- Meeting Presentation Slides – ML22286A07

³ The correction notice, "Harmonization of Transportation Safety Requirements with IAEA Standards; Correction," was published in the Federal Register at 87 FR 65177 on October 28, 2022.

⁴ The unofficial redline/strikeout version of DG-7011, "Standard Format and Content of Part 71 Applications for Approval of Packages for Radioactive Material," was added to the Part 71 rulemaking docket (RIN 3150-AJ85; NRC-2016-0179) (ML22280A061) on November 3, 2022.

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List of Meeting Attendees

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Meeting Identifier: 20221078

Date of Meeting: October 26, 2022

List of Meeting Attendees

Name	Organization
Andrew Barto	U.S. Nuclear Regulatory Commission (NRC)
Michelle Beardsley	NRC
Cindy Bladey	NRC
Helen Chang	NRC
Sheldon Clark	NRC
Suzanne Dennis	NRC
James Firth	NRC
Antonio Gomez	NRC
Sophie Holiday	NRC
Tara Inverso	NRC
Harriet Karagiannis	NRC
Brett Klukan	NRC
Meredith Neubauer	NRC
David Pstrak	NRC
Sandra Rodriguez	NRC
Fred Schofer	NRC
Neil Sheehan	NRC
George Tartal	NRC
Aaron Thomlinson	NRC
Brian Wagner	NRC
Bernard White	NRC
Boyle, Rick (PHMSA)	Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA)
Sumrall, Matthew (PHMSA)	DOT/PHMSA
Wolcott, Alexander (PHMSA)	DOT/PHMSA
Richard Byars	*
Darcy Campbell	*
Ashley Cockerham	*
Shawn P Collins	*
Jill Corbett	*
Morgan Denman	*
Neil Fales	*
Tom G.	*
Stanley Gardocki	*
Aleksandr X. Gelfond	*
Rob Hall	*
Jonathan Horin	*
Thomas L. Jones	*
Marty Karr	*

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Mark Lewis	*
Matthew Marzano	*
John Miller	*
Scott P. Murray	*
Arsalan Nathani	*
Marc R. Pawlowski	*
Paul Plante	*
Lori Podolak	*
Jim Rickman	*
Bill Riddoch	*
Vern C. Rogers	*
Sarah Sanderlin	*
Janet Schlueter	*
Abdulsalam Shakhatreh	*
Deepak Siromani	*
Mike N. Stephens	*
Glenn Sullivan	*
Jack Tway	*
Librado Villalobos	*
Kalene Walker	*
Phillip R. Williams	*
Siaka Yusuf	*
7 Participated by phone or without providing a name	

* Affiliation not collected