



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 24, 2022

MEMORANDUM TO: Christopher A. McKenney, Chief
Risk and Technical Analysis Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety and Safeguards

FROM: Cynthia S. Barr, Senior Risk Analyst
Risk and Technical Analysis Branch
Division of Decommissioning, Uranium Recovery,
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Office of Nuclear Material Safety and Safeguards

CBarr

Signed by Barr, Cynthia
on 10/24/22

SUBJECT: SUMMARY OF OCTOBER 11, 2022, HYBRID INFORMATION
MEETING ON NUREG-1757, VOLUME 2, REV. 2, GUIDANCE
UPDATES

On October 11, 2022, the U.S. Nuclear Regulatory Commission (NRC) held a hybrid public meeting in-person and via Teams to provide information on the final NUREG-1757, Volume 2, Revision 2, "Consolidated Decommissioning Guidance, Characterization, Survey, and Determination of Radiological Criteria," guidance revisions. The meeting was noticed on the NRC's public website at the NRC's Agencywide Documents Access and Management System (ADAMS) at Accession No. [ML22283A020](#). The NRC staff's presentation is available in ADAMS at Accession No. [ML22280A041](#). NRC staff presented information on (i) changes that were made to Revision 2 of the guidance document, (ii) significant comments received on the draft document and how they were addressed in the final document, and (iii) continuing guidance updates and code development initiatives.

Approximately 35 people participated in the public meeting including industry representatives, state representatives, and NRC staff. After NRC staff's presentation, the Nuclear Energy Institute (NEI) provided a presentation on NEI 22-01, "License Termination Process", which was described as providing "how to" guidance on how to navigate the license termination process specific to nuclear reactor licensees. The NEI's presentation is available in ADAMS at Accession No. ML22291A444. NEI would like to meet with NRC in mid-November 2022 in a pre-submittal meeting and requested NRC to provide input on the types of information it would like to see to facilitate the review and approval of NEI 22-01 in 2023.

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A Question-and-Answer period was conducted after NRC staff and NEI presentations. A summary of the questions and comments discussed in the meeting is listed below:

- Several questions were raised regarding new guidance on the possible need for additional site-specific support for risk-significant distribution coefficients (or K_d s) including the following:
 - i. What constitutes a significant or insignificant contribution to dose when determining the need for site-specific support for the parameter value?
 - ii. What is the pedigree of data provided in Argonne National Laboratory's "Data Collection Handbook" (can any of the parameter distributions be relied on)?
 - iii. When is experimental support versus other types of site-specific support needed to support the parameter value?
 - iv. Do license termination plans submitted prior to issuance of the final Revision 2 to NUREG-1757, Volume 2, need to be revised to address the change in guidance?
- NRC responded that the issue with use of literature values for K_d s is that data available to develop the parameter distributions could be based on (i) sparse data, or (ii) reflect a range of sites with 25th or 75th percentile values not necessarily being with the range of values for any particular site. Additional information in the form of site-specific information on soil/mineral types, groundwater chemistry and quality could be used to support the parameter values if the parameter is found to be risk-significant and sufficient information is available in the literature to support the parameter value for a particular set of site-specific conditions (i.e., site-specific field or laboratory experiments are not always needed to support the site-specific parameter value even if found to be risk-significant). Radionuclides contributing less than 10 percent of the dose standard are considered insignificant and additional support for these radionuclides would not be required. Depending on the radionuclides of concern and the importance of the parameter value to dose, a graded approach will be used to determine the need for additional site-specific support. Licensees should work with NRC reviewers early in the process to determine the need for additional site-specific support for risk-significant parameters such as K_d . Finally, NRC staff also plans to evaluate information available in the literature for distribution coefficients for radionuclides of concern typical for reactor licensees in its interim staff guidance for subsurface (typically only a few radionuclides dominate the dose for reactor sites and the uncertainty in K_d values for those radionuclides may be low or well understood limiting the need for experimental support).
- A comment was made on the need for interim staff guidance on subsurface investigations to address contaminated bedrock.
- A comment was made on the need for research efforts to consider different types of technological advancements for continuously collected data.
- A comment was made on the compounding conservatisms in survey and dose modeling efforts to support license termination (e.g., resident farmer scenario, surrogate ratios).
- A comment was made supporting the flexibility in allowing reactor licensees to find large construction projects that could bring reactor basement substructures to the surface less likely but plausible or implausible.
- A question was raised in chat about NRC's experience with buried residual radioactivity and how it behaves including case studies, and site data. NRC responded in chat that it has experience with buried residual radioactivity at decommissioning sites (e.g., West Valley Demonstration Project and USDA Beltsville), as well as low-level waste disposal facilities, waste-incident-to-reprocessing sites, and uranium recovery sites.
- A question was raised about the schedule for completion of NUREG-1757, Volume 1, Rev. 3. NRC responded that due to higher priority items the draft NUREG is now expected to be issued for public comment the end of CY2023.

Enclosure:
List of Attendees

List of Attendees

Industry, State and Other Participants

Bruce Montgomery (in-person)	NEI
Gerry van Noordennen (in-person)	Energy Solutions
Jana Bergman	Curtis Wright
Bill Barley	PGE
Eric Darois	Radiation Safety and Control Services
Ed Everett	NEI
Jean Fleming	Holtec
Rich McGrath	EPRI
Sarah Roberts	Energy Solutions
Jane Schlueter	American Nuclear
Michael Smith	NEI
Karen Tuccillo	New Jersey Department of Environmental Protection
Jenny Goodman	New Jersey Department of Environmental Protection
James McCullough	New Jersey Department of Environmental Protection
Paul Schwartz	New Jersey Department of Environmental Protection
Jerry Bingaman	State of Tennessee
Roger Fenner	State of Tennessee

Josie Piccone

Participating NRC Staff

Shaun Anderson (in-person)
Cynthia Barr (in-person)
David Esh (in-person)
Randall Fedors
Brett Klukan (in-person)
Michael LaFranzo
Sarah Lopas (in-person)
Chris McKenney (in-person)
Leah Parks
Ashley Roberts (in-person)
Adam Schwartzman (in-person)

Other NRC Staff

Louis Caponi
Kim Conway
Tanya Hood (in-person)
Adam Lee
Kerstun Norman

ENCLOSURE

NUREG-1757 Volume 2 Rev 2 Guidance Updates October 11, 2022 information meeting DATE October 24, 2022

DISTRIBUTION:

- JMarshall, NMSS/DUWP
- ARoberts, NMSS/DUWP
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- SClark, OGC/GCRPS/RMR/NLO
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ADAMS Accession No.: ML22291A443; Memo ML22292A227

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DATE	Oct 19, 2022	Oct 21, 2022	Oct 21, 2022	Oct 24, 2022

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