

U.S. Nuclear Regulatory Commission Public Meeting Summary

September 20, 2019

Title: Public Webinar to discuss the Draft Regulatory Basis for the Disposal of Greater-than-Class C (GTCC) and Transuranic Waste

Meeting Identifier: 20190801

Date of Meeting: Thursday, August 22, 2019

Location: Webinar

Type of Meeting: Category 3

Purpose of the Meeting(s):

This public meeting was a part of a pre-rulemaking initiative for NRC staff to discuss the “Draft Regulatory Basis for the Disposal of GTCC and Transuranic Waste” with stakeholders. The draft regulatory basis was published on July 22, 2019, Federal Register notice at 84 FR 35037. However, the NRC did not take formal comments at this meeting. Participants were directed to submit all comments in writing in accordance with the instructions listed in the notice. The draft regulatory basis is available through the NRC’s Agencywide Documents Access and Management System (ADAMS) at Accession No. ML19059A403.

This meeting is consistent with NRC’s Principles of Good Regulation, Openness Strategy, and Cumulative Effects of regulation initiatives in that NRC encourages public engagement and participation in its regulatory processes. In addition, this meeting is in accordance with the Commission’s directions in Staff Requirements Memorandum – SECY-15-0094 – “Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste,” that tasked the NRC staff to conduct a public workshop during the development of the regulatory basis to receive input from the State of Texas and other stakeholders.

General Details:

The NRC conducted a public meeting via teleconference and webinar at 1:00 p.m. Eastern Daylight Time (EDT), with NRC in-house facilitator, Sarah Lopas, presiding. The meeting was held to discuss the “Draft Regulatory Basis for the Disposal of Greater-than-Class C and Transuranic Waste,” which was published in the Federal Register on July 22, 2019 (84 FR 35037) with a 60-day comment period that was scheduled to end on September 20.¹ The public meeting transcript is available at ADAMS Accession No. ML19241A169. The meeting was scheduled from 1:00 - 4:00 p.m. (EDT); it ended at 3:28 p.m.

The meeting began with an introduction and opening remarks by NRC management, and a review of ground rules by the NRC in-house facilitator, followed by NRC staff presentations that described the general background and considerations in the draft regulatory basis. In addition, the staff’s presentations emphasized that formal comments were not being taken at the meeting and reviewed the ways formal comments could be submitted in writing according to the

¹ In response to multiple requests, the NRC subsequently extended the public comment period by 60 days, from September 20, 2019 to November 19, 2019 (84 FR 48309, September 13, 2019).

instructions in the July 22, 2019, Federal Register notice. Most of the meeting was dedicated to addressing questions and comments from members of the public.

The webinar was attended by over 100 stakeholders. The attendees included representatives from the nuclear industry (e.g., NEI, WCS), Federal Agencies (DOE, EPA, FDA and Argonne National Labs), Agreement States (TX, NJ, PA, NV, UT, NY, OR, SC, and WA), a Non-Agreement State (MO), public interest groups, members of the public, and three Congressional staff members. There was an extensive question and answer session. Several stakeholders indicated that they would like an extension of the 60-day comment period that ends on September 20, 2019.

Summary of Presentations:

The NRC is seeking public comment on a draft regulatory basis for potential new regulations governing the near-surface disposal of certain low-level radioactive waste. The NRC classifies low-level radioactive waste based on its potential hazards and has specified disposal and waste requirements for three classes of waste with progressively higher concentrations of radioactive material. Class A is the least hazardous and Class C the most hazardous. However, a fourth type of low-level radioactive waste, called "Greater-than-Class-C," contains radionuclides exceeding the concentration limits for Class C. GTCC waste is typically activated metals from power reactors, sealed sources, and waste material from medical isotopes, but it may also contain special nuclear material such as enriched uranium or plutonium. Currently, there are no facilities licensed to dispose of GTCC waste, so it is being stored at nuclear power plants or at interim storage sites. The draft regulatory basis evaluates whether certain GTCC waste could be safely disposed in a near-surface disposal facility. It also evaluates whether regulatory changes would need to be considered to permit such action, and whether the NRC or Agreement States should regulate such disposal. During the webinar, the NRC staff described the background and considerations in the draft regulatory basis and gave the public an opportunity to ask questions about the document.

The staff's presentation is available at:

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19225D184>.

In addition, a fact sheet on GTCC and transuranic waste disposal is available at:

<https://www.nrc.gov/waste/llw-disposal/llw-pa/gtcc-transuranic-waste-disposal.html>.

Public Participation Themes:

During the public question and answer session of the meeting, NRC staff addressed questions on the following topics:

- Should the NRC extend the comment period for the GTCC draft regulatory basis?
- How might the draft regulatory basis be affected by the new high-level waste definition interpretation by DOE, which could result in a larger volume of GTCC-like waste than was analyzed in the EIS?
- Will all the siting requirements that are currently in 10 CFR Part 61 apply to a GTCC waste disposal?
- What's wrong with disposal of GTCC at DOE's Waste Isolation Pilot Plant, and why is that no longer being considered?
- What is the basis for the NRC staff assumptions behind the 500-year intruder barrier in the regulatory basis?

- The 10 CFR Part 61 classification tables included a factor of 10 multiplier that increases the Class C limits by a factor of 10 to account for a variety of pessimistic assumptions built into intrusion scenarios. Was a similar factor used in the GTCC technical analysis?
- What transportation requirements will be applied to GTCC waste shipments? What kind of statistics will you use to estimate the potential for highway accidents? What amount of risk do you expect? Who will pay the costs? How many new staff will be needed to assure public and environmental safety? Will first responders be ready when a GTCC waste shipment is made? Will the public be informed in advance of GTCC shipments? What transportation package would be used for GTCC waste shipments?
- Did the NRC staff's analysis consider GTCC waste placement in a disposal cell with other Classes of LLRW waste, i.e., Class A, B or C, being placed above the GTCC package or was just the GTCC package evaluated?
- What independent checking will be done to verify GTCC waste inventories, especially since it is difficult to measure some radionuclides that have long half-lives?
- What public dose limit will be applied to a GTCC waste disposal facility?
- Is the draft regulatory basis for GTCC waste disposal being motivated by the decommissioning of reactors and the need for GTCC disposal because the deep geologic repository for high level waste disposal is not available? Were the doses from and the economics of decommissioning of nuclear reactors considered?
- Does the draft regulatory basis for GTCC waste disposal stress the need for a site-specific analysis, i.e., a model, rather than prescriptive requirements based upon waste longevity or concentration?
- If the NRC gives Agreement States authority for making a GTCC waste disposal decision, how will you verify that the models used for a site-specific analysis are good enough? Will NRC review a State's decision?

Attachments:

- Meeting agenda: <https://www.nrc.gov/pmns/mtg?do=details&Code=20190801>
- NRC staff presentation: ADAMS Accession No. ML19225D184
- Meeting transcript: ADAMS Accession No. ML19241A169