



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

November 15, 2019

Annette Vietti-Cook  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001  
Rulemakings and Adjudications Staff

RE: Draft Regulatory Basis for the Disposal of Greater-than-Class C (GTCC) and Transuranic Waste (Docket ID NRC-2017-0081)

Dear Ms. Vietti-Cook:

The Missouri Department of Natural Resources (Department) appreciates the opportunity to review the Draft Regulatory Basis (DRB) for the Disposal of Greater-than-Class C (GTCC) and Transuranic Waste. The Department offers the following comments for consideration.

- In section 2.3, NRC does not mention appropriate storage container requirements. The DRB should include the types of containers that will be accepted for near surface storage. NRC should include a discussion on how these guidelines would be established. NRC should also discuss when and where transfer would occur of GTCC and transuranic waste to approved containers if current containers are not acceptable under a new proposed rule.
- In section 2.4.5, NRC does not mention the guidelines that would be used to determine whether waste could be disposed of in a near-surface disposal facility. The DRB should include the guidelines to allow for the opportunity for comment and input.
- In section 3.1, NRC does not mention hazards associated with the transportation of GTCC and transuranic waste to a disposal facility. The DRB should include a discussion on how waste would travel to the approved disposal facility and how adequacy of transportation infrastructure would be considered in approving a site for near-surface disposal.
- In Section 3.1, NRC should include a discussion on what types of shipments would require security detail in transit and who would be responsible for the security detail. Also, the DRB does not address who is responsible/liable if an incident occurs when the waste is in transit to the disposal facility.
- Section 3.1 does not currently address safety inspections of the waste. Some states, including Missouri, have statutes that allow for inspections on shipments that exceed a certain radioactivity. The DRB should include a discussion of how inspections would



occur in transit, for example if the expectation would be for inspections to occur in every state that has an inspection program or just at the point of origin and destination.

- In section 3.1.1, a key assumption in considering hazards associated with near-surface disposal is a minimum disposal depth of 5 meters below surface of the earth and a 500-year intruder barrier wall. GTCC and transuranic waste could have half-lives far greater than 500 years. NRC should include a discussion on what institutional controls will be required in order to limit exposure beyond the proposed life of the intruder barrier.

We appreciate the opportunity to provide comments for the Draft Regulatory Basis for the Disposal of Greater-than-Class C (GTCC) and Transuranic Waste. If you have any questions or need further clarification, please call me at (573) 526-9830. Address any written correspondence to my attention at Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

ENVIRONMENTAL REMEDIATION PROGRAM



Tiffany Drake  
Remediation and Radiological Assessment Unit Chief

TD:tgr