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Secretary, U.S. Nuclear Regulatory Commission,
Washington, DC 20555-0001, ATTN:
Rulemakings and Adjudications Staff.

Subject: Docket ID NRC-2008-0198 Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements – 10 CFR Part 71

The American Society of Mechanical Engineers (ASME) Radioactive Waste Systems Committee (RWSC) is a Technical Committee of the ASME Nuclear Engineering Division. Our mission is to provide for the collection and exchange of technical and programmatic information relating to the management and transportation of low-level radioactive waste to identify and support programmatic enhancements, improvements in radioactive waste processing systems designs and the continuity of radioactive waste-related programs. We appreciate the opportunity to provide comments on the revision to 10 CFR Part 71 Revisions to Transportation Safety Requirements and Harmonization With International Atomic Energy Agency Transportation Requirements.

The ASME RWSC has been following discussions and comments related to the Revision. We support NRC's proposal to allow licensed shipping package providers to make changes to packages that do not impact safety without prior NRC approval. This proposal better risk informs US regulations and harmonizes US regulations with international rules.

We are concerned however about several regulatory requirements that have recently been imposed on Type B licensed shipping casks routinely used or under design review to transport Low Level Radioactive Waste (LLRW) from commercial power plants.

- 1- We understand that NRC is now requiring registered users of licensed packages to conduct and provide radiolysis calculation on hydrogen gas generation. We don't believe a requirement for such calculations are risk informed. Combustible Gas generation within a licensed transport package is a valid concern. History has shown that the source of combustible gas generation from commercial LLRW is not from radiolysis but rather, from biological sources (methane) or rusting of waste container internals (Hydrogen) noted as "(bulging drums)". We are not aware of any calculation method for biological or rusting combustible gas generation.

For over two decades a time tested requirement to vent waste containers prior to shipments has mitigated concerns on gas generation from LLRW during transport. Passive vents have been employed for years and are an easily inspected and auditable measure to ensure safety. We submit that requiring radiolysis calculations which do not address the actual issue are burdensome and not risk informed.

- 2- We further understand that NRC is now requiring the closure of waste containers be verified by two independent inspectors prior to shipment in a licensed package. We believe this new requirements is based on an incident with an Iridium source. We submit imposing this requirement for all materials placed in licensed packages is not risk informed.

The majority of LLRW containers transported in licensed packages are Low Specific Activity (LSA) II¹ materials that exhibit a few spots of elevated dose rates that can exceed 1R/hr at 3m. This dose rate limit is the main reason licensed shipping packages are employed for transport of large containers of commercial LLRW in the USA. We submit that the risk from LSA material does not warrant the new burdensome and unclear dual container closure independent inspection requirement. Such requirements should be limited to concentrated radioactive sources similar to the one involved in the event.

Containers of activated metal loaded underwater cannot be sealed because the water must be allowed to drain from thee containers prior to shipment. Since activated metal is not dispersible, sealing of the waste container is not required.

- 3- -Likewise we also understand new calculations to limit the activity that a licensed Type B package may contain, based on the above event, are being required. Again, we submit this requirement is not risk informed for the essentially LSA II low level waste that commercial power plants routinely ship. Such calculation requirements should be limited to the shipment of concentrated radioactive sources similar to the one involved in the event.

We appreciate the opportunity to offer comments to the NRC Staff on this Revision to 10 CFR Part 71. Thank you for your consideration of this letter.

Sincerely,



Charles Jensen
Vice Chair
ASME Radioactive Waste Systems Committee

cc: Jovica Riznic ASME
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¹ LSA II as defined in 49 CFR Part 173.403