Joseph Rudd

From: Joseph Rudd

Sent: Thursday, April 18, 2024 11:17 AM

To: Matt Bartlett
Cc: Stephen Poy

Subject: Email Summary of Meeting Held with TRISO-X, LLC on April 16, 2024 Regarding Clarifications for

Chemical Safety Analysis

Matt,

The following is summary of a closed meeting held with TRISO-X, LLC (TRISO-X) on April 16, 2024 from 3:30 PM until 4:15 PM to discuss the U.S. Nuclear Regulatory Commission (NRC) staff's review of TRISO-X's chemical safety analysis program. The purpose of the meeting was to discuss technical details and discuss anticipated changes to probabilistic hazard analysis (PHA) and consequence event analysis (CEA). TRISO-X will post updated documents as they become available to their portal for the NRC staff to review. NRC requested TRISO-X further review and update the diffusion rates of chemicals in enclosed spaces, as well as dermal exposure considerations. TRISO-X asked if the NRC staff has published guidance for calculating chemical diffusion rates. The NRC staff stated that there is no specific guidance on this topic, but the NRC staff is open to any reasonable approach that demonstrates conservative assumptions. TRISO-X agreed to consider the updates suggested by the NRC staff. TRISO-X stated that the hazards and accident sources in the PHA and the evaluation of the consequences is detailed in the CEA. The NRC staff stated the organization of information is up to the applicant, provided sufficient detail is present to make the regulatory findings. The NRC and TRISO-X agreed that additional technical clarification calls may be beneficial in the future.

Best Regards, Joe

Joseph Rudd, Project Manager
Fuel Facility Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
(301) 415-5039