REQUESTS FOR ADDITIONAL INFORMATION ON THE TRISO-X, LLC, ENVIRONMENTAL REPORT AND APPLICATION FOR A PROPOSED FUEL FABRICATION FACILITY

PART 3

The purpose of these Part 3 requests for additional information (RAIs) presented below is to obtain additional data and information from TRISO-X, LLC (TRISO-X), for the U.S. Nuclear Regulatory Commission (NRC) staff to complete the environmental review and Environmental Impact Statement (EIS) in support of the NRC's evaluation of the TRISO-X license application to construct, operate, and decommission a Fuel Fabrication Facility (FFF) in Oak Ridge, Tennessee, to manufacture high-assay low-enriched uranium fuel up to 19.75 percent weight Uranium-235. The FFF would produce TRistructural ISOtropic uranium fuel for use in both existing and advanced commercial nuclear reactors. The fuel is designed to seal uranium particles in a protective coating that resists meltdowns and prevents release of fission products. The TRISO-X license application included an Environmental Report (ER), and these RAIs were developed by the NRC staff based on its ongoing review of the ER and other documentation independently obtained by the staff. The NRC's EIS is being prepared to fulfill the requirements of the National Environmental Policy Act of 1969, as amended (NEPA), and the NRC's NEPA implementing regulations in Title 10 of the Code of Federal Regulations Part 51. The staff used the guidance in NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, for its review of the application.

Waste Management

RAI3-ER-WM-1

Provide a description of the types and estimated amounts of waste that will be generated during construction, operation, and decommissioning.

In Section 4.13, provide additional information on the estimated amount and types of municipal and debris waste that will be generated during construction, operation, and decommissioning. Also provide information on the estimated amount and types of radioactive, mixed, hazardous, industrial, debris, and municipal waste that will be generated during decommissioning. Provide assurance that local capacity exists for the debris and municipal wastes (include specific locations). Provide an estimate of the number of annual shipments of the waste streams identified in table 2.1-2 of the TRISO-X Environmental Report and table ER-WM-2-1of the TRISO-X response to RAI dated April 14, 2023. This information is needed by staff to make an environmental impact determination.