

**SOLSTICE ADVANCED MATERIALS US, INC.
METROPOLIS WORKS FACILITY
DECOMMISSIONING COST ESTIMATE/DECOMMISSIONING FUNDING PLAN
2025 UPDATE
REQUEST FOR ADDITIONAL INFORMATION
DOCKET NO. 04003392
LICENSE NO. SUB-526**

The U.S. Nuclear Regulatory Commission (NRC) staff has identified the additional information discussed below that is needed to complete its detailed technical review of Solstice Advanced Materials US, Inc.'s (Solstice) 2025 decommissioning cost estimate and decommissioning funding plan (DCE/DFP).

(1) Description of changes in waste inventory

Regulatory Basis

The requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) 40.36(d)(2)(ii) state that a DCE/DFP must specifically consider the effect of "[w]aste inventory increasing above the amount previously estimated" on decommissioning costs.

The guidance in "Interim Staff Guidance on Decommissioning Funding Plans for Materials Licensees (June 2019, Agencywide Documents Access and Management System Accession No. ML19079A314) also states that "[t]he DFP should contain a narrative describing the current amount of waste inventory onsite, including, if available, the reason for the waste inventory increasing above the amount previously estimated. The narrative should compare this amount to the previous DFP."

Description of Issue

In its submittal, Solstice notes that the waste inventory for certain categories of waste in the 2025 DCE/DFP has increased or decreased relative to the 2022 DCE/DFP. However, the 2025 DCE/DFP does not include a narrative discussion describing the changes in waste inventory.

Information Need

Provide additional detailed information on waste inventory changes since the submission of the 2022 DCE/DFP

(2) Waste disposal costs

Regulatory Basis

The requirements in 10 CFR 40.36(d)(1)(ii) state that a DCE/DFP must contain "[i]dentification of and justification for using the key assumptions contained in the DCE."

The guidance in NUREG-1757, Vol. 3, Rev. 1, appendix A, section A.3.1, states that a "decommissioning estimate should contain a substantial level of detail, consistent with the guidance presented in this section, to allow the NRC to fully evaluate the adequacy of the estimate" and that "[t]he labor estimates, material costs, and other factors of the cost estimate should have a clear and reasonable basis."

Enclosure

Appendix A of NUREG-1757, Vol. 3, Rev. 1, section A.3.14, "Packaging, Shipping, and Disposal of Radioactive Wastes (Excluding Labor Costs)," provides guidance on how to estimate non-labor costs associated with waste disposal outlines how to estimate packing material costs, shipping costs, and waste disposal costs.

Description of Issue

In section 4.3 of its 2025 DCE/DFP Solstice provides per pound unit costs for waste disposal, which the DCE describes as "terms of transportation and disposal" for various disposal pathways. Appendix A-2 (Waste Summary) includes an inventory of waste volumes and a total waste disposal cost by WBS line item. The 2025 DCE/DFP provides a new column in the table in appendix A-1 (Cost Estimate Summary) for waste container cost per WBS line item; however, all costs are listed as \$0. Appendix A-2 (Waste Summary) indicates that 5,569 gondola containers will be used for waste disposal activities, but the 2025 DCE/DFP does not otherwise specify whether the costs for these waste containers are incorporated into the waste disposal costs in appendix A-1.

Information Need

In accordance with section A.3.14 of NUREG-1757, Vol. 3, Rev. 1, clarify how waste container costs are accounted for in the DCE/DFP, including providing further information about the purpose of the newly added column in appendix A-1 that indicates an estimated cost of \$0 for waste containers.