6450-01-P

DEPARTMENT OF ENERGY

Record of Decision for DOE/EIS-0082-S-SA-01 Supplement Analysis for Defense Waste Processing Facility Failed Melter Aboveground Storage

AGENCY: Office of Environmental Management, Department of Energy.

ACTION: Record of decision (ROD).

SUMMARY: The U.S. Department of Energy (DOE) announces its decision to construct an interim aboveground storage facility for storage of two Defense Waste Processing Facility (DWPF) failed melters (Melter Nos. 1 and 2) in lieu of underground storage units. Moving Melter Nos. 1 and 2 from the Failed Equipment Storage Vaults (FESVs) to aboveground storage will allow space for storage of two melters with a higher radiological nature to be stored in the FESVs. The potential environmental impacts of this decision were analyzed in DOE/EIS-0082-S-SA-01, *Supplement Analysis for Defense Waste Processing Facility Failed Melter Aboveground Storage* (the SA). The SA found that the proposed change and information discussed in this SA are not significant and therefore do not require a supplement to the Final Supplemental Environmental Impact Statement (Final SEIS) Defense Waste Processing Facility (DOE/EIS-0082-S).

ADDRESSES: This ROD and related information are available at the University of South Carolina – Aiken, Public Reading Room. The documents are posted on the DOE NEPA Website at *www.energy.gov/nepa*.

FOR FURTHER INFORMATION CONTACT:

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For general information on the DOE Office of Environmental Management NEPA process, contact: Bill Ostrum, EM NEPA Compliance Officer, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585; or email: *william.ostrum@hq.doe.gov*.

SUPPLEMENTARY INFORMATION:

Background

On June 1, 1982, DOE decided that failed equipment that could not be repaired was to be decontaminated, packaged, and transferred to the SRS burial facilities. However, DOE was concerned that melters, and possibly other equipment, potentially could not be decontaminated to levels that would allow them to be handled or even repaired without resulting in unacceptable radiation doses to workers. Therefore, DOE constructed two underground vaults in S-Area near the DWPF to provide safe interim storage of this equipment until a permanent disposal facility can be identified. Failed equipment is first placed into containers (*e.g.*, Melter Storage Box) before being put into interim storage facilities.

Currently, two DWPF failed melters (Melter Nos. 1 and 2) are stored underground in two operational FESVs. For analysis, DOE assumed that a total of approximately 14 vaults would be required for underground storage of failed melters and other large equipment

due to their highly radiological nature. The life expectancy of the DWPF melters has been extended based on current performance. The current *Liquid Waste System Plan*, SRMC-LWP-2023-0001, Revision 23-P, March 2023 assumes one melter changeout, which would be Melter No. 3 replaced by Melter No. 4. As such, storage for up to four melters is projected to be required for the life of DWPF, not fourteen. Storage for fourteen melters is no longer required. Construction of the aboveground storage facility should provide the required additional failed melter storage space for the life expectancy of DWPF. Actual radiation dose calculations for Melter Nos. 1 and 2 have been determined to be far lower than what was analyzed in the Final SEIS. Consequently, the low radiological nature of Melter Nos. 1 and 2 allow for properly constructed aboveground storage. Moving Melter Nos. 1 and 2 from the FESVs to aboveground storage will allow space for storage of two melters with a higher radiological nature to be stored in the FESVs.

The same design criteria outlined in the existing analysis has been applied to the design of the aboveground storage facility, and the size of the aboveground facilities will be like that of the underground facilities.

In accordance with DOE's NEPA implementing regulations, and consistent with the NEPA Recommendations for the Supplement Analysis Process, 2nd Edition, DOE prepared the DOE/EIS-0082-S-SA-01, *Supplement Analysis for Defense Waste Processing Facility Failed Melter Aboveground Storage*, July 2024, to evaluate whether the aboveground storage of failed melters require supplementing the existing EIS or preparing a new EIS.

In the SA, DOE evaluated the impacts of this proposed change and new information since publication of the Final SEIS. This included potential change to impacts to geologic resources, groundwater, surface water, air resources, cultural resources, aesthetics and scenic resources, traffic and transportation, radiological health effects from normal operations, nonradiological health effects from normal operations, worker radiological and nonradiological health, accidents, chemical hazards, waste generation, decontamination and decommissioning, unavoidable adverse impacts, DWPF Organic Waste Treatment options, greenhouse gasses, noise, land use, biological resources, floodplains and wetlands, socioeconomic resources and existing facilities, and cumulative impacts. In all cases, DOE identified no or negligible differences in potential impacts. DOE concluded that the proposed change and information discussed in the SA are not significant and therefore do not require a supplement to Final Supplemental Environmental Impact Statement Defense Waste Processing Facility (DOE/EIS-0082-S). No further NEPA documentation is required.

Decision

The DOE announces its decision to construct an interim aboveground storage facility for storage of two DWPF failed melters (Melter Nos. 1 and 2) in lieu of underground storage units, as described in the SA. In the SA, DOE concluded that the proposed change and information discussed in the SA are not significant and therefore do not require a supplement to Final Supplemental Environmental Impact Statement Defense Waste Processing Facility (DOE/EIS-0082-S). No further NEPA documentation is required.

Mitigation

Because the proposed activity circumstances are similar in nature to the existing potential impacts based on this analysis, DOE determined, consistent with the FEIS, that no additional mitigation measures are anticipated.

Signing Authority

This document of the Department of Energy was signed on December 2, 2024, by Candice Trummell, Senior Advisor for Environmental Management, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, D.C. on December 2, 2024.

Candice Trummell Digitally signed by Candice Trummell
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Candice Trummell,
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U.S. Department of Energy