

[6450-01-P]

DEPARTMENT OF ENERGY

Amended Record of Decision for the Direct-Feed Low-Activity Waste Approach at the Hanford Site, Washington

AGENCY: Department of Energy.

ACTION: Amended record of decision.

SUMMARY: This is an amendment to the U.S. Department of Energy's (DOE) 2013 Record of Decision (ROD) for the *Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington* (DOE/EIS-0391, December 2012) (TC&WM EIS) published in the *Federal Register* on December 13, 2013. In the TC&WM EIS, DOE analyzed 11 alternatives for the retrieval, treatment, storage, and disposal of tank wastes, followed by the closure of the single-shell waste storage tanks (SSTs) at the Hanford Site. The six other alternatives analyzed in the TC&WM EIS concerned waste management and Fast Flux Test Facility decommissioning, which are not the subject of this ROD. DOE prepared a supplement analysis (DOE/EIS-0391-SA-02; SA) which evaluated the Direct-Feed Low-Activity Waste (DFLAW) approach to operations of the Waste Treatment and Immobilization Plant (WTP), which would pre-treat and send low-activity waste (LAW) from the tank farms to the LAW Facility. This amended ROD addresses those portions of the DFLAW functions and facilities that were not addressed by the 2013 TC&WM EIS ROD.

ADDRESSES: For copies of this amended ROD, the original 2013 ROD, SAs (DOE/EIS-0391-SA-01 and -02), the TC&WM EIS, or any related NEPA documents, please contact Ms. Mary Beth Burandt, NEPA Document Manager, U.S. Department of Energy, Office of River

Protection, P.O. Box 1178, Richland, Washington 99352; telephone: (509) 372-8828; or email, mary_e_burandt@orp.doe.gov. This amended ROD, the original ROD, the SA, and the TC&WM EIS are also available on DOE's NEPA website at <http://www.energy.gov/nepa> and the Hanford website at <http://www.hanford.gov/index.cfm?page=1117&>.

FOR FURTHER INFORMATION CONTACT: For further information about the TC&WM EIS, contact Ms. Burandt, as listed in **ADDRESSES**. For general information on the DOE Office of Environmental Management's NEPA process, contact Mr. Bill Ostrum, Office of Environmental Management, U.S. Department of Energy, Washington, DC 20585-0103; telephone: (202) 586-2513, or leave a message at (800) 472-2756; or email, askNEPA@hq.doe.gov.

SUPPLEMENTARY INFORMATION:

Background.

In the 2013 TC&WM EIS ROD, DOE selected Tank Closure Alternative 2B (Expanded WTP Vitrification; Landfill Closure) and announced that it would: (1) retrieve 99 percent of the waste from the SSTs; (2) treat tank waste, including pretreatment of tank waste with separation into LAW and high-level radioactive waste (HLW); and (3) dispose of the vitrified LAW and secondary waste and construct immobilized HLW (IHLW) interim storage modules to store the IHLW prior to disposal. (See 78 FR 75913, December 13, 2013, for a complete list of the activities covered in the 2013 ROD.) The WTP, as analyzed in the TC&WM EIS, was assumed to have all primary and supporting facilities available at startup. The tank waste was designed to be sent to the WTP Pretreatment Facility, where it would be separated into HLW and LAW. The

process would then send each of these waste streams to the HLW Facility and the LAW Facility, respectively, for further treatment.

Due to technical issues with the WTP Pretreatment Facility and HLW Facility, only the LAW Facility, analytical laboratory and balance of facilities are near completion. The three facilities that are near completion could begin treating tank waste no later than 2023. DOE has developed a sequenced approach to utilize the available facilities to treat LAW before treating HLW. This is referred to as DFLAW. The sequenced approach involves using ion exchange (IX) columns to remove the cesium from the LAW tank waste stream prior to sending the waste to the LAW Facility for immobilization. The cesium-loaded IX columns would be placed on an IX Column Storage Pad until final disposition.

Supplement Analysis for DFLAW and the IX Column Storage Pad.

DFLAW will operate in a different sequence than that analyzed in TC&WM EIS Alternative 2B, which was the alternative selected in the 2013 ROD. DOE prepared an SA (DOE/EIS-0391-SA-02) to determine whether supplemental or new NEPA documentation was required to address the DFLAW approach. The SA provides an analysis of the DFLAW approach relative to the analysis in the TC&WM EIS to determine if there are substantial changes to the proposal or if there are significant new circumstances or information relevant to environmental concerns. The SA was prepared in accordance with DOE's NEPA implementing procedures at 10 CFR 1021.314(c) and concluded that the DFLAW Proposed Action did not represent a substantial change to the proposal evaluated in the TC&WM EIS or significant new circumstances or information relevant to environmental concerns that would require preparation of a supplemental EIS. DOE determined that no further NEPA analysis was required.

The 2013 TC&WM EIS ROD addressed the functions necessary to implement DFLAW (effluent management, solids and cesium removal and waste transfers between facilities) with the exception of the construction and operations of the IX Column Storage Pad. The SA provides a comparative evaluation of the potential impacts associated with the IX Column Storage Pad for each of the environmental resource areas analyzed in the TC&WM EIS. Because the footprint of the IX Column Storage Pad would be within the previously disturbed Industrial-Exclusive Zone that includes the tank farms and WTP complex, impacts to land use, visual resources, noise, air quality, geology and soils, and water and ecological resources were determined to be bounded by or represent a negligible increase to those evaluated in the TC&WM EIS. The SA identified three key areas related to the IX Column Storage Pad for further evaluation: (1) Public and Occupational Health and Safety (Normal Operations), (2) Public and Occupational Health and Safety (Facility Accidents), and (3) Waste Management. In each of these key areas, the SA concluded that the potential impacts associated with the construction and operation of the IX Column Storage Pad would be within the estimated impacts presented in the TC&WM EIS.

Decision.

DOE/EIS-0391-SA-02 concluded that the DFLAW facilities and functions, except for the IX Column Storage Pad, were addressed in the TC&WM 2013 ROD. The SA also concluded that the IX Column Storage Pad does not represent a substantial change to DOE's proposal or significant new circumstances or information relevant to environmental concerns. There are no additional mitigation measures required beyond those commitments in the 2013 TC&WM EIS ROD. The 2013 TC&WM EIS ROD addressed the functions necessary to implement DFLAW,

with the exception of those related to the IX Column Storage Pad. DOE's decision is to amend the TC&WM EIS ROD to include construction and operation of the IX Column Storage Pad to support implementation of DFLAW.

Signed in Washington, DC, on January 17, 2019.

A handwritten signature in black ink that reads "Anne Marie White". The signature is written in a cursive style with a large initial "A" and "M".

Anne Marie White,
Assistant Secretary for Environmental Management