



Department of Energy
 Richland Operations Office
 P.O. Box 550
 Richland, Washington 99352



August 1996

Dear Citizen:

Please find enclosed the Final Environmental Impact Statement (EIS) for the Hanford Site Tank Waste Remediation System (TWRS). The U.S. Department of Energy (DOE), in cooperation with the Washington State Department of Ecology (Ecology), has prepared this Final EIS in compliance with the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA).

The TWRS EIS analyzes ten alternatives for the management and disposal of radioactive, hazardous, and mixed waste currently or projected to be stored in 177 underground storage tanks and approximately 60 miscellaneous underground storage tanks in the Hanford tank farm system located near Richland, Washington. In addition, it evaluates four alternatives for the management and disposal of approximately 1,930 cesium and strontium capsules located at the Hanford Site. The purpose of this proposed action is to implement permanent solutions for managing and disposing of tank waste and cesium and strontium capsules that will reduce risk to the public, site workers, and the environment. The alternative to be implemented is subject to Federal and Washington State environmental laws and DOE Policies.

The preferred alternative in the Final EIS for the management and disposal of the Hanford Tank waste is the Phased Implementation alternative, which includes retrieving all wastes practicable from the tanks and is consistent with the Hanford Federal Facility Agreement and Consent order (Tri-Party Agreement). This alternative would be implemented in two phases, a demonstration phase and full scale operations. The preferred alternative for management and disposal of cesium and strontium capsules is No Action, which continues current operation and maintenance practices at the Waste Encapsulation Storage Facility.

This Final EIS consists of an Executive Summary and Volumes One through Six. Volume One is the principal document; Volumes Two through Five consist of 12 appendices with analysis supporting the information contained in Volume One. Volume 6 (Appendix L) contains a compilation of the public comments received on the Draft EIS with DOE's and Ecology's response to those comments. Modifications to the EIS were made in response to comments received on the Draft EIS or based on information or analysis that has become available since the Draft EIS was issued. Dashed lines on the outside margins have been included to identify changes to the text since publication of the Draft EIS.

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A major purpose of NEPA and SEPA is to promote efforts that will prevent or reduce significant impacts to the environment by ensuring informed decision making on major agency actions that significantly affect the quality of the human environment. Consideration of public comments on the Draft EIS helps ensure that the Final EIS is an adequate decision making tool. Based on review of public comments and after consultation with Federal and State agencies, Tribal governments, and Stakeholder organizations, a number of modifications have been made to the EIS, including the following:

- Discussion and analysis associated with the disposal of high-level waste at the potential national geologic repository were clarified by separating such discussion and analysis from other aspects of the alternatives. Updated data and formulas for calculating costs were added to Section 3.0 and 5.0 of Volume One and Appendix B of Volume Two, as appropriate.
- The option of longer interim onsite storage of high-level immobilized waste pending availability of an offsite geologic repository was included in the analysis provided in Section 3.0 and 5.0 of Volume One and Appendix B of Volume Two.
- The risk analysis was revised to include a Native American user scenario. This analysis compared impacts of each alternative to a potential future population of individuals who would reside on the Hanford Site and engage in a traditional Native American and contemporary lifestyle. This scenario was developed at the request of affected Tribal Nations and is included in Section 5.0 of Volume One and Appendix D of Volume Three.

DOE also requested the National Academy of Science to review and comment on the Draft EIS. DOE has not yet received National Academy of Science comments. In order to meet privatization-related milestones under the Tri-Party Agreement, DOE has decided to issue the Final EIS prior to receiving the National Academy of Science comments. Nevertheless, to ensure that DOE obtains the full benefit of the National Academy of Science review, DOE will assemble a team to review National Academy of Science comments when they become available to determine whether any supplementation of the EIS may be appropriate. DOE will also address the National Academy of Science comments in an appendix to the Record of Decision.

As committed to in the Draft EIS and in response to public comments, a discussion of emerging data regarding vadose zone contamination beneath the tanks resulting from past leaks has been added to the Final EIS in Sections 4.2 and 5.2 of Volume One, Appendixes F of Volume Four, and Appendix K of Volume Five. This data was unavailable for inclusion in the Draft EIS at the time it was published. Much of the data presented in the Final EIS is based on preliminary analysis of the vadose zone contamination, and thus the EIS presents several scenarios that are currently under review by DOE and Ecology regarding the cause, nature, and extent of the contamination. Also, the Draft EIS contained an analysis of uncertainties for each relevant component of the

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environment (e.g., risk, waste inventory, groundwater migration) in the applicable section of the EIS. For the Final EIS, the evaluation and discussion of uncertainties were expanded and presented together in Appendix K of Volume Five.

Other changes to the Final EIS included modifying Phase 2 of the Phased Implementation alternative to include construction and operation of two waste treatment facilities. Accident discussions and analysis were revised to incorporate emerging data, which was added to Section 5.12 of Volume One and Appendix E of Volume Four. Finally, DOE expanded the Final EIS analysis to include a variation to the Ex Situ/In Situ Combination alternative (known as Ex Situ/In Situ Combination 2 alternative in the Final EIS). This alternative was described in the Draft EIS cover letter and the preface to Volume One. The discussion and analysis for this alternative are presented in Volume One and Appendix B of Volume Two.

The Final EIS and reference documents are available in DOE Public Reading Rooms and Information Repositories. The addresses of the reading rooms and repositories are included in Section 7.0 of Volume One of the Final EIS.

For further information or to request additional copies, contact:

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DOE will issue a Record of Decision on the TWRS action no sooner than 30 days after the U.S. Environmental Protection Agency publishes a Notice of Availability in the Federal Register for the Final EIS.

Thank you for your interest in the TWRS EIS Project.

Sincerely,



Carolyn C. Haass
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Geoff Tallent
TWRS EIS Project Lead
State of Washington
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Enclosure