0041385

PROPOSED PLAN FOCUS SHEET

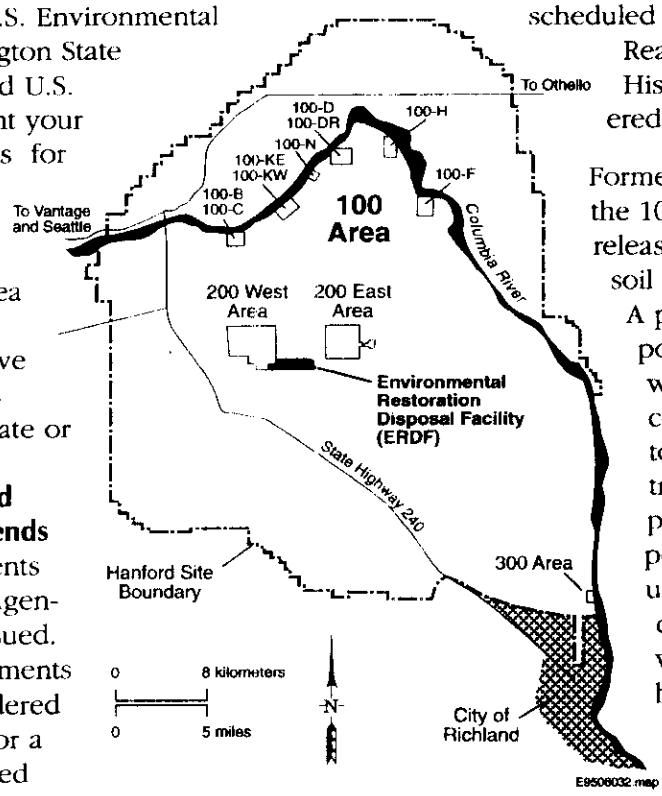
Tri-Party Agreement

HANFORD 100 AREA ENVIRONMENTAL CLEANUP ALONG THE COLUMBIA RIVER

This focus sheet describes a proposal for the first reactor area environmental cleanup of the 100 Area located at the Hanford Site in Washington State. The 100 Area is 26.6 square miles of land along the Columbia River where nine water-cooled plutonium production reactors operated as part of the nation's defense program. The actions proposed in this focus sheet are cleanup of waste disposal sites located next to the river. These actions are one part of the Environmental Restoration Program for the Hanford Site (560-square miles).

The Tri-Party Agencies – U.S. Environmental Protection Agency, Washington State Department of Ecology, and U.S. Department of Energy, want your opinion on proposed plans for interim remedial actions at the 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units located at the 100 Area on the Hanford Site. The proposed cleanup alternative for these proposed plans is Remove/Treat (as appropriate or required)/Dispose.

The public comment period begins June 26, 1995 and ends August 9, 1995. All comments will be considered by the agencies before a decision is issued. We are also accepting comments on a proposal being considered by the Tri-Party Agencies for a regulatory change as detailed later in this focus sheet (Draft TPA change request C-95-01A).



BACKGROUND

Starting in 1943 and continuing into the 1980s, materials for national defense were produced at the reactors on the Hanford Site. In the process, soil and water were contaminated with chemical and radioactive pollutants. At the present time, the reactors along the Columbia River are no longer in service and are scheduled to be decommissioned. The B Reactor has been listed on the National Historical Register and is being considered for preservation.

Former waste management practices for the 100 Area reactor operations resulted in release of radionuclides and chemicals to soil and groundwater near the reactors. A primary source of environmental pollution was contaminated cooling water that flowed through the reactor cores. Because of leaks in the reactors' process effluent (waste water) transfer systems and intentional process effluent (waste water) disposal in cribs and trenches, soil and underlying groundwater have been contaminated. In addition, solid wastes containing radionuclides were buried in unlined trenches.

In May 1989, the Tri-Party Agencies signed the Hanford Federal

SEND WRITTEN COMMENTS TO:

Kevin Oates
U.S. Environmental Protection Agency
712 Swift Avenue, Suite 5
Richland, WA 99352

To request copies of the proposed plans or Draft TPA change request C-95-01A, call the Hanford Cleanup Line toll-free on 1-800-321-2008

Facility Agreement (TPA) and Consent Order, also known as the Tri-Party Agreement. This agreement identifies cleanup needs on the Hanford Site, establishes schedules, and defines the legal structure to ensure the work is completed.

Protecting the Columbia River is one of the highest priorities expressed by the public. In response, the Tri-Party Agencies propose cleanup of the waste sites in the 100 Area. These cleanup actions focus on high-priority, radioactive liquid waste disposal sites, identified through field investigations and risk assessments, at the 100 BC-1, 100-DR-1, and 100-HR-1 Operable Units, located at the 100-BC, 100-DR, and 100-H Reactor Areas, respectively.

More than 350 inactive waste disposal sites have been grouped into source and groundwater operable units. Operable units contain hazardous waste, radioactive/ hazardous mixed waste, and other hazardous substances. Waste disposal sites are grouped into operable units according to location and similar characteristics. High-priority, radioactive liquid waste disposal sites include retention basins, process effluent (waste water) pipelines, trenches, cribs and french drains. Other types of sites include solid waste burial grounds, septic systems, buried demolition waste sites, and miscellaneous waste sites like burn pits. Groundwater contamination resulting from these waste sites is addressed in separate operable units.

Contamination in these waste sites and groundwater pose a potential threat to future users of the Hanford Site. Waste sites fall into two general categories: shallow sites where both soil exposure and groundwater impacts may be a concern and deep sites where groundwater impact is the primary concern (for example, the 116-H-7 Retention Basin where contamination begins at a depth of 16 feet below the surface). The goal of the proposed cleanup actions is to reduce these threats by removing the contamination associated with the waste sites. Twenty-seven high-priority, radioactive liquid waste disposal sites are addressed in these proposed plans. An additional 10 sites have been recognized as analogous to the approach taken in these propsed plans and are being considered for inclusion in the record of decision.

The **100-BC-1 Operable Unit** encompasses an area of 450 acres. It includes radioactive liquid waste disposal sites and buried debris resulting from demolition of reactor support facilities. Ten waste sites are proposed for interim cleanup; 6 analagous sites are located in the 100-BC-1 Operable Unit. Beginning this summer, the Tri-Party Agencies plan to initiate a field demonstration in the 100-BC Area (100-BC-1 Demonstration Project Expedited Response Action). This project will assist in implementation of the cleanup activities.

The **100-DR-1 Operable Unit** encompasses an area of 380 acres and contains radioactive liquid waste disposal sites and buried debris resulting from demolition of reactor support facilities serving 105-D Reactor. Twelve waste disposal sites are recommended for interim cleanup; 3 analagous sites are located in the 100-DR-1 Operable Unit.

The **100-HR-1 Operable Unit** encompasses an area of 100 acres containing radioactive liquid waste disposal sites and buried debris. Four waste disposal sites are proposed for interim cleanup; 1 analagous site is located in the 100-HR-1 Operable Unit.

Subsequent proposed plans will be issued for public comment to address the cleanup of remaining sites and groundwater.

REMEDIAL ALTERNATIVES

The following six alternatives were considered in selecting the preferred cleanup alternative:

1. **No Action:** serves as a baseline to evaluate cleanup alternatives.
2. **Institutional Controls:** includes access restrictions and groundwater monitoring. Does not limit exposure to human or ecological receptors and does not protect the groundwater.
3. **Containment:** includes surface barriers, surface water controls, groundwater surveillance monitoring, and access restrictions.

LOCATION OF INFORMATION REPOSITORIES WHERE MATERIAL IS AVAILABLE FOR PUBLIC REVIEW

The Proposed Plans for Interim Remedial Measures at 100-BC-1, 100-DR-1 and 100-HR-1 Operable Units and Draft TPA change request C-95-01A are located at the Hanford Tri-Party Agreement Public Information Repositories:

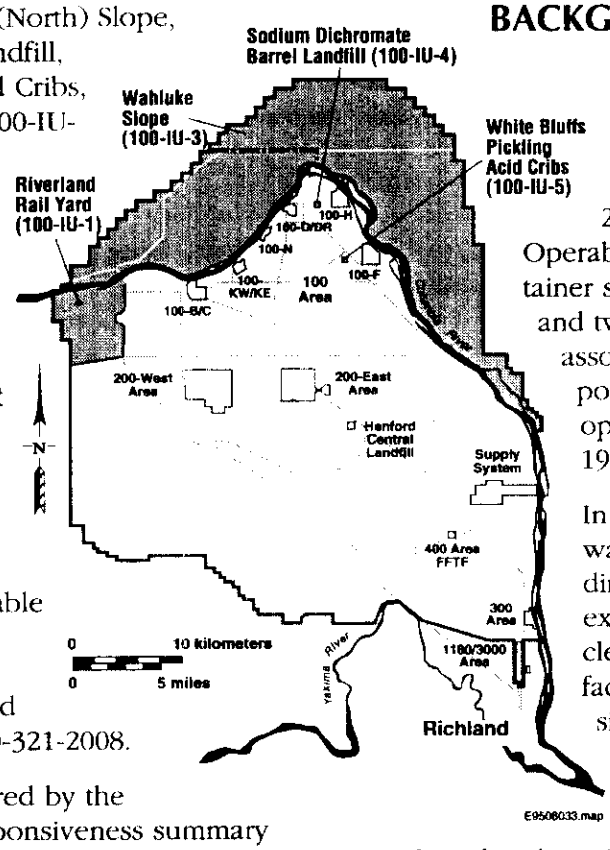
FOCUS SHEET

PROPOSED PLAN FOR FOUR COMPLETED EXPEDITED RESPONSE ACTIONS

Tri-Party Agreement

The U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and the U.S. Department of Energy (USDOE) invite you to comment on the Proposed Plan for the Riverland Rail Yard, Wahluke (North) Slope, Sodium Dichromate Barrel Landfill, and White Bluffs Pickling Acid Cribs, also known as the 100-IU-1, 100-IU-3, 100 IU-4, and 100-IU-5 Operable Units. Between 1992 and 1994, each of these operable units were addressed as an expedited response action. Public comment will be accepted from **June 26, 1995** through **August 9, 1995**. The proposed plan discusses the actions taken at these operable units and proposes the final action. If you would like to review the proposed plan for these operable units, please visit the Hanford Public Information Repository nearest you or call the Hanford Cleanup Line toll-free at 1-800-321-2008.

All comments will be considered by the regulatory agencies and a responsiveness summary issued before making a final decision for the Riverland Rail Yard (100-IU-1), Wahluke Slope (100-IU-3), Sodium Dichromate Barrel Landfill (100-IU-4), and White Bluffs Pickling Acid Cribs (100-IU-5).



BACKGROUND

Riverland Rail Yard (100-IU-1 Operable Unit). The Riverland Rail Yard is located east of Washington State Route 240 between Highway 24 and the Columbia River. The Operable Unit included a pesticide container site, a rail yard maintenance facility, and two former military installations with associated debris. The rail yard supported Hanford construction and operation activities from 1943 until 1954.

In June 1993, an Action Memorandum was issued by EPA and Ecology directing USDOE to perform an expedited response action for: cleanup of the rail yard maintenance facility and the pesticide container sites, an ordnance survey, and closure of a munitions cache hole. Following removal of contaminated concrete and soil from the rail yard and pesticide sites, soil sampling was performed. The results indicated that the levels of the contaminants remaining in the soil are at/or below Model Toxic Control Act (MTCA) residential cleanup levels. Also during the cleanup, a 2,4-D pesticide site was discovered, sampled and cleaned up to residential cleanup standards.

Wahluke Slope (100-IU-3 Operable Unit). The Wahluke Slope is located at the northern most extent of the Hanford Site, north and east of the Columbia River. The Wahluke Slope area contains former anti-aircraft artillery and missile sites used to protect the Hanford site during the Cold War.

SEND WRITTEN COMMENTS TO:

Gary Freedman
Washington State Department of Ecology
1315 West Fourth Avenue
Kennewick, WA 99336-6081

To request copies of the proposed plans, call the Hanford Cleanup Line toll-free on 1-800-321-2008

At this time no public meeting is scheduled, however, to request a public meeting please call Dennis Faulk, EPA, at (509) 376-8631.

From 1992 through 1994 an expedited response action was carried out at the sites associated with military or homesteading activities. Soil was excavated until Washington State residential cleanup criteria were met.

Sodium Dichromate Barrel Landfill (100-IU-4 Operable Unit). The Sodium Dichromate Barrel Landfill is located between 100-D and 100-H Reactor Areas on the Hanford site. In 1945, the Operable Unit became a disposal area for empty sodium dichromate barrels. Sodium dichromate was added to reactor cooling water to reduce corrosion.

In March 1993, an Action Memorandum was issued by EPA and Ecology directing USDOE to perform an expedited response action for cleanup of the landfill. The crushed drums were removed from the site and disposed of at the Hanford Central Landfill. Sampling of the soils indicated that chromium levels were at/or below background soil concentrations and that no significant risk to human health and the environment was present at the Operable Unit.

White Bluffs Pickling Acid Cribs (100-IU-5 Operable Unit). The White Bluffs Pickling Acid Cribs are located west of the 100-F Reactor. The cribs consist of two excavated trenches that may have received waste from a nearby pipe fabrication facility.

Soil characterization completed in November 1992 indicated that, with the exception of zinc, concentrations of contaminants in the soil were at/or below background levels. The levels of zinc were, however, below any risk levels. As a result of the sampling, no cleanup actions were pursued.

PREFERRED ALTERNATIVE

The expedited response actions either removed or verified that the contaminants remaining in the soil at the wastes sites for the four operable units are all at/or below the MTCA residential cleanup level and are unlikely to pose a significant threat to human health or the environment. Therefore, the preferred alternative recommended for the Riverland Rail Yard (100-IU-1), Wahluke Slope (100-IU-3), Sodium Dichromate Barrel Landfill (100-IU-4), and White Bluffs Pickling Acid Cribs (100-IU-5) Operable Units is No Further Action.

LOCATION OF INFORMATION REPOSITORIES WHERE MATERIAL IS AVAILABLE FOR PUBLIC REVIEW

The proposed plan and supporting documentation may be reviewed at the information repository nearest you. You may also receive a copy of the proposed plan by calling the Hanford Cleanup toll-free number at 1-800-321-2008.

PORTLAND
Portland State University
Branford Price Millar Library
Science and Engineering Floor
934 SW Harrison
(503) 725-3690
Attn: Michael Bowman or
Susan Thomas

SEATTLE
University of Washington
Suzzallo Library
Government Publications Room
(206) 543-4664
Attn: Eleanor Chase

RICHLAND
U.S. Department of Energy
Public Reading Room
Washington State University
Tri-Cities
100 Sprout Rd., Room 130 West
(509) 376-8583
Attn: Terri Traub

SPOKANE
Gonzaga University
Foley Center
E 502 Boone
(509) 328-4220 ext. 3844
Attn: Tim Fuhrman

E9506033

4. **Remove/Dispose:** soil waste will be disposed of at an appropriate facility, e.g., the Environmental Restoration Disposal Facility (ERDF) located on the Central Plateau on the Hanford Site. Risk is significantly reduced.

5. **In Situ Treatment:** treatment of the waste in place to reduce toxicity, mobility and/or volume.

6. **Remove/Treat/Dispose:** same as the Remove/Dispose Alternative, with the addition of treating the waste before disposal as appropriate or required.

A detailed analysis is used to evaluate the performance of each alternative using the following Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) criteria:

- ▲ Protection of human health and the environment
- ▲ Compliance with applicable relevant and appropriate requirements (ARARs)
- ▲ Long-term effectiveness and performance
- ▲ Reduction of toxicity, mobility, and volume
- ▲ Short-term effectiveness
- ▲ Implementability
- ▲ Cost
- ▲ State acceptance
- ▲ Community acceptance

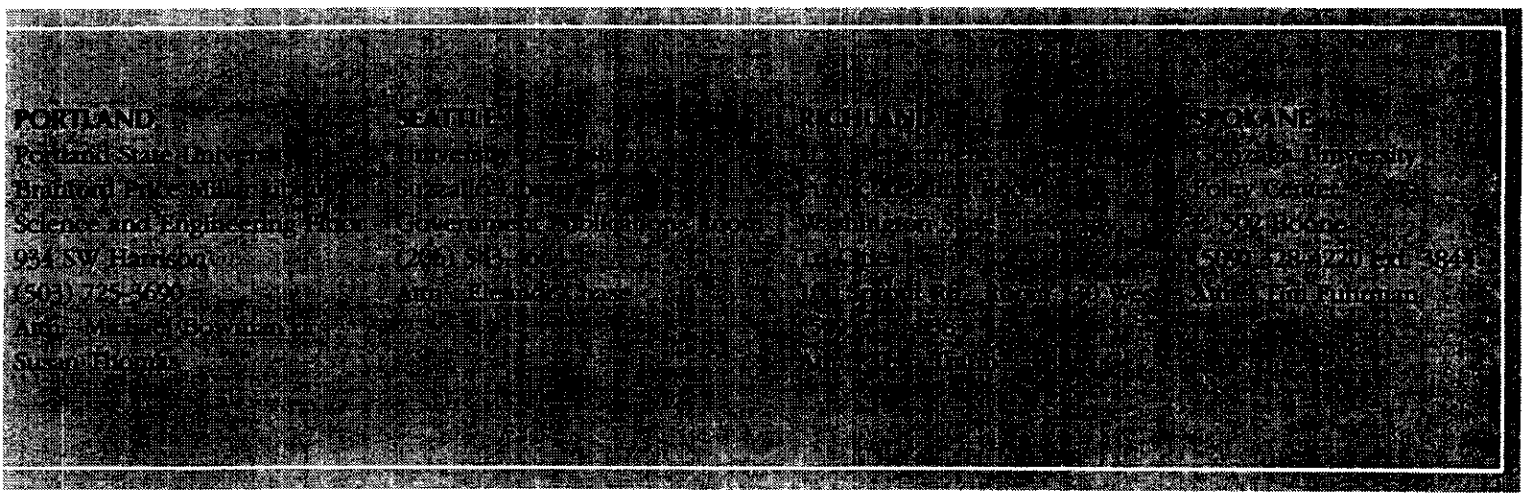
PREFERRED ALTERNATIVE

The preferred alternative for cleanup of 100-BC-1, 100-DR-1, and 100-HR-1 Operable Unit high-priority, radioactive liquid waste disposal sites is Remove/Treat (as appropriate or required)/Dispose. The preferred alternative will provide the best balance of the criteria, and is protective of human health and the environment by removing the waste. It provides long-term effectiveness, permanence, reduces volume, and uses available technologies and equipment. Waste disposal will be at an appropriate facility, e.g., the ERDF.

The preferred alternative is the initial recommendation by the Tri-Party Agencies. The Tri-Party Agencies have agreed to cleanup goals that, to the extent practicable, would support a goal to not limit future uses of the 100 Area land due to contaminants resulting from Hanford operations. A cleanup alternative will be selected only after public review and comment; all public comments will be considered and a responsiveness summary will be issued.

POTENTIAL REGULATORY CHANGE

The Tri-Parties are also considering whether or not to redesignate the 100-DR-1, and 100-HR-1 Operable Units as CERCLA units. Currently, these units are Resource Conservation and Recovery Act (RCRA) Past Practice Units because they each contain a Treatment, Storage and Disposal Unit. Ecology would remain the lead regulatory agency. Draft TPA change request C-95-01A is available for your review.



FOR MORE INFORMATION

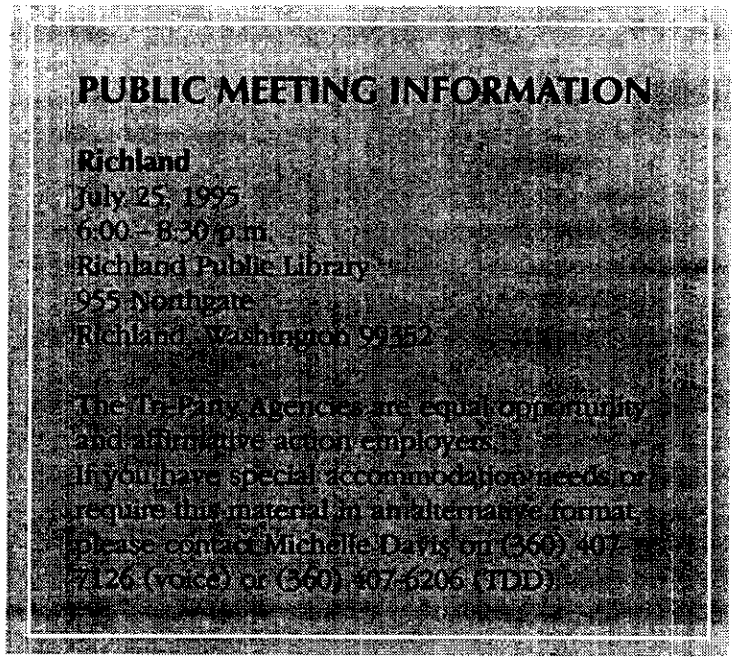
If you have questions or concerns related to these decisions or about the site, please contact the following people:

NANCY WERDEL
DOE Project Manager
(509) 376-5500

DENNIS FAULK
EPA Operable Unit Manager
(509) 376-8631

PHIL STAATS
Ecology Project Manager
(509) 736-3029

OR, CALL THE TOLL-FREE HANFORD CLEANUP LINE
1-800-321-2008



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