



# Changes Proposed To Hanford's Tri-Party Agreement K Basins Spent Nuclear Fuel Project

U.S. Department of Energy • U.S. Environmental Protection Agency • Washington State Department of Ecology

## Request For Public Comment

We need your review and comment on the proposed schedule for the U.S. Department of Energy's (DOE) K Basins Spent Nuclear Fuel Project. Our plan for the K Basins is to remove 2,300 tons of corroding spent nuclear fuel from two large water basins near the Columbia River to dry storage in central Hanford. We also will remove contaminated sludge, water and debris from the basins.

The schedule is provided for public review and comment before we make it final in the Tri-Party Agreement, the legal document that guides the Hanford cleanup. We will accept public comments from October 5 through November 18, 1998. We will consider all public comments and respond to them before making the final decision.

**Submit comments in writing or electronically to:**

**Larry Gadbois** (509) 376-9884  
U.S. Environmental Protection Agency  
712 Swift Boulevard, Suite 5  
Richland, WA 99352  
E-mail [gadbois.larry@epamail.epa.gov](mailto:gadbois.larry@epamail.epa.gov)

**To request a copy of the proposed commitments and associated documents, please contact:**

**George Sanders** (509) 376-6888  
U.S. Department of Energy  
P.O. Box 550 (A5-15)  
Richland, WA 99352  
E-mail: [george\\_h\\_sanders@rl.gov](mailto:george_h_sanders@rl.gov)



## Background

A top priority of the Hanford cleanup is the pair of 1.3 million-gallon K Basin pools that store 80 percent of the department's national inventory of spent nuclear fuel. Less than a quarter-mile from the Columbia River, the basins were built in the early 1950s as part of the K East and K West nuclear reactors.

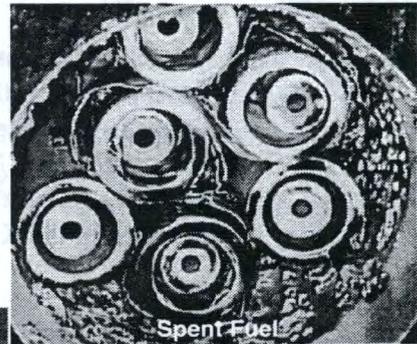
These basins contain "spent" nuclear fuel, meaning the fuel has passed through a nuclear reactor to produce electricity and to be partially converted to plutonium for use in nuclear warheads. During the Cold War, fuel from N Reactor was placed in the K Basins until it could be processed to retrieve the plutonium. In the late 1980s plutonium production at Hanford stopped, leaving behind the two basins of fuel.

The basins were never intended for long term storage. The fuel has been corroding and creating radioactive sludge in the basins. The basin water is now radioactive, as is all the debris in the basins, such as canisters and metal racks. Approximately 65 cubic yards of contaminated sludge is now in the basins. (That's about the volume of six large concrete-mixing trucks.)

The basins already are decades past their design life. The condition of the basins and the fuel is getting worse.

Approximately 15 million gallons of contaminated water leaked to the surrounding soil and groundwater in the late 1970s. Another 90,000 gallons leaked in 1993.

An earlier version of this proposal was the subject of a public comment period in the summer of 1997. The proposal was withdrawn when it became clear that the schedule contained in it could not be met.



## Principal Issues

A new proposed schedule was difficult to achieve. The primary concern was the schedule, how it was developed, and the cost of the project. The Tri-Party Agreement agencies - the DOE, the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) - have been in intermittent negotiations on the spent fuel issue for two years. The agencies failed to reach consensus, and EPA initiated the dispute resolution process in August 1998. The dispute resolution process is a formal procedure in the Tri-Party Agreement for resolving disagreements.

After an in-depth analysis of project scope, performance, cost and schedule, several changes were made to DOE's proposed plan. The result is a schedule in which:

- Fuel removal will begin earlier.
- Additional time is allowed for completion of fuel removal.
- The entire project will be completed sooner.

The dispute was resolved on September 2, 1998. Key elements of the resolution include:

- The Tri-Parties have agreed to regulate the project as an 'Interim Remedial Action' under the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund. This provides appropriate enforcement for the project.
- The Parties agreed that DOE will use a single schedule of commitment dates for the Tri-Party Agreement, the Project Hanford Management Contractor, DOE, and the Defense Nuclear Facilities Safety Board. (In the past, these groups had a variety of schedules for the K Basins cleanup.)
- DOE is committed to drive improvements in the cost and schedule for the Spent Nuclear Fuel Project.

## Revised Strategy

Following public comment, schedule commitments will be added to the Tri-Party Agreement as milestones and target dates. Milestones are legally enforceable commitments for key items in the cleanup schedule. Target dates are not legally enforceable, but are schedule dates that if missed, indicate that future milestone dates

are in jeopardy. Key commitments in the proposed milestone and target date series include:

- Begin removal of spent nuclear fuel from the K Basins to dry storage in central Hanford by November 2000.
- Complete fuel removal from both basins by December 2003.
- Begin remediation of K East Basin water to reduce tritium levels by April 2004.
- Begin removal of all water from the basins by September 2004.
- Complete removal of sludge and debris by August 2005.
- Complete removal of spent nuclear fuel, sludge, debris and water from the K Basins by July 2007.

Final disposal of Hanford's spent nuclear fuel is not part of this Tri-Party Agreement proposal. The public will have an opportunity to participate in the decision making process for fuel disposal, when that process occurs.

## How You Can Be Involved

You can review the details of the proposed schedule at the public information repositories. The information also is available on the Internet.

<http://www.hanford.gov/tpa/changelist.htm>

### Public Meeting

Richland, WA  
Doubletree Hotel Richland/Hanford House  
802 George Washington Way  
7:00-9:00 p.m.  
Thursday, November 5, 1998

### TPA Spent Fuel Discussion

Portland, OR  
Portland State Office Building  
800 Northeast Oregon Street  
7:00-9:00 p.m.  
Thursday, November 12, 1998

# Spent Nuclear Fuel Project Commitments

This chart summarizes the enforceable milestones and target dates for the Spent Nuclear Fuel Project. A "T" in the number indicates a target date.

Number	Description	Date
M-34-00A	Complete removal of spent nuclear fuel, sludge, debris, and water at DOE's K Basins(2)	07/31/07
M-34-03	Submit Proposed Plan and Focused Feasibility Study for Remedial Action for the K Basins	11/30/98
M-34-04	Submit Remedial Design Report/Remedial Action Work Plan for the K Basins	03/31/00
<b>Sludge and Debris Removal</b>		
M-34-05-T01	Submit report on quantities, character, and management of K Basins debris	Annual
M-34-06-T01	Initiate K West Basin spent nuclear fuel canister cleaning operations	12/31/00
M-34-07-T01	Complete final safety basis for the transfer of K Basins sludge	12/31/03
M-34-08	Initiate full scale K East Basin sludge removal	07/31/04
M-34-09-T01	Complete K Basins rack and canister removal	12/31/04
M-34-10	Complete sludge removal from K Basins	08/31/05
<b>Spent Nuclear Fuel Removal</b>		
M-34-11-T01	Complete construction of K West Basin Integrated Water Treatment System	06/30/99
M-34-12	Complete construction of K East Basin Integrated Water Treatment System	02/28/01
M-34-13A-T01	Complete construction and installation of K West Basin Spent Nuclear Fuel Retrieval System	07/31/99
M-34-13B-T01	Complete construction and installation of K East Basin Spent Nuclear Fuel Retrieval System	11/30/00
M-34-14A	Complete K West Basin Cask Facility modifications	09/30/99
M-34-14B-T01	Complete K East Basin Cask Facility modifications	01/31/01
M-34-15A-T01	Complete two bays of the Cold Vacuum Drying Facility construction and installation	10/31/99
M-34-15B-T01	Complete remaining bay(s) of the Cold Vacuum Drying Facility construction and installation	06/30/00
M-34-16	Initiate Removal of K West Basin Spent Nuclear Fuel	11/30/00
M-34-17	Initiate Removal of K East Basin Spent Nuclear Fuel	11/30/01
M-34-18A	Complete Removal of all K West Basin Spent Nuclear Fuel	04/30/03
M-34-18B	Complete Removal of all K East Basin Spent Nuclear Fuel	12/31/03
<b>Basin Water Remediation</b>		
M-34-19	Initiate removal, replacement, and treatment of contaminated K Basins water	04/30/04
M-34-21	Initiate full scale K West Basin water removal	09/30/04
M-34-22	Complete K West Basin water removal	09/30/05
M-34-20	Complete removal, replacement, and treatment of contaminated K Basins water	10/31/05
M-34-23	Initiate full scale K East Basin water removal	10/31/05
M-34-24	Complete K East Basin water removal	10/31/06

## Public Information Repository Locations

### SEATTLE

University of Washington  
Suzzalo Library  
Government Publications Room  
(206) 543-5932 ATTN: Eleanor Chase  
E-mail: echase@u.washington.edu

### RICHLAND

U.S. Department of Energy Public Reading Room  
Consolidated Information Center, Room 101L  
Washington State University, Tri-Cities  
(509) 372-7443 ATTN: Terri Traub  
E-mail: doe.reading.room@pnl.gov

### SPOKANE

Gonzaga University  
Tri-Party Information Repository  
Foley Center  
East 502 Boone  
(509) 323-3839 ATTN: Connie Scarppelli  
E-mail: scarPELLI@its.gonzaga.edu

### PORTLAND

Portland State University  
Branford Price Millar Library  
Science and Engineering Floor  
Tri-Party Information Repository  
SW Harrison and Park  
(503) 725-3690 ATTN: Michael Bowman  
E-mail: bowmanm@pdx.edu

**Hanford Cleanup Toll-free Line: 1-800-321-2008**

Hanford Cleanup Mailing List  
P.O. Box 1000 B3-35  
Richland, WA 99352

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