START

Three Hanford comment periods are set to start August 5

Tri-Party Agreement

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

Your comments are requested on three Hanford cleanup proposals. The Tri-Party Agreement agencies; the U.S. Department of Energy, The Washington State Department of Ecology and the U.S. Environmental Protection Agency have enclosed information on the proposals in this packet. All comments received during the comment periods will be considered and responded to before final decisions are made for each proposal.

TPA cleanup expands (M-33): an amendment to the Tri-Party Agreement (TPA) setting milestones for Hanford waste facilities and certain materials not previously covered by the TPA. Comments will be accepted for 60 days from August 5 through October 3.

B Plant cuts costs: new and revised TPA milestones cover transition of Hanford's B Plant to a safer and less expensive state by 1999. Comments are accepted through September 17.

Comments create new proposal (200-UP-1): Changes in a proposed plan for treatment and disposal of contaminated groundwater being pumped from beneath the center of the Hanford Site (200 West Area). A 30-day comment period will conclude September 3.

The proposed milestones and Tri-Party Agreement changes are available to read and/or be copied at the following Hanford TPA Information Repositories:

SEATTLE
University of Washington
Suzzallo Library
Government Publications Room
(206) 543-4664

PORTLAND
Portland State University
Branford Price Millar Library
Science and Engineering Floor
(503) 725-3690

SPOKANE
Gonzaga University
Foley Center
East 502 Boone
(509) 328-4220 Ext. 3844

RICHLAND
Washington State University
USDOE Public Reading Room
Tri-Cities, Room 130 West
100 Sprout Road
(509) 376-8583

Public meetings on these actions have not been scheduled, but may be held if requested, preferably before August 14. For more information call the Hanford Cleanup toll-free line at 1-800-321-2008, or submit comments to:

Cleanup
Jon Yerxa
U.S. Department of Energy
825 Jadwin
Richland WA 99352
(509) 376-9628

B Plant
Moses Jaraysi
Department of Ecology
1315 W. 4th Avenue
Kennewick WA 99335
(509) 736-3016

New Proposal
Shri Mohan
Department of Ecology
1315 W. 4th Avenue
Kennewick WA 99335
(509) 736-5704

If you have special accommodation needs, or require this material in an alternative format, please contact Michelle Davis at (360) 407-7126 (voice), or (360) 407-6206 (TDD).

Tri-Party Agreement

Comments Lead Hanford to New Cleanup Plan

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

Comment Period Runs August 5-September 3

BACKGROUND

The 200-UP-1 operable unit is a group of waste disposal sites located in the southern portion of the 200 West Area of Hanford's Central Plateau. Historic discharges from nuclear materials processing facilities in the 200 West Area have caused groundwater contamination. In 1994, a pilot-scale treatability test began pumping groundwater to an above-ground, on-site treatment system to remove uranium and technetium 99. The treatment system was later upgraded to remove carbon tetrachloride, which is designated as a hazardous waste.

The pilot-scale system is successful. Therefore, a plan for expanded use was developed and made available for public comment in August of 1995. The preferred alternative requires pumping the groundwater with on-site treatment using the existing pilot-scale system to remove contaminants. The current pump and treat system processes 50 gallons of water per minute.

PROPOSAL FOR THE USE OF EFFLUENT TREATMENT FACILITY

During public comment on the proposed plan, several comments were received requesting that USDOE consider using the 200 Area Effluent Treatment Facility (ETF) instead of the on-site system. ETF is a multi-stage treatment facility that can remove a large number of contaminants. In response, USDOE compared the cost of using the on-site system with the use of the multi-stage facility for treatment of the contaminated groundwater. In April 1996, the USDOE provided a three-year (1996, 1997, and 1998) revised cost comparison for the two systems. The study estimated costs of using the on-site system would be $4,793,000 and the ETF would cost $4,169,000 for a savings of $624,000. This cost comparison assumes the use of a pipeline currently in place. The on-site system will continue operation until the multi-stage system is ready to accept groundwater for treatment.

The existing on-site system returns treated groundwater to the aquifer near the pumping location using a well. The multi-stage system alternative includes disposal of the treated water at the state-approved land disposal site located north of the 200 West Area. USDOE calculations indicate that this change will not have a significant impact on the groundwater cleanup. Besides saving money, the multi-stage system treatment will equal or exceed cleanup levels that would be provided by the on-site system for all the contaminants in the groundwater.

BENEFITS AND ISSUES RELATED TO THE CHANGE

The use of the multi-stage system is a common sense approach that uses already existing facilities to transport and treat the contaminated groundwater. The system will treat all contaminants of concern in the groundwater with the exception of tritium. It will meet conditions of the State Waste Discharge Permit requirements; and treat at a lower cost. Using this system will also eliminate secondary wastes generated at the on-site facility which require expensive disposal. Secondary waste generated from the multi-stage system will be disposed in the Environmental Restoration Disposal Facility located in the 200 Area. Disposal of this secondary waste must meet waste acceptance criteria. For these reasons, using the multi-stage system is more protective of the environment than using the on-site treatment system.

In 1993, two pipelines were installed between 200 West Area and 200 East Area. One pipeline is being used to route liquid discharges away from 200 West Area. The second pipeline was installed for possible future streams

such as contaminated groundwater. The use of the multi-stage system alternative requires transport of the contaminated groundwater through the second pipeline. By law, carbon tetrachloride requires two-layer (secondary) containment. The pipelines do not provide secondary containment. This second pipeline has never been used and recent pressure testing of the pipeline was performed to confirm pipe integrity.

Use of a single contained pipeline to the multi-stage system will likely require a waiver of requirements based on the assessment that the pipeline will perform equally as well as a pipeline that has a second lining. The pipeline has never been used, and testing demonstrates that it conforms to design specifications. Should a waiver be granted, the pipeline will undergo regular integrity testing. The project is expected to last about three years.

An alternate regulatory approach would use risk analysis on a case-by-case basis to determine if the transferred material poses a threat to the environment. The regulators will decide if a waiver is warranted after considering comments from the public.

After evaluation of the two alternatives including consideration of cost, added environmental benefits, and use of existing facilities, the EPA and Ecology determined that use of the multi-stage system is more protective of the environment than the on-site treatment facility.

HOW YOU CAN GET INVOLVED

Following consideration of public response to these proposed changes, a Record Of Decision and discharge permits will be issued. Your comments on these options are welcome and will be responded to. All comments will be considered by the TPA agencies before making a final decision on the proposed changes for this unit. For more information submit questions and comments to:

Shri Mohan
Department of Ecology
1415 W. 4th Avenue
Kennewick, WA 99336-6018
(509) 736-5704

The following documents are available upon request:

The 200-UP-1 Engineering Evaluation/Conceptual Plan Rev 2 (BHI-00187) with a transmittal letter and proposed 200 Area ETF State Waste Discharge Permit modification and a list of specific citations, including the relevant portions of RCRA that apply to this action.

Tri-Party Agreement

Changes Proposed to Hanford's Tri-Party Agreement

Radioactive/Solid Waste and Other Material Milestones

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

Comment Period Runs August 5-October 3

REQUEST FOR PUBLIC COMMENTS

Your comments are requested for proposed Hanford milestones that will cover radioactive solid waste and other materials not previously included in cleanup schedules.

Negotiations of Milestone M-33-00 of the Hanford Federal Facility Agreement and Consent Order, known as the Tri-Party Agreement (TPA), were completed in June. Milestone M-33-00 was established to:

- develop milestones necessary for the storage, treatment/processing, and disposal of Hanford site solid wastes and other materials not yet covered under the TPA, and
- develop and incorporate TPA modifications to a management process that addresses all aspects of Hanford site "cleanup."

BACKGROUND

In December 1995 the Department of Energy (USDOE) submitted a signed Tri-Party Agreement milestone change request to the Environmental Protection Agency and the Washington State Department of Ecology. This action started negotiations for more TPA milestones covering Hanford waste and material streams not covered under the current TPA. Negotiations between the Tri-Parties on these proposed milestones concluded on June 14, 1996. An extended public comment period of 60 days begins on August 5 and ends on October 3, 1996.

PROPOSED CHANGES

Approval of these proposed changes by the Tri-Parties establishes new milestones and target dates governing the acquisition of new facilities, modification of existing facilities, and/or modification of planned facilities necessary for the storage, treatment/processing, and/or disposal of the following:

- Cesium and strontium capsules, unirradiated uranium, bulk sodium, and 300 Area special case waste.
- The interim storage of immobilized high-level tankwaste and other canister-stored high-level waste forms,and for the interim storage and disposal of immobilized low activity tank waste.
- Transuranic/mixed, transuranic and mixed low-level waste.

Approval of this change by the Tri-Parties modifies Tri-Party Agreement "legal" provisions. This change request by the Tri-Parties also modifies Agreement Action Plan Sections 4.0, 9.0 and 11.0.

On approval, Hanford site planning and budget development documents will be modified accordingly.

AGREEMENTS HIGHLIGHTED

In addition to milestones for waste and material streams proposed in the TPA, the agencies reached tentative agreement on modifications to establish and implement cleanup projects at Hanford.

These agreements are made in partial fulfillment of Land Disposal Restriction treatment requirements of the Tri-Party Agreement. Because the TPA contains a plan for treating Hanford mixed waste, USDOE is not required to have a separate site treatment plan for such waste under the Federal Facilities Compliance Act of 1992.

SPENT NUCLEAR FUEL

Spent nuclear fuels were originally expected to be part of these negotiations. However, USDOE and the regulators are still studying the application of regulations for spent fuel. USDOE on a national basis, is analyzing how it should deal with spent fuels which, with the end of the Cold War, have no identified future use.

Tri-Party Agreement

B Plant Proposal Cuts Costs

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

Comment Period Runs August 5-September 17

BACKGROUND

B Plant is one of three large processing facilities built at Hanford during World War II to separate plutonium produced in the atomic reactors along the Columbia River. The main B Plant building, called a canyon, stretches some 850 feet, and at 74 feet high, it stands taller than it is wide.

During the war years, plutonium was extracted from uranium at B Plant using the bismuth-phosphate process. Separation methods at newer facilities soon replaced B Plant's original plutonium mission. In 1968, B Plant was modified to extract, purify and encapsulate radioactive cesium and strontium present in Hanford's underground waste storage tanks. Removing these isotopes increased tank space by reducing the need to cool hot liquid wastes by dilution. The cesium and strontium capsules are now stored in a water pool in the Waste Encapsulation and Storage Facility, a newer building attached to the west end of the B Plant canyon. The WESF will continue to be an active facility.

The cesium and strontium recovery work at B Plant continued through 1985. The two missions left B Plant with a number of liquid storage tanks, pipe and pumping systems contaminated with a variety of radioactive and dangerous wastes. In addition, radioactively contaminated filters from past operations are stored there.

B PLANT TRANSITION

Ecology recently concluded negotiations with USDOE to establish a series of Tri-Party Agreement milestones to guide transition of B Plant from an inactive but expensive standby condition to a much less costly surveillance and maintenance mode by September 1999.

Currently, monitoring and maintaining the necessary safety systems requires more than 100 people and $20 million a year. By eliminating threats from tanks still holding liquids, removing or stabilizing contaminated equipment, and reducing energy needs for heating and cooling systems, annual B Plant costs are expected to be reduced to $1 to $2 million by 1999. Surveillance and maintenance staff will then be shared with other deactivated facilities.

Because B Plant will continue to contain significant quantities of radioactive and hazardous materials, the USDOE will submit a plan for managing the materials to Ecology no later than March 1999. This is reflected in the change to TPA Milestone M-20-21A, and will significantly reduce paperwork costs over the previously required permit application.

The actual facility transition schedule is in new TPA Milestone M-82, setting the September 1999 deadline for transition to surveillance and maintenance. Ten interim milestones are included. Key intermediate steps include:

- ▲ Removing chemicals from tanks, plumbing and possibly contaminated surfaces in the chemical storage area by January 1997.
- ▲ Removing organic solvent wastes from the canyon by June 1997.
- ▲ Stopping all liquid waste streams discharged to the ground by May 1998.
- ▲ De-coupling electrical, plumbing and other support systems shared with the WESF by December 1998.

USDOE hopes to complete these and other transition steps even faster, thereby further reducing non-cleanup spending. Ecology will work closely with the USDOE's transition team to ensure protection to human health and the environment as well as compliance with regulatory standards.