

# **Proposed Changes to the Tri-Party Agreement for Central Plateau Cleanup Work**

The U.S. Department of Energy (DOE), Washington State Department of Ecology (Ecology) and U.S. Environmental Protection Agency (EPA) - the Tri-Party Agreement agencies — want your input on proposed changes to the Tri-Party Agreement (TPA). These proposed changes lay the framework for a comprehensive cleanup approach for Hanford's Central Plateau.

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

# What the proposed changes mean for cleanup

- For the first time, the TPA will have milestones that integrate cleanup of Central Plateau soils, facilities and groundwater
- The TPA will include new milestones to address cleanup of the deep vadose zone (contamination deep in the soil)
- The TPA will reflect a comprehensive, geographic approach for Central Plateau cleanup

# Background

The Hanford Site, managed by DOE, produced about 60 percent of the United States' plutonium from the mid-1940s to the late-1980s to support national defense. The 586-square-mile site is located in southeastern Washington State. The Central Plateau covers approximately 75 square miles in the middle of the Hanford Site. The legacy waste and contaminated materials from the site's defense mission remain on the Central Plateau in facilities, underground tanks, waste sites, and structures.

The TPA, the legal agreement between DOE, Ecology, and EPA, identifies cleanup actions and schedules, called milestones. The TPA outlines the process for changing, removing, or adding milestones.

During the spring of 2009, the agencies held a public comment period on a series of proposed milestone changes. These milestones reflected shared priorities of the agencies, Tribal Nations, and stakeholders to focus on Columbia River Corridor and groundwater cleanup. Some of these milestones required the agencies to negotiate new schedules for specific Central Plateau cleanup work. The current proposed changes would

# PUBLIC COMMENT PERIOD

The Tri-Party Agreement agencies want your feedback on proposed Tri-Party Agreement milestone changes.

The public comment period will run from May 3 through June 17, 2010

extend schedules for this work and implement a geographic cleanup approach for the Central Plateau.

In February 2009, the TPA agencies signed an Agreement in Principle (AIP) to address integrating Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and Resource Conservation and Recovery Act of 1976 (RCRA), integrating facility disposition with the remediation of nearby waste sites, and forming a strategy for cleaning up the Central Plateau. In August 2008, the agencies also signed an AIP to address Central Plateau facility disposition.

The two AIPs agreed to discussions on:

- Comprehensive cleanup of Central Plateau waste sites, facilities, and groundwater:
- Coordination of canyon facility and associated waste site remediation; and
- A strategy for the cleanup of the Central Plateau deep vadose zone.

# The Central Plateau – a Complex Cleanup Challenge

The Central Plateau contains approximately 900 excess facilities, formerly used in the plutonium production process. These facilities include massive chemical processing buildings or



"canyons". Additionally, the Central Plateau has more than 800 waste sites, such as buried solid waste and contaminated soil. Many of these waste sites received liquids from processing operations that occurred in the 200 Area. Radioactive hazards include plutonium, uranium, cesium-137, iodine-129, and technetium-99. Chemical hazards include metals, acids, and carbon tetrachloride.

A portion of the Central Plateau is used for waste management operations that support Hanford cleanup, including low-level waste burial grounds, liquid effluent treatment and disposal facilities, double-shell tanks, the Environmental Restoration Disposal Facility, and eventually the Waste Treatment and Immobilization Plant.

# Central Plateau Cleanup Completion Strategy

The 2009 Central Plateau Cleanup Completion Strategy laid out DOE's Central Plateau cleanup vision and approach. The Strategy proposed to organize the Central Plateau into three major parts – the Inner Area, the Outer Area, and Groundwater (see text box). The Strategy provided a basis for discussions between the TPA Agencies that led to negotiations and the resulting proposed TPA changes. During the past year, DOE and the regulatory agencies participated in numerous discussions on DOE's Strategy with the Tribal Nations, the State of Oregon, the Hanford Advisory Board, and stakeholders. The agencies considered comments received during these discussions and factored them into negotiations. This resulted in a proposed change package with greater focus on deep vadose zone cleanup and plans for more operable units (groupings of waste sites) than initially outlined in DOE's Strategy.

# River Corndor (-220 sq. mi.) Hanford Reach National Monument (-290 sq. mi.) Hanford Reach National Monument (-290 sq. mi.) River (River Groundwater contaminated because of pothe Central Plate groundwater gro

Inner Area – Approximately 10 square miles in the middle of the Central Plateau, the Inner Area is where the chemical processing and waste management activities occurred. The Inner Area is envisioned to be the smallest practical final cleanup footprint where waste management and containment of residual contamination will occur. The proposed TPA changes

would include seven study areas within the Inner Area.

Outer Area – This area is greater than 65 square miles and includes much of the open area on the Central Plateau. Limited processing activity occurred in this area. Proposed changes would finalize plans for cleanup that began with the use of American Recovery & Reinvestment Act funding. It is expected that the cleanup levels in the outer area will be comparable to those being used for waste sites along the Columbia River (River Corridor)

Groundwater – Approximately 80 square miles of groundwater beneath the Hanford Site are contaminated above the drinking water standard because of past processing activities that occurred on the Central Plateau. Cleanup that started in 1995 is being expanded to contain contaminant plumes in the Central Plateau, remove contaminants, and restore groundwater to beneficial use.

# What changes are proposed?

In general, the agencies are adding new work and extending some schedules. New work includes cleanup of the canyon facilities and adjacent waste sites, and focus on deep vadose zone contamination. Schedules for soil site decision documents are delayed because of operable unit realignment, added work scope, and focus on other Hanford cleanup projects, such as completing River Corridor cleanup. With the addition of these proposed milestones, the TPA now comprehensively addresses cleanup activities on the Central Plateau. The figure below gives an overview of the proposed change package.

# Overview - Proposed TPA Changes for Comprehensive Central Plateau Cleanup Approach

### Prepare for Geographic Central Plateau Cleanup

- Realign operable units to support a geographic approach
- Add milestones to coordinate and complete cleanup of canyons and adjacent waste sites as well as other Central Plateau facilities

### Enhance Focus on Deep Vadose Zone

- Add milestones for deep vadose zone technology development
- Establish deep vadose zone operable unit
- Add milestones for completing cleanup process for deep vadose zone

### Implement Central Plateau's First Major Facility (Canyon) Record of Decision

 Add milestones to carry out the U Plant Record of Decision

### Improve Document Processes

- Support the comprehensive geographic approach by improved coordination between CERCLA and RCRA Corrective Action Documents
- Clarify timing and assign initial ROD preparation responsibility to DOE

Note: For certain operable units where the Ecology is the lead regulatory agency, the RCRA corrective measures study process will be closely coordinated with the CERCLA Remedial Investigation/Feasibility Study (RI/FS) process. However, for brevity, the CERCLA terminology will be used throughout this fact sheet to represent the phases of site investigation, alternative analysis, and proposal of preferred cleanup alternatives. See actual draft change package for a description of which operable units are involved in the close coordination between RCRA and CERCLA processes.

The following table shows the operable unit (OU) structure and proposed milestones that support the comprehensive approach.

### **Proposed Operable Units and Milestones** (Change Packages M-15-09-02, M-85-10-01, and M-37-10-01) Milestone **Operable Units** # Waste Description **Schedules** Sites Inner Area A single proposed plan will be developed based on the Spring, 2010 existing feasibility study reports from the 200-PW-1/3/6 operable units and the 200-CW-5 operable unit. The (original milestone met, 200-PW-1/3/6 and 200-CW-5 21 document revision process (plutonium-contaminated waste sites) proposed plan is expected to be submitted before the extended by mutual draft change package is finalized; therefore, there is no agreement) milestone in this change package. 200-WA-1 (200 West Inner Area) The 200-WA-1 operable unit will include the waste sites in the 200 West Inner Area except for those in the Work Plan December 31, 2011 operable units listed above. The draft change package Test Report June 30, 2012 174 includes milestones to submit a work plan and applicable Feasibility Study/Proposed Plan June 30, 2013 CERCLA analysis and decision documents. The draft TSD Closure Plans December 31, 2011 package also includes a milestone to submit TSD closure plans for TSDs in the 200-WA-1 operable unit.

# Proposed Operable Units and Milestones (continued) (Change Package M-15-09-02, M-85-10-01, and M-37-10-01)

Operable Units	Milestone Schedules	# Waste Sites	Description
200-EA-1/200-IS-1 (200 East Inner Area/Pipelines)  • 200 IS-1 Work Plan revision • 200-EA-1 Work Plan • Feasibility Study/Proposed Plan • TSD Closure Plans	<ul> <li>June 30, 2011</li> <li>December 31, 2012</li> <li>June 30, 2014</li> <li>June 30, 2014</li> </ul>	200	The 200-EA-1 operable unit will include the waste sites in the 200 East Inner Area except for those in the operable units listed above. The change package includes milestones to revise the existing 200-IS-1 work plan, submit a new work plan for the 200-EA-1 operable unit and applicable RCRA and CERCLA analysis and decision documents. Draft changes also include a milestone to submit treatment, storage and disposal (TSD) closure plans for TSDs in the 200-EA-1 operable unit.
200-DV-1 (deep vadose zone)  Test Plan  Work Plan Feasibility Study/Proposed Plan	<ul><li>December 31, 2010</li><li>September 30, 2012</li></ul> September 30, 2015	44	The new 200-DV-1 operable unit includes waste sites that have deep contaminants. A work plan will identify additional technologies that could be used for characterization, treatment, and monitoring of deep vadose zone contaminants.
Canyons & associated waste sites  • 200-CB-1 (B Plant) Work Plan • 200-CP-1 (PUREX) Work Plan • 200-CR-1 (REDOX) Work Plan	<ul><li>December 31, 2011</li><li>September 30, 2015</li><li>December 31, 2017</li></ul>	16 20 7	The B Plant, Plutonium Uranium Extraction (Plant) (PUREX), and reduction and oxidation (REDOX) canyon buildings, and nearby waste sites (including pipelines).  Note: The T Plant canyon continues to operate as part of cleanup and is not addressed in this draft change package.
Outer Area			
200-CW-1, 200-CW-3 and a new 200-OA-1 (Outer Area waste sites)  Feasibility Study/Proposed Plan TSD Closure Plans	<ul><li>April 30, 2012</li><li>June 30, 2012</li></ul>	85	The draft change package includes a milestone for completion of the Outer Area analysis and decision documents. A milestone to submit TSD closure plans for TSDs in the 200-CW-1 and 200-OA-1 operable units is also included.
Groundwater			
200-UP-1 (200 West Area Groundwater)  • Feasibility Study/Proposed Plan	• September 30, 2010	0	The TPA agencies have agreed to streamline and consolidate groundwater decisions by amending a remedy decision for the 200-UP-1 operable unit into an existing Final ROD.
200-BP-5 and 200-PO-1 (200 East Area Groundwater)  • Feasibility Study/Proposed Plan	December 31, 2012	0	The draft change package includes a milestone for a consolidated feasibility study report and proposed plan for these groundwater operable units.

The draft change package also includes a new major milestone to complete cleanup of B Plant, PUREX, and REDOX canyon buildings and nearby waste sites, and other Central Plateau facilities. The major milestone is supported by interim milestones for work plans to investigate the canyons and evaluate other facilities.

A milestone (March 31, 2018) is also included to provide engineering evaluation/cost analysis and proposed removal actions for other Central Plateau facilities not currently included in the TPA (e.g. facilities requiring CERCLA cleanup other than reactors, the Plutonium Finishing Plant, or canyon facilities).

In addition, the agencies propose a RCRA permit modification to support the proposed TPA Corrective Action Decision (CAD) CAD-ROD process changes. A public comment period on this draft permit modification (Coordinating Decision Processes for Old Disposal Sites) will run concurrent with this public comment period.

# How you can become involved

A 45-day public comment period on the *Hanford Federal Facility Agreement and Consent Order (also known as the TPA)* Change Forms Implementing Changes to Central Plateau Cleanup will run from **May 3 through June 17, 2010**. The TPA agencies would like your feedback and will consider all comments before finalizing this draft change package.

### Please submit comments by June 17, 2010 to:



Paula Call U.S. Department of Energy Richland Operations Office P.O. Box 550, A7-75 Richland. WA 99352

Email: TPACH@rl.gov

The agencies are considering the need for public meetings. For more information, call the toll-free Hanford Cleanup Line 1-800-321-2008.

This TPA Draft Change Package can be viewed on line at http://www.hanford.gov under Hanford Events Calendar.

To access the document, click on More Event Calendar.

Select any date during the May 3 to June 17 timeframe.

Click on Public Comment Period on Proposed Changes to the Tri-Party Agreement for Central Plateau Cleanup Work

# A guide to the Central Plateau TPA draft change package ...

The existing milestone language is shown with the proposed modifications marked as follows:

- New text dates, or complete milestones proposed for addition are shown with double-underlines (e.g., New text)
- Deleted text, dates, or complete milestones are shown with strikeout (e.g., Deleted text).
- Existing milestones without proposed changes are **not** shown in the draft change package.

For reference, all existing TPA milestones, as currently approved, are located in Appendix D of the TPA Action Plan, which can be found online at: <a href="http://www.hanford.gov/files.cfm/ap-App-D.pdf">http://www.hanford.gov/files.cfm/ap-App-D.pdf</a>.

The documents are also available for review at the Public Information Repositories listed below.

### HANFORD PUBLIC INFORMATION REPOSITORY LOCATIONS

### **Portland**

Portland State University Bradford Price and Millar Library 934 SW Harrison

Attn: Claudia Weston (503) 725-4542 Map: http://www.pdx.edu/map.html

### Richland

U.S. Department of Energy Public Reading Room Washington State University, Tri-Cities Consolidated Information Center, Room 101-L 2770 University Drive

Attn: Janice Parthree (509) 372-7443 Map: http://tinyurl.com/2axam2

### Seattle

University of Washington Suzallo Library Government Publications Division Attn: David Maack (206) 543-4664 Map: http://tinyurl.com/m8ebj

### **Spokane**

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Attn: Linda Pierce (509) 323-3834 Map: http://tinyurl.com/2c6bpm

Administrative Record and Public Information Repository: **Address**: 2440 Stevens Center Place, Room 1101, Richland, WA.

**Phone:** 509-376-2530

Web site address: http://www2.hanford.gov/arpir/

### **Fact Sheet**

Department of Energy P.O. 550 MSIN A7-75 Richland, WA, 99352

