

# Hanford Update

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

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## Offsite Shipments of Waste to Hanford on Hold



U.S. Department of Energy (DOE) and Washington State have agreed to enter into a settlement agreement to resolve the State Department of Ecology's (Ecology) concerns with the groundwater analysis in the Hanford Site Solid Waste EIS (HSW EIS) and to provide an approach to analyze waste management at the Hanford Site.

DOE Secretary of Energy Samuel Bodman announced on Monday, January 9, 2006, that DOE and Ecology have entered into a settlement agreement that will lead to a final order and the dismissal of the challenge to HSW EIS in the lawsuit *Washington v. Bodman*. The agreement includes a commitment by DOE to prepare an expanded Tank Closure EIS that will include

assessment of some of the waste management issues contained in the HSW EIS. The settlement delays importation of the four categories of radioactive and hazardous waste (low-level waste, mixed low-level waste, transuranic waste, and mixed transuranic waste) to Hanford until additional reviews are completed.

In 2003, Ecology filed a lawsuit challenging a decision by DOE to bring transuranic and mixed transuranic waste from off-site nuclear defense and research activities to Hanford for interim storage. Based on the state's motion, the federal district court issued a preliminary injunction prohibiting DOE from making further shipments.

In 2004, DOE issued the HSW EIS, which evaluated potential environmental impacts of the storage, treatment, and disposal of low-level, mixed-low level, and transuranic waste at the Hanford Site. At this time, the state amended its complaint to also challenge the delivery of low-level and mixed low-level waste to Hanford for permanent disposal. The state argued that the HSW EIS was inadequate and groundwater modeling in the document was unreliable for making waste management decisions. The federal court issued another injunction against shipments of these waste types to allow the state a chance to gather additional information about the HSW EIS.

In responding to the state's request for information, DOE discovered discrepancies in its HSW EIS. This led the parties to begin settlement discussions. Under

the settlement, DOE will not rely on its current solid waste EIS to make decisions regarding disposal of the waste identified in the lawsuits.

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“With this agreement, both parties will be able to shift their focus and resources away from litigation and toward partnership and our shared cleanup goals.”

*Secretary of Energy Samuel Bodman*

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Instead, the settlement calls for developing an EIS that contains a comprehensive groundwater analysis that examines both the closure of Hanford’s single shell tanks and the management of other wastes at Hanford, including the disposal of low level radioactive and mixed hazardous wastes.

Under the settlement, DOE and the State of Washington agree that:

- DOE will prepare a new, expanded, comprehensive EIS that will combine the scope of the 2004 Solid Waste EIS and the ongoing Tank Closure EIS;
- The State of Washington will have a significant role in establishing key analytic parameters for the new EIS, resolving issues, participating in reviews, and giving overall input as a cooperating agency;
- DOE will not import waste from other sites pending the completion of the new, comprehensive EIS, except in certain limited instances to which the State has previously agreed. The exceptions are listed in the Settlement Agreement;
- The current Solid Waste EIS will remain in place to ensure that ongoing cleanup operations continue. When completed, the new EIS will replace the existing Solid Waste EIS.

An opportunity for public review, comment, and participation in the additional analysis will be made

available. A Notice of Intent will be issued to the public to announce the expansion of the Tank Closure EIS. This expanded EIS will be called the Tank Closure & Waste Management EIS (TC&WM EIS). The Notice of Intent will initiate a public scoping period, during which DOE, in consultation with Ecology, will hold public meetings and seek public comment. The comments will be considered in the preparation of the final TC&WM EIS.

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“I’m very pleased the Department of Energy has agreed to re-examine the impacts of waste disposal at Hanford so we have greater confidence that future waste disposal will not increase the threat to the Columbia River.”

*Ecology Director Jay Manning*

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## CERCLA 2006 Five-Year Review Update

The U.S. Department of Energy (DOE) held a public workshop on December 7, 2005, to provide information and obtain feedback on the second Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review being conducted at the Hanford Site. More than 80 participants gathered to discuss the parameters required to assess protectiveness with DOE, Department of Ecology, and U.S. Environmental Protection Agency representatives.

Information from the workshop was captured and is available on the CERCLA webpage, which can be accessed from the Hanford website at <http://www.hanford.gov>, under Public Involvement.

DOE is reviewing the input from the workshop to determine if issues identified are included in the review. As this information is generated it will be made available on the website. A formal public comment period will be held in the February/March 2006 timeframe. The final report is expected to be issued in April 2006. For more information contact Cliff Clark at 509.376.9333.

## Public Comment Periods Tell us what you think!

A comment period on the 324 Closure Plan and the associated changes to the M-89-00 milestone will run concurrently from January 17 through March 20, 2006.

The Tri-Party Agreement (TPA) agencies – U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology – want your feedback on the proposed changes to the TPA M-89-00 milestone.

The Washington State Department of Ecology (Ecology) welcomes comments on the Amended 324 Building Closure Plan for the Radiochemical Engineering Cells, High-Level Vault, Low-Level Vault and other areas of the facility.

Ecology will collect comments on the 324 Closure Plan documents, and DOE will collect comments on the Change Package. We will consider all comments before the documents are finalized. No public meeting for either decision is scheduled at this time. To schedule a public meeting contact the appropriate agency. For more information contact us through the Hanford Cleanup Line at 800.321.2008.

During the comment period, the draft closure plan and associated documents are available for public review Monday – Friday, 9 a.m. – 12 p.m. and 1 p.m. – 4 p.m., at the Department of Ecology Nuclear Waste Program Library, located at 3100 Port of Benton Blvd, Richland, Washington. To make an appointment to review the documents call 509.372.7920.

Visit <http://www.hanford.gov/public/calendar>, under the Public Comments section, or visit <http://www.ecy.wa.gov/programs/nwp/commentperiods.htm> for more information on the comment periods.

To request a hard copy or CD of the Closure Plan and/or proposed TPA Milestone changes call the Hanford Cleanup Line 800.321.2008.

Send comments to:

### For the Amended 324 Building Closure Plan:

Jeanne Wallace  
Washington State Dept. of Ecology  
3100 Port of Benton Blvd.  
Richland, WA 99354  
[jewa461@ecy.wa.gov](mailto:jewa461@ecy.wa.gov)

### For the M-89-00 Change Package:

Rudy Guercia, USDOE  
PO Box 550, MS A3-04  
Richland, WA 99352  
[Rudolph\\_F\\_Rudy\\_Guercia@RL.gov](mailto:Rudolph_F_Rudy_Guercia@RL.gov)

## State of the Site, Seattle



*Russell Jim, Manager of the Yakama Nation Environmental Restoration/Waste Management Program speaks at the State of the Site in Seattle.*

The last State of the Site for 2005 took place in Seattle, Washington. More than 150 members of the public attended the meeting to listen to current priorities at Hanford, talk about their own concerns, and learn about the past year's activities and successes. For the first time this year, agencies hosted an open house before the meeting to provide an avenue for discussion and education about Hanford. Major topics covered at the Seattle meeting were tank waste, groundwater, offsite waste, Waste Treatment Plant, and funding.

## Hanford Advisory Board Update

by Todd Martin, Chair



*Treatment of radioactive sludge retrieved from the north loadout pit of the K Basins.*

In February, the Hanford Advisory Board will begin work on one of the most difficult pieces of work it will tackle in 2006—cleanup priorities. On the surface, this work does not appear new or particularly challenging for the Board. The Board's eleven-year body of work is rooted in the Tri-Party Agreement and has provided priority input to the agencies on the relative importance of each of Hanford's individual cleanup projects. This year, however, several developments have changed the context of these priority discussions.

In the past, the Board has provided input on clean up priorities that, in a nutshell, added up to this: resources should be focused on reducing urgent risks first and protecting the river. This input resulted in the current cleanup approach that has experienced success in cleaning up waste sites along the river, removing spent fuel from the K Basins, and initiating construction of the Waste Treatment Plant (WTP).

The current cleanup approach is based on two important assumptions: (1) Hanford will receive sufficient budget each year for each project; and (2) each project will experience progress consistent with its projected cost and schedule. Currently, both of these assumptions are on shaky ground.

On one hand, Hanford's budget has been cut significantly. On the other, two of Hanford's largest

cleanup projects are to take longer and will cost more to complete. The K Basins project is currently focused on removing radioactive sludge from the old spent nuclear fuel storage basins. This project has been delayed.

The cornerstone of Hanford cleanup is the WTP. It is being constructed to immobilize Hanford's 53 million gallons of high level tank waste. The cost of construction of the WTP and safely storing the tank waste is about half of Hanford's total budget. Current reports show the WTP could cost billions of dollars more and be delayed by several years.

The cleanup depends on the successful construction and operation of the WTP in several ways. Most important is the difficult, expensive job of retrieving, treating, and disposing of Hanford's high level tank waste. Waste is currently being moved from the older single shell tanks into the newer double shell tanks. The double shell tank system, however, is almost full. The WTP will treat waste from the double shell tanks allowing the single shell tank retrieval program to continue. Without an operating WTP, single shell tank retrieval will have to stop, increasing the potential for tank failure resulting in more waste leaking out or new, expensive double shell tanks will have to be constructed. Lastly, more money and time spent on the WTP means less money and time for other cleanup projects.

With these significant changes in the landscape, the Hanford community has to wrestle with priority decisions almost as though the cleanup is starting over at square one. Given the circumstances, what is the best overall strategy for maintaining cleanup progress? Should some projects be delayed? Should some be expedited? Should some cleanup projects continue at the expense of others?

This work will challenge the Board. But given the individual and collective passion for the overall cleanup as well as many of the individual projects, hopefully the Board will rise to the occasion and provide the agencies with guidance for making the difficult priority decisions over the next year.

## Milestone M-46-21 Completed Early

The Department of Energy – Office of River Protection (DOE-ORP) completed the Tri-Party Agreement (TPA) Milestone M-46-21 – Complete Implementation of Double Shell Tank Space Optimization Study Recommendations – on December 15, 2005. The results were transmitted to the Washington State Department of Ecology (Ecology) sixteen days early.



Tank S-102

DOE-ORP and Ecology developed a study to make additional double shell tank space available to support continued single shell tank waste retrievals. Milestone M-46-21 took the suggestions from the study and successfully optimized double shell tank space by creating enough space to accommodate approximately 4.5 million gallons of retrieved single shell tank waste from S-112, S-102 and 16 C Farm Tanks.

Three primary options are identified in the original study and are being implemented.

1. Raise the fill height in eight double shell tanks in the AP Farm.
2. Raise specific gravity to evaporate more water out of the waste while processing waste through the evaporator system thus reducing the space that the spare water was taking in the double shell tank.
3. Reduce the emergency dedicated operational tank space by consolidating space needed for emergency returns to the tank farms.

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“This is absolutely a win-win achievement for DOE and the State because it supports continuation of our single shell tank waste retrievals.”

*Asst. Mgr. for Tank Farm Operations Zack Smith*

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In addition, certain waste feeds going to the Waste Treatment and Immobilization Plant (WTP) were “restricted,” these wastes could not be consolidated to make space in the tanks. By following a process to evaluate and approve changes, DOE-ORP has identified two double shell tanks within the AP Farm that can be consolidated to allow space saving measures to be implemented without adversely affecting the WTP.

## DOE RL Announces K-Basin Closure Project Director

The Department of Energy-Richland Operations Office (DOE-RL) announced the appointment of David Brockman to the position of Federal Project Director for the K-Basins Closure Project. Brockman has 35 years of nuclear operations and project experience.

Brockman joins the DOE-RL Team from Science Applications International Corporation (SAIC) where he was the Vice President and Division Manager located in SAIC’s Richland office. Not new to DOE, Brockman held multiple assignments with DOE at the Rocky Flats Field Office in Denver, Colorado, including Assistant Manager for Strategy Integration and Guidance; Director/Special Assistant to the Resumption Manager; and the DOE Headquarters Environmental Safety and Health Site Representative at Rocky Flats. Brockman came to DOE from the United States Navy where he worked in several naval shipyards.

Brockman holds a bachelor of science degree from Oregon State University. He is a Washington native and resides in Richland with his wife Cheryl.

## Waste Treatment and Immobilization Plant Update



*Low-Activity Waste Facility*

The Hanford Waste Treatment and Immobilization Plant (WTP) continues forward with design and construction and remains among the highest priorities within the Department of Energy (DOE). The Fiscal Year (FY) 2006 funding, though lower than requested, will keep the project moving forward.

The Low-Activity Waste Facility, the Analytical Laboratory, and Balance of Plant Facilities will be the focus of construction activities in FY 2006. While work on the Pretreatment and High-Level Waste Facilities has been significantly reduced due to technical and funding issues, construction is expected to ramp back up the last quarter of FY 2006 or the first quarter of FY 2007.

On April 22, 2005, the DOE received a revised Project Estimate at Completion (EAC) from Bechtel National, Inc. (BNI). DOE's internal review of the BNI report concluded that the information provided did not allow the Department to sufficiently and properly determine the accuracy and viability of this project estimate. Thus DOE commissioned an independent review by the United States Army Corps of Engineers (USACE). The USACE report similarly concluded that the information provided by BNI on April 22, 2005,

lacked sufficient detail needed to validate the proposed cost and schedule.

In order to provide the best and most accurate information to Congress, the State of Washington, and other interested parties, DOE directed BNI to prepare a more detailed and updated EAC. BNI submitted the revised 2005 EAC for the WTP on December 22, 2005, reflecting a constrained funding scenario of \$626 million for FY 2006 and \$690 million, thereafter. The EAC is a comprehensive "bottoms up" cost and schedule estimate and a single set contains 49 volumes in 87 separate binders.

The USACE is performing an external independent review of the EAC scope, cost, and schedule with a status report due mid-March and the final report due June 20, 2006. Both documents will be released to the public.

In addition, DOE required BNI to conduct, utilizing the industry's most qualified people both within and external to BNI: 1) a comprehensive review and analysis of the technical baseline focusing on the functionality of WTP process systems; and 2) a comprehensive review and analysis of the cost and schedule baseline. Both reviews are scheduled to be complete the end of February 2006.

Changes to the EAC to incorporate the lower FY 2006 funding (approximately \$520 million versus the requested \$626 million) and comments received from BNI's technical and cost/schedule reviews will be submitted to DOE by May 31, 2006.



*Aerial view of the Waste Treatment and Immobilization Plant*

## Ecology Hires Nuclear Waste Program Manager



*Jane Hedges, Nuclear Waste Program Manager*

Ecology is pleased to introduce Jane Hedges as our Nuclear Waste Program Manager. Jane has been with the Nuclear Waste Program since 1999 as the Cleanup Section Manager. She started her new position as program manager at the beginning of January and is enthusiastically and successfully taking on her new role.

Prior to coming to Ecology, Jane worked for two years in environmental and public health consulting and twenty years in county health departments in Thurston, Tacoma-Pierce, and Chelan-Douglas Counties in Washington and in Berrien County in Michigan. Jane graduated from Washington State University with a bachelors of science degree in environmental health, specializing in bacteriology and public health.

“Over the next several months I will be trying to meet with as many stakeholders as possible to gain insight, learn from their experience, and discuss future activities for the Nuclear Waste Program. I look forward to meeting you.”

Ecology is very excited that Jane has accepted the challenge of leading the Nuclear Waste Program in carrying out Washington State’s critical role in

cleaning up the Hanford Site and ensuring the safe management of nuclear waste in the state. The office of the program manager is now based in Richland. It is enjoyable having Jane in the Richland office on a daily basis. Her presence will be fundamental to Ecology’s success in the coming years.

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“I operate on an open door policy - your input is welcome at all times.”

*Nuclear Waste Program Manager Jane Hedges*

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Ecology extends our thanks and appreciation to Mike Wilson for his ten years of program leadership. Mike has entered into his new role in the program and is focusing his efforts at the national level and with other states.

## RCRA Permit Mods

The Department of Energy transmitted Class 1 modifications to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the period through December 30, 2005, to State of Washington, Department of Ecology (Ecology). Pursuant to WAC 173-303-830(4)(a)(i)(B), the Permittees of the Hanford Facility RCRA Permit are providing notice. Hanford Facility RCRA Permit Condition I.C.3 allows for quarterly notification of Class 1 modifications to be made to Ecology. Contact Greta Davis, Ecology at 509.372.7894 for further information about the Class 1 modifications.

### Corrections

Fall 2005: Look Back on the 2005 State of the Site Meetings

The postal mailed version of the newsletter stated in error that “About 30 individuals complained that the contractor in charge of DOE health coverage, AdvanceMed, was denying payment of medical costs that were related to contact with Beryllium.”

This should state: “About 30 individuals complained that the Hanford site worker Workers Compensation Program was denying payment of medical costs that were related to contact with Beryllium.”

# Hanford Update

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The Hanford Update newsletter provides general information about Tri-Party Agreement cleanup and compliance activities. It also contains information on public meetings, workshops, and other opportunities to participate in Hanford Site decisions. The newsletter is available on the Internet at [www.hanford.gov/tpa/updates.html](http://www.hanford.gov/tpa/updates.html).

## Comment Periods & Hanford Happenings

Jan. 17 - Mar. 20, 2006: Proposed Amended 324 Building Closure Plan Comment Period

Jan. 17 - Mar. 20, 2006: Changes to the M-89-00 Tri-Party Agreement Milestone Comment Period

Feb. 1, 2006: Public Involvement Committee, TPA Public Involvement Strategy planning.  
Call: Hanford Operator at 509.376.7411 or 800.664.0771, ext 0

Feb. 2-3, 2006: Hanford Advisory Board meeting, Richland, WA. Contact: Erik Olds, 509.372.8656

April 6-7, 2006: Hanford Advisory Board meeting, Mission, OR. Contact: Erik Olds, 509.372.8656



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# Hanford Cleanup Line: 1.800.321.2008

Winter 2006



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