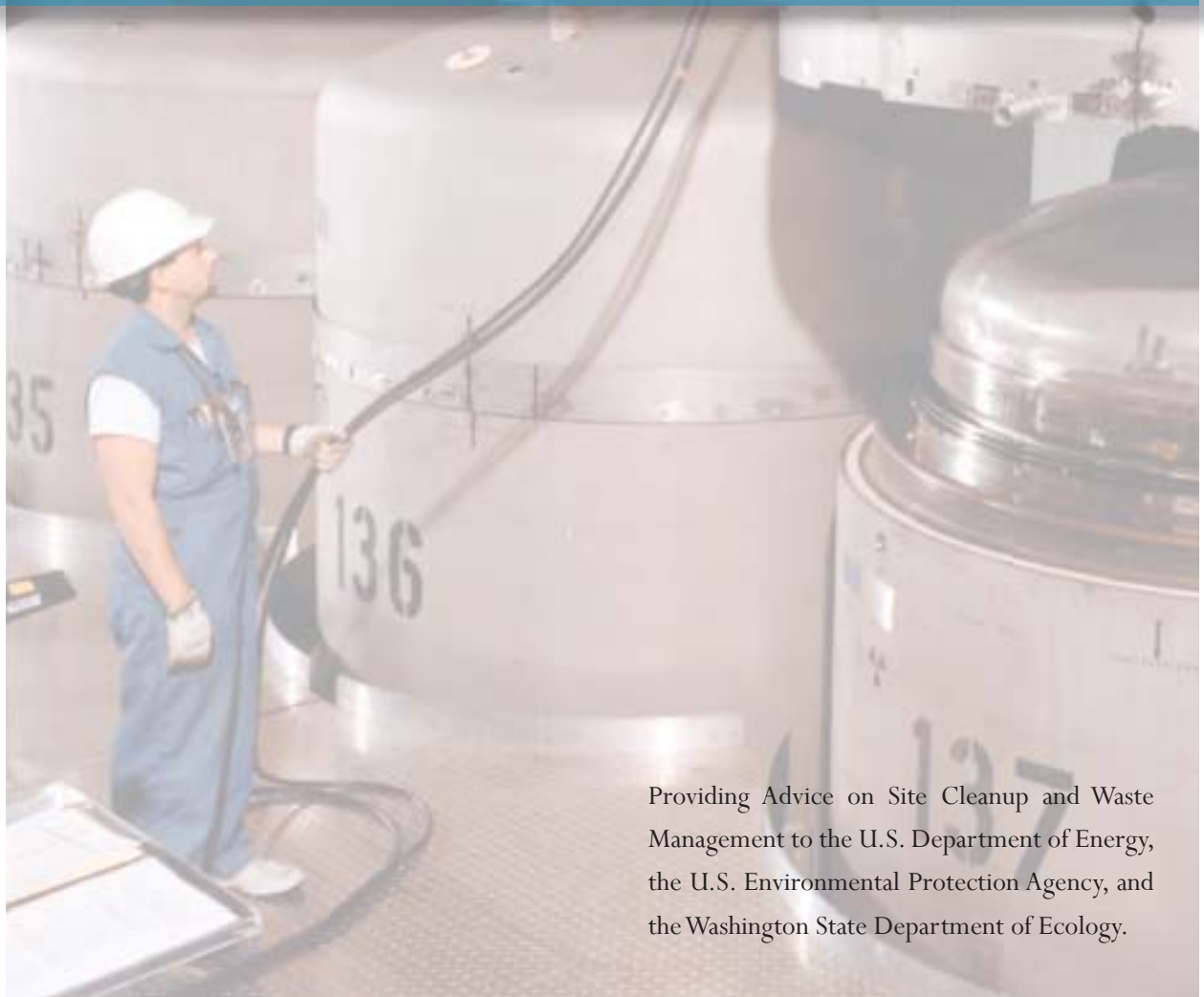


HAB 10th Anniversary

Hanford Advisory Board

2004 Annual Report
10th Anniversary



Providing Advice on Site Cleanup and Waste Management to the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology.

Mission Statement

The Hanford Advisory Board is an independent, non-partisan, and broadly representative body consisting of a balanced mix of the diverse interests that are affected by Hanford cleanup issues. The primary mission of the Board is to provide informed recommendations and advice to the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology on selected major policy issues related to the cleanup of the Hanford site. Through its open public meetings, advice on agency public involvement activities, and the responsibilities of Board members to communicate with their constituencies, the Board is chartered to assist the broader public in becoming more informed and meaningfully involved in Hanford cleanup decisions.

On the Cover
Celebrating 10 years: former Board Chair,
Marilyn Reeves, and current Chair, Todd Martin

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Message from the Chair



B-Reactor

Ten Years of the Hanford Advisory Board

The Chair's message this year might be a bit more personal than in the past—it may actually be a bit more personal than is appropriate. But this Board is blessed or cursed (or a little of both) to have a chair who was present at both the creation and tenth anniversary of the Board. Looking back to that first meeting in 1994, it truly is remarkable to say: In 2004, the Hanford Advisory Board celebrated its tenth anniversary.

Before the Hanford Advisory Board and its predecessors (the Future Site Uses Working Group and the Tank Waste Task Force) existed, consideration of Hanford issues resembled a barfight, not a deliberative decision-making process. Every issue was plagued with conflict and rarely led to resolution.

This conflict led to intense distrust and, in some instances, personal dislike among Hanford stakeholders. Whether one agreed with a statement was based on who made the statement, not what was said.

Ultimately, the Hanford community was self-defeating—unable to accomplish the goals of individual constituencies and unable to identify and accomplish mutually beneficial goals.

In this environment, the Board was created to accomplish the unthinkable: Gather thirty-odd constituencies in a room (have I mentioned that some of these people detested each other?) and ask them to come to consensus on the most controversial cleanup issues of the day. Many, including some Board members, were certain the Board wouldn't see its first anniversary.

Looking back is not easy. Time tends to soften the edges of events. Our frail human memories skew those events or forget them altogether. This is just human nature. But looking back at some of the Board's specific low-points demonstrates the amazing growth we've experienced as a community. In the early years, I remember Board members organizing a walk-out during a Board meeting to prevent action on an issue; a board member staging a mock takeover of a Board meeting and calling it a 'terrorist attack'; and agency officials engaging in top-of-the-lungs shouting matches on Board conference calls. I remember Board members blocking consensus on issues that had nothing to do with the advice under consideration and a Board Chair who resigned half-way through a Board meeting.

These events are all unthinkable today. We have matured into a community that is a repository for the breadth and depth of opinions to be aired, discussed and resolved. Through the dedication of board members and the support of the agencies, the Board ensures a balanced review and discussion of Hanford issues. Productive conflict has its place in our processes. But the vitriol of the Board's early years has faded into distant memories.

2004 In Review

In conjunction with the agencies, the Board develops a work plan every year outlining the Board's priority issues for the upcoming year. Given the unpredictability of all things Hanford, the Board's priority list is partially guesswork. In our best years, we accurately outline about half of the Board's issues.

In 2004, our issue prediction rate was less than half. Even for Hanford, 2004 was an unpredictable year. The large issues the Board and agencies expected to materialize did not; and other issues seemed to come at the Board out of nowhere. As a result, the Board commented on:

- Tri-Party Agreement (TPA) requirements for characterization, retrieval and treatment of buried waste.
- Ensuring the TPA requires a process by which the public and regulators can provide input on Hanford budget priorities.
- The development of a process to focus attention on identifying and evaluating new technologies for Hanford cleanup.
- Maintaining an aggressive groundwater cleanup program.
- Unrestricted use cleanup standards for the River Corridor.
- Maintaining responsible pension and benefit packages in current and future Hanford contracts.
- DOE requesting sufficient funding for all TPA activities.
- Agency outreach to diverse communities.
- Technical assistance for Board review of Hanford risk assessments.
- Development of comprehensive risk analysis incorporating all of Hanford's waste streams.
- The uniform implementation of 'stop work authority' throughout worker categories and subcontractors.
- Agency cooperation during TPA negotiations.
- Risk Based End States and the Hanford Interagency Management Integration Teams (IAMIT) End State process.

The above work (detailed in the Board Work section beginning on page 13 of this report) is important and substantial. But this year's record lacks the overarching thread, the theme leading to a vision of Hanford cleanup's future.

This is because 2004's fragmented issues did not play to the Board's strengths. The Board is strongest when it focuses its energy on outlining values, principles, and strategic priorities that guide decision-making during the decision-making phase of cleanup. Many of Hanford's current successes—retrieval of K Basin spent fuel, cleanup along the Columbia River, and construction of the Waste Treatment Plant—were born of early Board values.

The Board has been less successful when offering input on the 'fine tuning' of decisions that have already been made, unless a mid-course correction in a cleanup activity represents a fundamental change in direction.

The Board and agencies expected two major strategic remedial decision-making issues in 2004: (1) how to determine a high level waste tank has been sufficiently emptied and can ultimately be 'closed'; and, (2) development of strategies to cleanup the Central Plateau with its multitude of challenging waste sites.

Neither of these issues materialized. The Environmental Impact Statement on Tank Closure has been significantly delayed. And the agencies have struggled to develop the Central Plateau strategy. With these two major items delayed, the Board moved forward without large, strategic issues it planned to sink its teeth into.

Looking forward to 2005, the Board has decided to take on the strategies for cleaning up the Central Plateau as its primary theme. This is an acknowledgement of the existing efforts of the agencies and the importance of the many decisions that need to be made in the Central Plateau.

In its first decade, the Board played an active role in many of Hanford's current successes. Moving into its second decade, the cleanup issues facing the Board are no less challenging than those it faced in 1994. In contrast to 1994, however, the Board's position as the forum for broad dialogue and informed stakeholder advice is secure and respected.

– Todd Martin



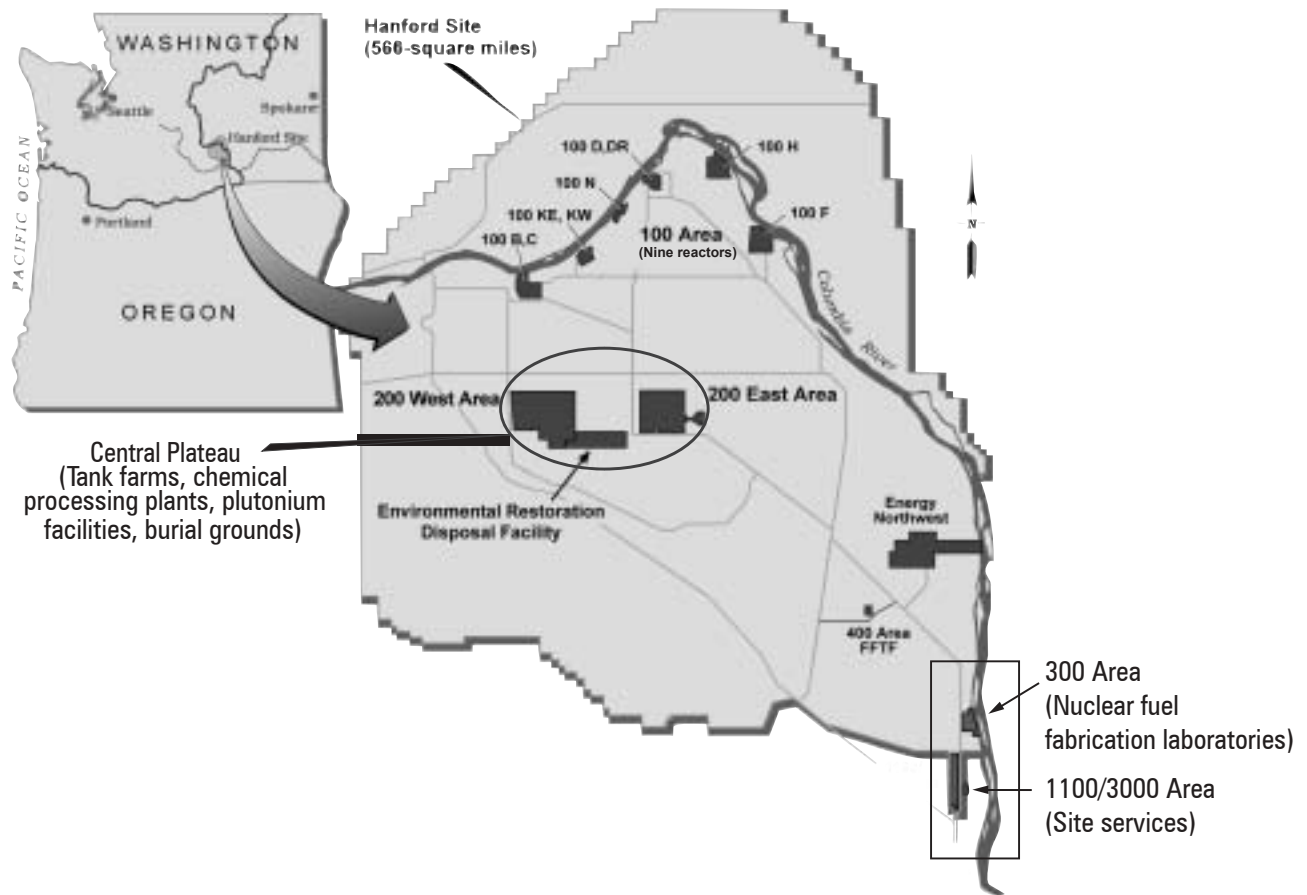
2004 Leadership Retreat



Retrieval of post-1970 suspect transuranic (TRU) waste



River and Plateau Committee Tour



History of Hanford

The 586-square mile Hanford Nuclear Site was the first and primary plutonium production facility for the United States' nuclear weapons program. The site, which began operations in 1944, includes nine production reactors, five chemical separations plants, plutonium processing facilities, and 177 underground high-level nuclear waste tanks containing 53 million gallons of highly radioactive waste and 190 million curies of radioactivity. Between the start of operations in 1944 and the shutdown of the last reactor in the late 1980's, Hanford produced over two thirds of the nation's estimated 111 metric tons of plutonium.

The production of plutonium generated large amounts of radioactive and chemically hazardous wastes. Hanford has 60 percent of the volume of the nation's military high-level radioactive wastes and over 1,400 waste sites containing liquid and solid waste.

Currently, Hanford is the world's largest environmental cleanup project. The shift in mission from operations to cleanup became complete in 1989 when the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology) signed the landmark Hanford Federal Facility Agreement and Consent Order, commonly known as the Tri-Party Agreement or TPA. The TPA outlines legally enforceable milestones for Hanford cleanup over the next several decades.

DOE's Richland Operations Office (DOE-RL) is responsible for environmental restoration and waste management activities at Hanford. DOE's Office of River Protection (DOE-ORP) was established by Congress in 1998 to manage the complex project of retrieval, treatment, and disposal of Hanford tank wastes.

The Hanford Advisory Board



Construction workers at one of eight mess halls

The Hanford Advisory Board

In addition to the cleanup milestones, the TPA contains a Community Relations Plan outlining public participation processes designed to ensure the agencies include the public as partners in Hanford cleanup decisions.

Under the Federal Advisory Committee Act of 1972, DOE chartered the Hanford Advisory Board in 1994. The Board brought together diverse local and regional interests to tackle the difficult issues associated with cleaning up the legacy of radioactive and chemical wastes left from 50 years of weapons production. The 31 seats on the Board include interests from the economic, environmental, tribal, public interest, local government, university, and health and safety communities. At Board and committee meetings, the Board works to define significant issues meriting public input and provide meaningful advice to the agencies on Hanford cleanup. Operating by consensus, the Board has produced over 160 individual pieces of advice in its ten-year history.

This tenth progress report of the Hanford Advisory Board highlights the work done in calendar year 2004 and outlines the issues the Board will focus on in 2005.



Loading of a Transuranic Packaging Transporter (TRUPACT) for shipment to the Waste Isolation Pilot Plant

Board Work 2004

As in previous years, the Board worked hard in 2004 to maximize its effectiveness. A number of creative mechanisms were used to tackle complex cleanup issues. In addition to traditional committee meetings “Committees of the Whole” were held several times during the year. Committees of the Whole are committee meetings that acknowledge the cross-cutting nature of large, overarching cleanup issues. At a Committee of the Whole, members of all the Board’s committees are present to ensure a focused, single-point consideration of priority issues.

Hands-on workshops at Board meetings focused on in-depth education. In the workshops, Board members met in small groups and interacted with agency project staff on issues such as accelerated cleanup, risk assessments, and the assumptions underlying decisions being made on the Central Plateau.

The Board also took advantage of its “sounding board” process several times during the year. Sounding boards provide each seat on the Board an opportunity to comment on an issue without the expectation of negotiating for consensus. Sounding boards are useful in identifying trends and determining the Board’s ‘next steps’ on difficult issues.

Committee Meetings

The Board has five standing committees: two technical committees charged with synthesizing the vast array of information about ongoing and planned cleanup work, and three cross-site committees whose role is to track broader, sitewide issues for Board consideration. Often, this arrangement is well served by joint committee meetings, and in 2004, all five committees participated in joint meetings at points throughout the year.

Issue managers on each committee are assigned the task of working with DOE liaisons and project managers to frame topics for committee discussions before going before the full Board. The committees are also responsible for reaching consensus on advice language and principles prior to Board discussions. This process ensures broad participation in advice development and makes best use of the Board's limited time.

River and Plateau Committee

Still the busiest of the Board's committees, the River and Plateau Committee tackled an array of issues in 2004. New topics coming to the committee's attention included planning documents such as the Central Plateau Optimization Strategy, U Plant Zone Closure Plan, and 300 Area risk assessments. (See map on page 8.) The committee also tracked ongoing work, looking carefully at implications for decisions from the Final Hanford Solid Waste Environmental Impact Statement (HSW-EIS), changes to cleanup plans at the K Basins, groundwater protection issues, and Risk-Based End States (RBES), taking a lead role in preparing the Board's response to RBES activities.

Tank Waste Committee

The Tank Waste Committee tracked the plans for tank waste retrieval, treatment, and disposal. More specific issues included discussions on tank closure following the retrieval of tank C-106; technical challenges at the Waste Treatment Plant (WTP); and plans for testing bulk vitrification as a supplemental tank waste treatment technology. The committee also focused on how WTP waste streams might affect other cleanup projects at Hanford. For the second August in a row, the committee toured the WTP construction site and saw firsthand the progress toward constructing this long-awaited facility.

Committee of the Whole

End States was a major focus for Board work in 2004, beginning with a Committee of the Whole in May to discuss activities related to the DOE Risk-Based End States initiative. At that meeting, Board members gave input to the agencies on a series of public workshops. As a result of the Board's suggestions, the workshop agendas broadened the discussion to include public values and agency expectations on end states in general across the site.

A second Committee of the Whole convened in October to frame the technical issues Board members need to understand in order to articulate the Board's values and principles for Central Plateau cleanup decision-making. Those values will become clear as the Board goes through questions such as: What are the drivers for decisions? How much uncertainty can we live with in terms of knowing about waste streams and plans for them? How should resources be allocated to deal with the risks on site? The Board articulated a basic bias for action—remove, treat, dispose—but the continued development of such principles will be a key focus of the Board in 2005. (See page 31.)

Budgets and Contracts Committee

The Budgets and Contracts Committee continued to monitor the state of Hanford funding and contracting and looked at the budget implications of technical decisions, such as the M-45 change package. The committee also continued to voice the Board's belief in the importance of stakeholder participation in near- and long-term Hanford budget planning.

Public Involvement and Communication Committee

The Public Involvement and Communication Committee concentrates its efforts on the public's participation in Hanford cleanup decisions. The committee authored advice recommending agency outreach to diverse populations and plans for the end states workshops. The committee also began work on a fact sheet summarizing the Board's advice on tank waste cleanup to help inform the public during review of the impending Tank Closure EIS.

Health, Safety, and Environmental Protection Committee

The Health, Safety, and Environmental Protection Committee continued its focus on the use of the Integrated Safety Management System (ISMS) across

Waste Treatment Plant Construction Site,
August 2004



Pretreatment Facility



High-Level Waste Facility



Low-Activity Waste Facility

the site. The committee kept track of specific ongoing safety issues within ISMS implementation, such as vapor exposure in the tank farms, as well as broader safety topics such as the new site medical contractor, workers' stop-work authority, and the role of safety in DOE contracting.

Board Leadership

In early May, Board leadership held a retreat to discuss priorities for the coming year. It was at this retreat that articulating Board values and principles for Central Plateau cleanup decisions was agreed to as a significant Board focus for 2005. Board and committee chairs and vice-chairs committed to a new level of cooperation in managing Board activities to allow work on this important topic to come to fruition.

Workshops

Board members participated in the planning and execution of the agencies' end states workshops on the 100 and 200 Areas, lending personal perspectives to public discussions about what the site should look like when DOE's cleanup mission is completed. Correspondence to DOE clearly defined the Board's role in the workshops and established the difference between DOE's RBES process and the broader end states discussions held at the workshops.

The Board also hosted the national Site Specific Advisory Board chairs meeting in October and gave representatives from DOE sites around the country insight into the many challenges faced at Hanford.

The Board said goodbye to...

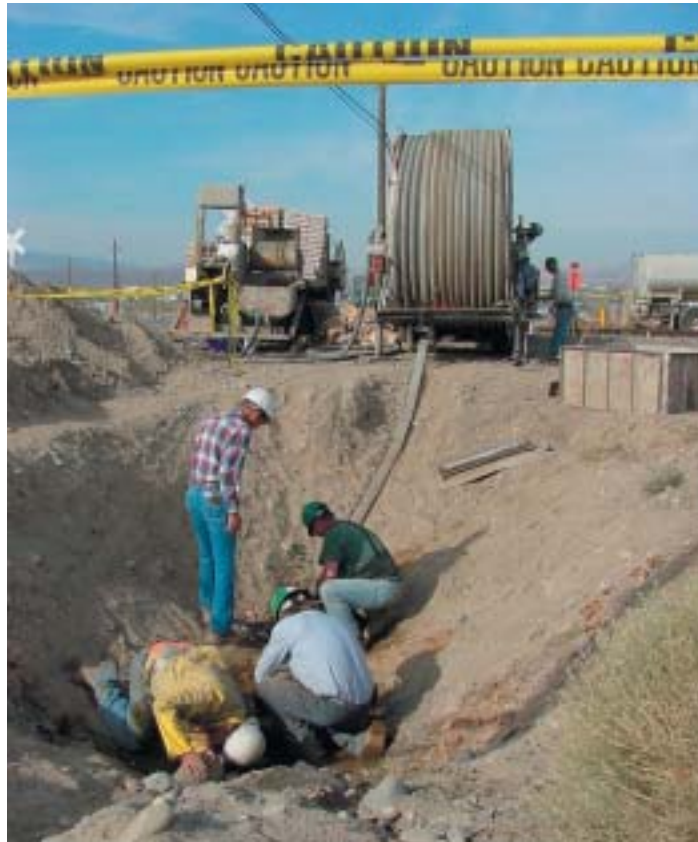
In September, the Board reluctantly bid farewell to founding father and tireless advocate Max Power of Ecology. Max was one of the original champions of the Board's formation, taking on the challenge of advising the Board in its early years and guiding it toward its current success as a regional forum for meaningful public involvement in Hanford decisions. Max retires to the Oregon Coast with his wife, a new clam shovel, and the heartfelt thanks of every member of the Hanford community.



Board Advice 2004

Board meetings are structured to provide members with information and opportunities to ask questions about key Hanford activities prior to the consensus building that culminates in Board advice to the agencies. Board advice outlines the Board's position on a particular policy issue and recommends action on the part of one or more of the TPA agencies. Board advice represents a consensus of the interests represented in the Board's seats. In five meetings in 2004, the Board produced 14 pieces of advice in response to the activities at Hanford. The Board commented on plans and documents specifically related to cleanup, such as the Tank Closure and Final Hanford Solid Waste Environmental Impact Statements; in addition to comments on broader subjects, such as public involvement and worker issues.

An index of and links to all of the Board's advice and agency responses can be found on the Board's website at: <http://www.hanford.gov/public/boards/hab/>



Mortar-lining of degraded water lines protects groundwater by stopping leaks from aging water lines



Spent fuel in multi-canister overpack being dried at Cold Vacuum Drying Facility

Board Advice 2004

Advice #154
M-91 Change Package

Advice #155
Public and Regulatory Review
and Input to Baselines

Advice #156
Site Technology Coordination
Group

Advice #157
Final Hanford Solid Waste
Environmental Impact Statement

Advice #158
300 Area Explanation of
Significant Difference

Advice #159
Pensions and Benefits Plans

Advice #160
2005-2007 Budget

Advice #161
Diversity Outreach

Advice #162
Request for Technical Assistance

Advice #163
K-Basins Change Package

Advice #164
Tank Closure EIS Alternatives

Advice #165
100/300 Area River Corridor
Baseline Risk Assessment

Advice #166
U Plant Closure Plan

Advice #167
Stop Work Authority

Public Involvement and Outreach

Support from the stakeholder community has been essential to the progress made at the site and the Board felt a number of activities undertaken in 2004 jeopardized that support. In addition to two pieces of advice specifically discussing the subject, the Board mentioned the need for robust public involvement processes in most of the rest of this year's advice.

Diversity Outreach

In June, the Board acknowledged and commended the Tri-Party agencies' efforts to reach across language and cultural borders to involve a more diverse audience in Hanford decisions.

Yet the Board believes more outreach could include a broader range of affected communities. Specifically, the Board recommended the agencies develop focused efforts to engage Hispanic communities. Many members of these communities live and work in the area surrounding the Hanford site but may not have had access to information about the risks at Hanford because of differences in language, culture and media use.

Advice #161

"Involving diverse segments of the population is not only good practice but is also a basic prerequisite for environmental justice and fair and democratic decision-making."

Public and Regulator Review and Input to Baselines

Cleanup success at Hanford has been due, in part, to public and regulator input into the development of cleanup priorities, and stakeholder involvement in priority setting has provided support for Hanford's budgetary requests. However, this year marked a change from previous years, as cleanup activities are now prioritized through the development of multi-year baselines and contracts. The Board believes this has resulted in a lack of stakeholder involvement in baseline changes. The Board advised the agencies (Advice #155) to update the TPA to reflect these process changes, include an annual public review of any new proposed baselines, and maintain a continuing dialogue with stakeholders as significant baseline changes are considered.

In comments on the 2005-2007 budget, the Board advised DOE to utilize the dispute resolution mechanism of the TPA when it has a disagreement on required cleanup activities, rather than withholding funding from cleanup. Advice #160 expressed concerns about "an increase in competition among projects that are not fully funded in the DOE-ORP and DOE-RL baselines," and again noted that "baselines should not be changed to delete cleanup work until requirements have been changed with a full public process."

Public Involvement in Technical Decision-Making

With the release of the Final Hanford Solid Waste Environmental Impact Statement and other TPA agencies documents and plans, the Board again expressed concern that decisions had been made without public review and comment. The Board stressed the importance of maintaining avenues of communication that allow stakeholders to weigh in on important decisions.

The complexity of the HSW-EIS and other documents guiding cleanup decisions led the Board to seek independent expertise to help Board members (and, by extension, the general public) understand the policy issues affected by these documents. In June, the Board requested funding for a technical assistance panel to review the HSW-EIS, the Hanford Site Composite Analysis and the Tank Closure EIS, and report to the Board on the analytical modeling used, assumptions made, and compliance issues that could affect stakeholder comment as these documents are issued. Though the panel is yet to be convened, after the panel's report, the Board expects to have "sufficient understanding of the technical issues and assumptions to be able to facilitate meaningful public dialogue for future Board advice." (Advice #162)

Workforce Issues

Pensions and Benefits Plans

Worker benefits became an issue for advice in April because of a provision in a Request for Proposal (RFP) that seemed to undermine pension and wage-savings plans. The Board advised DOE to continue the benefit

program beyond the first five years of the contract, reiterating the strong belief in the need to maintain a workforce able to handle Hanford's challenges.

Advice #159

"Erosion of the pension plan is likely to create a drain of qualified and experienced workers within affected projects... The Board believes it to be false economy to proceed with any initiative to erode worker benefits."

Stop Work Authority

The Board finished the year by providing advice again on worker issues. The Integrated Safety Management System (ISMS) has a built-in stop work procedure, which enables workers to stop unsafe work. Evidence indicated such stop work authority is not consistently applied across the site. In response, the Board recommended policy changes and increased auditing to ensure stop-work authority is consistently applied. The Board suggested training and implementation oversight to ensure workers do not fear management or coworker reprisal for exercising stop work procedures.

Advice #167

"Our concern is the health and safety of all workers on the Hanford site. Therefore, the Board recommends that safety policies, including stop work policies for safety concerns, be uniform for all worker categories, including all subcontractor groups."

Final Hanford Solid Waste Environmental Impact Statement

With the release of the Final Hanford Solid Waste Environmental Impact Statement, the Board again stressed the importance of critical review and robust public involvement.

The Board also expressed concern that the Final HSW-EIS declares much of Hanford's groundwater "irreversibly and irretrievably" contaminated.

Advice #157

"Because far-reaching decisions will be based upon this document, the Board has multiple concerns with the Final HSW-EIS."

TPA Change Packages

M-91

The Board's first piece of advice (#154) in 2004 related to the M-91 Change Package. The Board supported enforceable schedules for retrieval, treatment and storage of mixed low level waste, increased emphasis on waste treatment and retrieval, and designation and processing of post-1970 TRU waste. The Board was encouraged by the pace of shipments of TRU to the Waste Isolation Pilot Plant (WIPP) in New Mexico, but stressed the importance of implementing aggressive schedules for compliant characterization, retrieval, treatment and storage/disposition of all buried waste.

K Basins

Safe storage and removal of K-Basin spent fuel has been of interest and concern to the Board since the inception of the project. Because the K-Basins are very close to the Columbia River, the Board has consistently maintained that safe removal of the fuel is a high priority. The Board supported the change package commitment to treat K Basins sludge and dispose the treated material off-site. However, the Board noted a number of issues that still raised concerns (including adequate integration between the engineering and operations/maintenance staffs) and encouraged the agencies to commit adequate resources to the project.

Site Technology Coordination Group

An ongoing Board concern is the current limits of technology at Hanford and across the DOE complex. In previous years, a Site Technology Coordination Group (STCG) had been funded by DOE to hold monthly meetings discussing the technology needs of the site and reviewing the testing and deployment of science and technology necessary for cleanup. Although STCG funding was cancelled, the Board noted "Hanford still faces daunting challenges that require new or better technology" (Advice #156). As a result, the Board requested a similar forum be created with the previous participating organizations of the STCG.



Workers with the last dried Multi-Canister Overpack (MCO #386) marking the removal of all spent fuel (2300 tons) from the K Basins



Workers inspecting retrieved drums containing post-1970 suspect transuranic (TRU) waste

300 Area Explanation of Significant Difference

In April, the Board reviewed the proposed Explanation of Significant Difference (ESD) of the 300 Area cleanup and provided advice (#158) regarding the inclusion in cleanup plans of eight sites outside of the 300 Area fence line. The Board requested that “unrestricted use” be the standard applied to not only these eight sites but to all other sites along the Columbia River Corridor, in keeping with the TPA agencies’ previous commitments.

100/300 Area River Corridor Baseline Risk Assessment

The Board has a long history of input on both risk assessments and cleanup activities related to the River Corridor. In September, the Board provided input to the River Corridor Baseline Risk Assessment (RCBRA). The advice acknowledged that divisions between geographic areas and contaminant sources are necessary for regulatory and logistical purposes; however, it also reiterated the Board’s long-held belief that a comprehensive, integrated, site-wide view of risk is critical for decision-making.

The Board also advised that the RCBRA consider the arrival of groundwater plumes from the 200 Area and that exposure scenarios include groundwater consumption in both the 100 and 300 Areas.

U Plant Closure Plan

In September, the Board reviewed plans for the U Plant Area closure (U Plant was used for chemical separation and processing). Though wary of language implying Board endorsement of the entire Canyon Disposition Initiative, the Board expressed general support for the U Plant plan and its holistic approach to cleanup. Advice #166 reserved opinion on the specific method ultimately employed to clean up the canyons pending release of the Proposed Plans. The advice also stressed that continued funding is needed for testing of remediation processes and concepts. These tests will provide valuable information for developing Central Plateau cleanup strategies.

Tank Closure EIS Alternatives

Prior to the release of the Tank Closure EIS, DOE-ORP shared the scope and outline of the alternatives under consideration. The suite of alternatives proposed by DOE only included one alternative that met the TPA treatment standard. This led to strong concern that the alternatives in the EIS do not sufficiently support the TPA. In Advice #164, the Board advised DOE-ORP to analyze at least one alternative that complies with the TPA. This ensures that baseline assumptions used for all alternatives in the EIS are in compliance. (Note: The EIS has been delayed and is currently expected to be released in the Summer of 2005.)

Other Board Products

In addition to providing advice on cleanup strategies, the Board acknowledged progress on cleanup by congratulating the TPA agencies and the Hanford workforce on a number of successes. HAB Letter 2004O-02 notes, “Tank C-106 was at one time a high-risk tank and seeing its floor now is a dramatic, tangible indication that progress is indeed being made in dealing with Hanford’s tank wastes.”

Messages from the Tri-Party Agencies



B-Reactor workers

U.S. Department of Energy
Office of River Protection

U.S. Department of Energy
Richland Operations Office

U.S. Environmental Protection Agency

Washington State
Department of Ecology

U.S. Department of Energy Office of River Protection

Looking Ahead

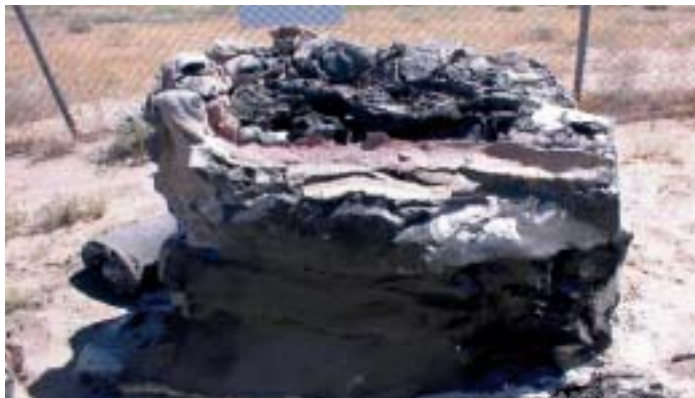
The nature of cleanup at Hanford has changed. Our focus on safety remains, but the schedule, cost and the way we do work on this massive endeavor is different and reflect an end to this mission that can be measured in decades as opposed to half centuries. The efforts of this Board to refocus its advisory role to match the pace of cleanup and begin a dialogue about finishing this important job have been notable.

This was apparent during the September 2004 meeting, when the Board addressed the question of effectiveness by launching a more global evaluation of its focus, member participation, quality of advice, and overall efficiency. We are beginning to see the fruits of this effort with the Board's focus on a Central Plateau Closure Strategy, and we are committed to supporting the Board through this process.

In review, 2004 was a year of great progress for both the Office of River Protection and the Board. Likewise, the Board's efforts to improve efficiency and membership participation have been successful. The efforts to minimize travel, combine committee meetings, increase use of conference calls to replace meetings and improve accountability for member attendance are seen as positive reinforcement to the Board's overall goal to sharpen and refocus its activities.

We look forward to an even more productive year in 2005 as we work together to sharpen our focus, improve efficiency and complete this important mission.

Roy Schepens, Manager
DOE-Office of River Protection



Testing of supplemental low-activity waste treatment technologies

U.S. Department of Energy Richland Operations Office

2004 was a year unlike any other, and I'm proud to be able to recap a series of project completions and milestones I believe demonstrate just how far we've come and what a difference our efforts are making.

Hanford is recognized as having three urgent risks to workers, the environment, and the surrounding community. This last year we eliminated two of them:

- As of October 2004, Hanford's 2,300 tons of spent nuclear fuel (50 million curies of radioactivity) is out of the K Basins on the Columbia River and in safe, dry storage—ready for disposal off the Hanford Site; and
- In February 2004 workers finished stabilizing Hanford's 18 tons of leftover plutonium - unstable and vulnerable to accident or terrorist activity - and packaged it for shipment off the Hanford Site consistent with the Department's consolidation strategy for improved security.

The third urgent risk, tank waste, is well on its way to remediation with the construction of the Waste Treatment Plant by the Office of River Protection. Additional progress by the Richland Operations Office and our contractors is evident across the site. We took down the first of three Plutonium Concentration Facilities in the only "free air" demolition in the DOE complex. Three of eight massive nuclear reactor complexes have been cleaned up and torn down—their "cores" sealed up for the radioactivity to decay safely away - with two more reactors underway. More than five million tons of contaminated soil have been removed and disposed of - passing the half way mark for cleanup in the 210-square-mile Columbia River Corridor. For the first time, buried drums containing plutonium-contaminated waste are being pulled out of trenches in the desert sand, and Hanford has more than tripled the rate at which that waste is being certified and sent to the Waste Isolation Pilot Plant for permanent disposal.

Results of this accelerated progress include meeting or beating regulatory compliance agreements, improving our safety record (from 1.9 to 1.3 recordable injuries per 200,000 worker-hours), and cutting estimated completion time and costs by at least 35 years (to 2035) and up to \$40 billion.

We appreciate the HAB's support of ongoing cleanup and risk reduction, and look forward to continued engagement on the critical public policy issues of the coming year.

Keith A. Klein, Manager
DOE-Richland Operations Office

U.S. Environmental Protection Agency

Three words come to mind as I reflect back on Hanford cleanup and the work of the Board: **celebration, consternation, and concentration.**

First, the **celebration.** We had a great time celebrating the Board's first 10 years. The celebration highlighted the difference that the Board has made to the cleanup of the last decade. We had a bittersweet celebration as we wished Max Power well in his retirement. While we are thrilled for Max, we know that as one of the founding fathers of the Board, his presence will be sorely missed. And, lastly on the celebration front, we completed the removal of all the spent fuel from the K Basins, which resulted in abating one of the largest near-term threats to the Columbia River. Other cleanup successes include the removal of inventory from the Plutonium Finishing Plant, tank waste stabilization efforts, continued progress on reactor interim safe storage, and expansion of the Environmental Restoration Disposal Facility.

Consternation: Risk Based End States. The Department of Energy's Risk Based End States policy caused some frustration in both regulatory and stakeholder communities. After several fits and starts and perhaps a lot of wasted energy, the Board and Agencies developed a public process to receive input on Hanford End States. The work of the Board members was very helpful in making these workshops productive. In our opinion, these workshops solidified and validated that the public shares EPA's vision for major cleanup of the 100 and 200 Areas. Workshops on the 300 Area are yet to come, but I believe we have laid a firm foundation for the Department of Energy as they continue to define the end states process.

And finally, **concentration.** This past year the Board made a conscious decision to work on the Central Plateau. The concentration by the Board and the Agencies is beginning to pay dividends as we close in on some of our first cleanup decisions on the Plateau. We look forward to continuing the dialogue on this critical cleanup area.

In closing, **congratulations** on another successful year.

Nick Ceto, Program Manager
Hanford Project Office
U.S. EPA

Washington State Department of Ecology



Groundwater remediation workers drill monitoring wells along the Columbia River

The Washington State Department of Ecology's Nuclear Waste Program works to bring the Hanford site into compliance with state and federal hazardous waste, cleanup, and air and water quality laws. The Hanford Advisory Board's counsel and advice continue to be instrumental to the success of our efforts. I want to congratulate the Board for its dedication to resolving Hanford cleanup issues for more than ten years.

Looking back on the Board's actions during 2004, several significant issues and actions stand out as notable. Among them are the Board's continued focus and attention to worker health and safety at the Hanford Site. We are listening to you and share your deepest concerns regarding worker health and safety. We have great respect for the abilities and the willingness of Hanford workers to take on the necessary tasks to cleanup the Hanford Site. Ecology continues to explore how we can use both our regulatory tools and the state's industrial toxicology resources to assure that detailed work plans fully account for likely chemical hazards and provide necessary protective measures. We strongly encourage dialogue and action between DOE, its contractors, labor unions, and workers to identify and correct inadequacies in its worker safety and employee concerns systems.

We are encouraged by the Board's focus on values, principles, and strategies for the Central Plateau. Board review and advice are valuable in defining the broad recommendations of the Future Site Uses Working Group for the Plateau to concentrate wastes from throughout Hanford in the 200 Areas while minimizing any potential harm there, and preventing the spread of contamination to other parts of the site or offsite.

In 2004 Ecology filed a legal challenge questioning the adequacy of the Hanford Solid Waste EIS Record of Decision. Since 1997 Ecology has repeatedly expressed concern that key decisions about waste disposal were made without the information on Hanford that would be contained in the Solid Waste EIS. In fact, the decision to use Hanford as a regional disposal facility was made four years before the Final Hanford Solid Waste EIS was

issued. We remain concerned about the implications of declaring that portions of Hanford groundwater are irreversibly and irretrievably contaminated.

We are also concerned about missed opportunities to reach better final cleanup decisions by not incorporating natural resource injury assessments into ecological risk assessment activities. We encourage the Board to track natural resource issues, see these issues as part of “end states,” and support the Tri-Parties to ensure maximum environmental restoration.

Several key decisions and issues that are coming up this year and in the next few years need to be put in a Plateau-wide perspective, including: tank waste retrieval and closure of tanks and tank farms; alternative treatment/waste forms for low-activity tank wastes; closure of canyon facilities; closure of burial grounds; development of new disposal facilities; and, development of facilities to handle large-size and remote-handled wastes. These require an understanding of ultimate direction (end states), of cumulative effects and risks, and of priorities and sequencing that the Board is uniquely able to help the Tri-Parties develop and express. The Board’s work this past year on tank waste retrieval and treatment, groundwater remediation and modeling, and support for individuals participating in the end states workshops is excellent preparation.

We respect the candidness the Board has shown in examining its own expectations and priorities and realigning its work processes. We expect that doing this will mean some issues and areas receive less attention than they otherwise might, and that much of the Board’s time and effort will be focused in Committee-of-the-Whole work related to the Central Plateau. From our perspective, the sacrifice is worthwhile.

2004 witnessed some direct challenges to the Board with respect to its charter, membership, and relevance. Ecology firmly believes the Hanford Advisory Board continues to provide quality service to the Tri-Party agencies. We encourage the Board’s active engagement to ensure that the interests and needs of the citizens of the Northwest region are articulated and addressed. The Board’s continued involvement, comments and questions help the agencies do our best.

2004 also marked a “passing of the torch.” The retirement of Max Power, who was instrumental in the founding, formation, and functioning of the Board, has left a void for us all. All of us at Ecology are extremely proud of the exemplary service, civility, and statesmanship of Max. We are hopeful that as others step forward they will use his legacy of service to guide their work with the Board and the Tri-Party agencies to achieve the safe and final cleanup of Hanford.

Mike Wilson
Nuclear Waste Program Manager
Washington State Department of Ecology

Board Work 2005

The Board's planning process has worked best when the agencies are clear on their upcoming work and related schedule. The process is more difficult when the upcoming work is relatively undefined, unforeseen issues arise (e.g., DOE-HQ directives, legal challenges, etc.), or the agencies are unable to maintain the projected schedule.

As a result of discussions at the Leadership retreat and subsequent Board meetings, the following 2005 priorities are straightforward, simple and less specific than those in past years.

- Values/principles/strategies for remedy selection and waste management in the Central Plateau: This priority acknowledges that the agencies are struggling with an overarching strategy and approach for making decisions about Central Plateau cleanup. It also acknowledges the Board's desire to take a leadership role in assisting the agencies with those decisions.
- 300 Area Uranium Plume and Reindustrialization: These priorities reflect the important decisions to be made in the 300 Area in the next year.
- 100 Area Final Records of Decision: This priority highlights the agencies' desire for specificity in exposure scenarios along the river to support final cleanup decisions.
- Groundwater: Though there may not be specific sitewide groundwater decisions in the upcoming year, the Board will ensure that groundwater remains a focus.

The above priorities are not the sum of the work the Board will undertake in the next year. Rather, they are the 'lens' through which the Board will view the work it faces.

2005 Meeting Schedule

January 27-28, 2005 – Richland
March 3-4, 2005 – Richland
April 28-29, 2005 – Yakima
June 16-17, 2005 – Richland
September 8-9, 2005 – Portland
November 3-4, 2005 – Seattle

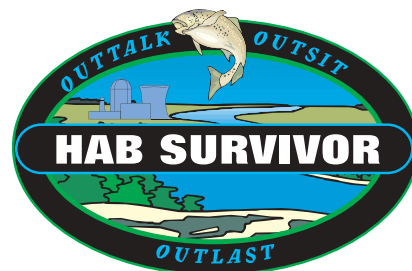
Special Events



Election Night, 1944

10th Anniversary Celebration

In February, current and former Board members, agency staff and dignitaries celebrated the Board's tenth anniversary with cake, reminiscences, and a fair dose of humor. Todd Martin donned a tuxedo for the festivities, Susan Leckband fondly gathered artifacts from the Board's history and Rick Bond of Ecology emceed a HAB roast that will be talked about for years to come. With the theme of "HAB Survivor" permeating the celebration, partygoers celebrated and marveled at the longevity and continued vitality of the Board.



“We have always regarded the Board as an integral part of our Tri-Party approach to Hanford cleanup, and, in our view, our confidence has been well-placed.”

Letter from Ecology Director Linda Hoffman



“...you have spent countless hours sifting through, seeking to understand, and debating some of the most complex technical, legal and societal issues in this nation. You have earned the congratulations and gratitude of all citizens of the Northwest and the Nation.”

Letter from WA Attorney General Christine Gregoire



“Your vigor and stamina continue to energize our work and contribute to our many cleanup successes...[you have] my sincere appreciation for this decade of dedication.”

Letter from DOE-RL Manager Keith Klein

Meet the Hanford Advisory Board

Current HAB Members & Alternates

Seat	Member	Alternate
Local Government Interests		
Benton County	Maynard Plahuta	Adam Fyall
Benton-Franklin Council of Governments	Robert Larson	Wanda Munn
City of Kennewick	Bob Parks	Dick Smith
City of Pasco	Robert Davis	Joe Jackson
City of Richland	Pam Brown	vacant
City of West Richland	Jerry Peltier	Patrick Conley
Grant & Franklin Counties	Jim Curdy	Art Tackett
Local Business Interests		
Tri-Cities Industrial Development Council	Harold Heacock	Gary Petersen
Hanford Work Force		
Central Washington Building Trades Council	Mike Keizer	Dave Smith
Hanford Atomic Metal Trades Council	Becky Holland	David Molnaa
Non-Union, Non-Management Employees (2)	Jeffrey Luke Susan Leckband	Gariann Gelston Richard Jansons
Government Accountability Project	Tom Carpenter	Clare Gilbert Allyn Boldt
Local Environmental Interests		
Lower Columbia Basin Audubon Society & Columbia River Conservation League	Rick Leaumont	Sky Bradley
Regional Citizen, Environmental and Public Interest Organizations		
Columbia Riverkeeper	Greg deBruler	Steve Roney Steve White
Hanford Watch	Paige Knight	Robin Klein William Kinsella
Heart of America Northwest	Gerald Pollet	Helen Wheatley Amber Waldref
Washington League of Women Voters	Madeleine Brown	Betty Tabbutt
Citizens for a Clean Eastern Washington	Todd Martin	Dr. Mark Beck Dr. Susan Babilon Cindy Meyer
Local and Regional Public Health		
Benton-Franklin Public Health	Dr. Margery Swint	Dr. Ross Ronish
Physicians for Social Responsibility	Dr. Jim Trombold	Dr. Charles Weems Jeanie Sedgely

Meet the Hanford Advisory Board

Current HAB Members & Alternates

Seat	Member	Alternate
Tribal Governments		
Nez Perce Tribe	Patrick Sobotta	John Stanfill Kristie Baptiste-Eke Sandra Lilligren
Yakama Nation	Russell Jim	Wade Riggsbee David Rowland
State of Oregon		
Oregon Hanford Cleanup Board	Larry Clucas	Maxine Hines Wayne Lei
Oregon Department of Energy	Ken Niles	Sue Safford Dirk Dunning Susan Coburn Hughes Tom Stoops
University		
University of Washington	Dr. Tim Takaro	vacant
Washington State University	vacant	Antone Brooks
Public At Large		
	Norma Jean Germond Keith Smith	Nancy Murray Shelley Cimon George Jansen, Jr.
	Leon Swenson	Daniel Simpson David Watrous
	Martin Yanez	
Ex-officio Representatives		
Confederated Tribes of the Umatilla Indian Reservation		Jeff Van Pelt
Washington State Department of Health	Earl Fordham	Debra McBaugh Allen Conklin
U.S. Department of Energy - Richland Operations Office	Joe Voice	Steve Chalk
U.S. Department of Energy - Office of River Protection	Howard Gnann	Steve Wiegman
U.S. Environmental Protection Agency	Dan Opalski	Nick Ceto
Washington State Department of Ecology	Michael Wilson	Nolan Curtis
Members and Alternates Who Left the Board in 2004		
Martin Bensky	Doug Huston	Norm Dyer
Richard Berglund	Thomas Schaffer	David Johnson
Dr. Larry Jecha	Dr. David Stensel	Susan May
Max Power		Kenneth Bracken Deanna Henry Dr. Joel Massman
In Memoriam		
	Michael Farrow	

Glossary

Hanford terms and acronyms used in this report

Central Plateau	The location of the 200 East and 200 West Areas and waste management facilities located in those areas.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980, also known as Superfund, providing statutory authority for cleanup of hazardous substances.
change package	Changes to milestones in the TPA (see below) negotiated and agreed to by the agencies involved in Hanford cleanup. Milestones are referred to by series numbers in change packages (e.g. M-45, M-91, etc.)
DOE-HQ	U.S. Department of Energy Headquarters in Washington D.C.
DOE-ORP	U.S. Department of Energy - Office of River Protection.
DOE-RL	U.S. Department of Energy - Richland Operations Office.
Ecology	Washington State Department of Ecology.
EIS	Environmental Impact Statement, a document prepared to comply with NEPA (see below).
EPA	U.S. Environmental Protection Agency.
ESD	Explanation of Significant Difference. An ESD provides public notice of proposed changes to scope, schedule or cost of an approved Record of Decision or remedy under CERCLA (see above).
HAB or Board	The Hanford Advisory Board.
HSW-EIS	Final Hanford Site Solid (Radioactive and Hazardous) Waste Program Environmental Impact Statement (DOE/EIS-0286F).
ISMS	Integrated Safety Management System that integrates safety principles into management and work practices to protect workers, the public, and the environment.
K Basins	Water-filled basins that were used to store spent nuclear fuel from reactor operations.
NEPA	National Environmental Policy Act of 1969 requiring the preparation of an Environmental Impact Statement (EIS) on all major federal actions significantly affecting the human environment.
RBES	Risk-Based End State, defined by DOE as “representations of site conditions and associated information that reflects the planned future use of the property and are appropriately protective of human health and the environment consistent with that land use.” Guidance from DOE-HQ in 2003 required each site to develop a document describing how cleanup plans are consistent with this approach.
River Corridor	Hanford’s 100 Area: facilities and waste sites along the Columbia River.
ROD	Record of Decision, the CERCLA (see above) document used to select the method of remedial action to be implemented at a cleanup site.
TPA	Tri-Party Agreement, the informal name for the Hanford Federal Facility Agreement and Consent Order signed by DOE, EPA, and Ecology in 1989. The TPA sets cleanup activities and schedules designed to bring Hanford into compliance with environmental laws.
Transuranic (TRU) Waste	Typically plutonium-contaminated trash, such as discarded tools and equipment, that is highly radioactive and can take thousands of years to decay to safe radiation levels. Mixed TRU waste (TRU-M) is TRU mixed with hazardous substances.
vitrification	A process that mixes wastes with other materials to form glass. The waste is immobilized in glass, reducing the potential for contamination of the environment.
WTP	Waste Treatment Plant, the facility where tank waste will be vitrified.

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Information on the Board is also available on the Web at:

<http://www.hanford.gov/public/boards/hab/>

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