

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 (DOE), the U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (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.

Under the Federal Advisory Committee Act (FACA) of 1972, DOE chartered the Hanford Advisory Board in 1994 to provide a forum for bringing 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, 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 200 individual pieces of advice in its 13-year history.

This thirteenth progress report of the Hanford Advisory Board highlights the work done in calendar year 2007 and outlines the issues the Board will focus on in 2008.



The Hanford Advisory Board.

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Chair's Message

When members of the Hanford Advisory Board (HAB or Board) selected me as their chair, I thought I knew most of the challenges and responsibilities associated with the job. After all, I had been vice chair for some time and how different could it be? Our former chairs, Todd Martin and Merilyn Reeves, made the job look effortless. I soon

discovered it wasn't that easy and I have developed even greater respect and admiration for the work of the former chairs. As with most challenges in life, there are always lessons to be learned and my first year as chair has presented me with many opportunities to learn new lessons – I learned to listen way more than I talked. I learned how difficult it is to keep a meeting moving while ensuring that all members and agency representatives have an opportunity to weigh in on the issues. And I learned, again, how good HAB advice can be when it is developed through the committee process and refined during the consensus Board discussion.

Being chair of the HAB requires not only knowledge of individual issues and topics undertaken by each committee, but an understanding of how those issues relate to bigger Hanford site and complexwide cleanup issues. Many cleanup issues have common threads that run through several of the U.S. Department of Energy's Environmental Management (DOE-EM) sites. We, the members of the HAB, are part of a larger community – the

Site Specific Advisory Board (SSAB). The SSAB is made up of the leaders (chairs and vice-chairs) from each of the DOE-EM citizen advisory boards representing other DOE-EM cleanup sites. Cleanup at these sites benefits when these individuals identify, share experiences and develop consensus recommendations on cross-cutting cleanup issues.

Looking Back

Given all that I've learned this year, my passion for the discovery, conversation, and consensus process that the HAB employs to do its work has never been stronger. My respect for Board members' dedication, knowledge, and enthusiasm has only intensified. I have an entirely new respect for the original design of the Board – particularly the insightful process that resulted in the balance and diversity of interests represented. That design has clearly stood the test of time and resulted in a Board that has matured well. Each member has equal opportunity to voice his/her concerns on every issue and each opinion carries equal weight. In 2007, the HAB issued nine pieces of consensus advice to the Tri-Party Agreement (TPA) agencies (DOE, Ecology, and EPA), which speaks directly to the Board's ability to come to agreement for the greater good.

Reflecting on HAB work in 2007, the advice that resonates most with me is HAB Advice #197, "Groundwater Values" and the accompanying decision flowchart. The River and Plateau committee and a smaller subcommittee worked for almost a year to develop the flowchart. It not only provides the TPA agencies with the HAB's groundwater values but also provides groundwater remediation decision-making guidance.





The intent of the Groundwater Values Flowchart and its prior companion piece, the Central Plateau Decision Flowchart issued in 2005, is to assist the TPA agencies in understanding not only the values of the HAB, but to demonstrate how to consider and apply those values during the cleanup decision process. DOE and the regulatory agencies applauded these flowcharts as timely and useful.

Additionally in 2007, the HAB issued advice on cleanup budgets, baseline schedules, the S-102 tank spill investigation, worker compensation, and two pieces of advice on the three major Hanford cleanup contract requests for proposals. The Board also urged the TPA agencies to increase clarity and readability in technical documents that go out for public review and comment and expressed concern over proposed delays being discussed in TPA negotiations. I encourage everyone to visit the HAB website and review the HAB advice (www.hanford.gov/public/boards/hab/).

Good cleanup progress was made in 2007. Removal of sludge from the K East Basin; continuation of transuranic waste (TRU) disposition to the Waste Isolation Pilot Plant (WIPP); vitrification facility seismic issue resolution and restart of construction; implementation of new groundwater remediation technologies; initiation of off-site plutonium disposition; cleanup of soil sites along the Columbia River; decontamination and demolition of buildings in the 300 Area and across the site; and solid waste retrieval and disposition – and much more.

Looking Ahead

2008 is shaping up to be a year of big decisions and big changes at Hanford from the award of three new major cleanup contracts to proposed changes to several major TPA milestones. Issues the HAB will continue to follow include: progress in tank farm operations, particularly safe retrieval of waste from single-shell tanks; construction of the various buildings that make up the vitrification facility; a safe and cost-effective transition to three new cleanup contracts; waste site cleanup in the Central Plateau and near the Plutonium Finishing Plant (PFP); issuance of the draft Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS); groundwater remediation; disposition of K Basins sludge and removal of the basins; and potential Hanford cleanup funding shortfalls.

The HAB committees have developed, with input from the TPA agencies, work plans for the coming year that prioritize their work load to include these important issues. The work plans will guide and focus the committee's efforts where they are most needed but remain flexible to respond to emerging cleanup issues as they arise.

I look forward to another productive year for the HAB in 2008. Working together with the agencies, the HAB's goals are to provide useful, consensus advice that reflects the values of HAB members and their constituencies and to continue to follow Hanford cleanup progress.

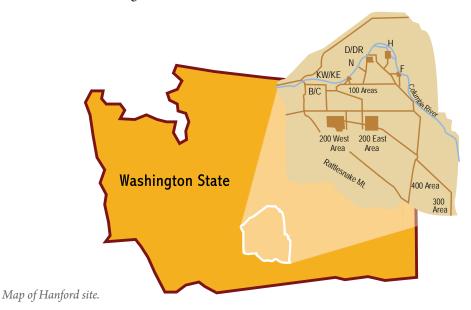
Susan Leckband, Board Chair The 586-square mile Hanford Nuclear Site was the first and primary plutonium production facility for the United States' nuclear weapons program. The site, which began operations in 1944, includes nine reactors, four chemical separations plants, plutonium processing facilities, and 177 underground highlevel 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.

In May 1989, DOE, EPA, and Ecology signed a landmark agreement, commonly known as the TPA. The TPA outlines legally enforceable milestones for Hanford cleanup over the next several decades. DOE has overall responsibility for the cleanup of Hanford and maintains two federal offices at Hanford - the Richland Operations Office (DOE-RL) and the Office of River Protection (DOE-ORP) - each of which oversees separate contracts held by private companies.

DOE-RL manages the infrastructure and all other cleanup activities at the site including groundwater remediation, cleanout and demolition of facilities, waste retrieval, packaging and disposal, and cocooning of former production reactors. DOE-ORP manages cleanup of 53 million gallons of tank waste and construction of the Waste Treatment Plant (WTP).

Ecology and EPA regulate DOE's activities. The regulatory agencies divide authority for different aspects of Hanford Site cleanup. Ecology's Nuclear Waste Program is responsible for oversight of the tank waste treatment and storage, waste management activities and implementation of the state's cleanup regulations. EPA has lead oversight of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 cleanup activities that include removal and transfer of spent nuclear fuel from corroding storage pools to safer storage areas and cleanup of contaminated soils and groundwater.



Hanford

CLEANUP 2007

Public Involvement in Cleanup Budget Development

The Board considered the Hanford Fiscal Year (FY) 2009 budget development process a positive example of how the public should be involved to provide their values and input on how and where dollars should be spent at Hanford. The HAB believes the public had the opportunity to provide meaningful input to DOE on the formulation of the FY 2009 budget because of the level of detailed budget information provided, active stakeholder involvement, and the various outreach efforts around the region. While the Board continues to

be deeply concerned about the funding shortfall for cleanup work at Hanford, it appreciates DOE's effort to share detailed information with the public and actively solicit feedback.

Board members contributed input early in the budget development process, working with the TPA agencies to shape the budget outreach format and information for public budget meetings. DOE held five public budget meetings for the FY 2009 Hanford budget process around the region, in Richland, Seattle, Spokane, Hood River and Portland. Prior to the public budget meeting in Richland, a workshop for actively involved stakeholders was held in May. The meeting format included breakout sessions that highlighted priority cleanup topics, including the River Corridor, Central Plateau, groundwater, WTP, and tank farms. Board members who participated in the workshop discussed their concerns and comments with the TPA agencies and provided workshop feedback through the committee and full Board, which contributed to draft advice on the budget development process.



Shelley Cimon, the Board's National Liaison, shares updates from a recent SSAB meeting with the Board.

The Board provided advice on this recent budget development process (Advice #198), adding to its long history of advising on Hanford budget matters (Advice #186, #187, #171, #44, #41, and #17). The Board advised DOE-Headquarters to honor its commitment to re-direct cleanup funds back to Hanford and other large, more contaminated sites in the complex, since several of the smaller sites are closing or are closed. The Board also advised that DOE be completely open with its regulators and the public about the specifics of funding shortfalls.

The Board wrote a letter of appreciation commending DOE on its improved openness and transparency in the budget and baseline development. The letter expressed the Board's commitment "to working openly and productively with [DOE-EM] in the upcoming, challenging process of developing the 2010 budget and project baselines."

The Board expressed its hope that DOE would continue to provide detailed budget information in coming years.

"We thank the Board for its comments and recognition of the enhanced information content that was made available and discussed with the Board, regulators, and the public. Because of the process developed at Hanford working with the Board, EM issued complex-wide guidance on how the U.S. Department of Energy (DOE) should involve Site Specific Advisory Boards in the development of DOE budgets. In addition, we appreciate the collaboration and feedback from the Public Involvement Committee on our budget outreach efforts this year.

We continue to appreciate the time and effort of the Board on budget and cleanup priorities and for the collaboration on the development of the FY 2009 budget outreach efforts."

Shirley Olinger Manager, Department of Energy Office of River Protection

Dave Brockman Manager, Department of Energy Richland Operations Office This year, DOE continued its cleanup contract procurement process and issued requests for proposals (RFPs) for three new Hanford site cleanup contracts:

- 1. Mission Support Contract (MSC), to be managed by DOE-RL, will cover cross-cutting services for the Hanford Site, such as safety and security, infrastructure, information technology, and integrated life-cycle planning.
- 2. Plateau Remediation Contract (PRC), also to be managed by DOE-RL, will complete cleanup of the PFP; perform non-tank farm waste disposal work; monitor and remediate groundwater, and; characterize, maintain and/or remediate facilities and waste sites.
- 3. Tank Operations Contract (TOC), to be managed by DOE-ORP, will manage base operations at the Hanford Tank Farms; retrieve waste from and close the single-shell tanks; support the WTP; and close tank farm waste management areas.

These three contracts will replace the two current site cleanup contracts, marking a new approach for a separate infrastructure and services contract structure at Hanford. These contracts will guide Hanford cleanup through 2012, and could be extended up to an additional five years. In the past, contracts included work that is now separated out into the MSC scope. DOE stated that this new approach is designed to enable the MSC contractor to "focus on right-sizing and improving the efficiency of site services to free up Hanford cleanup contractors to focus on their remediation work. Ultimately, DOE anticipates the costs of services to be driven down as portions of the site are cleaned up, enabling more of the Hanford budget to be spent on cleanup" (DOE press release; May 2, 2007). Given this new approach to contract structuring, the Board weighed in on the procurement process.



Workers deploy a sampler system in a single-shell tank to obtain previously inaccessible waste samples.



Aerial view of the K-Basins. Radioactive waste was removed from K East Basin in 2007.



Workers work on the PUREX stack probe replacement that serves the PUREX plant.

The Board issued two pieces of contract procurement advice in 2007. In February, Advice #195 was adopted in response to the draft RFPs that were released in November 2006. Advice #200 was sent to DOE in September 2007 after the RFPs were finalized. Both reiterated consistent Board values, as well as identified specific concerns and comments on the RFPs and their scope. The Board requested clarification of multiple aspects of the contracts, including the use of the Hazardous Material Management and Emergency Response (HAMMER) Training and Education Center; the intent regarding the construction of new facilities and their management; the consistency of budget estimates with the TPA; end states, and; the interface and integration of work to eliminate potential gaps and overlaps in work. The Board asked that the RFPs clearly identify worker health and safety as a top priority and clarify that contractors are entrusted with and are responsible for worker health and safety.

Stressing the importance of keeping within the TPA, the Board requested consistency between contractor work scope, the TPA and relevant hazardous waste management and cleanup laws. The Board maintained that cleanup decisions should not presume or call for the use of caps (or barriers) over waste sites without retrieval and treatment of the waste, nor should that be presumed by the contract RFPs. In addition, the Board stated that RFPs should be flexible to accommodate the design and eventual waste transfer facilities for whatever technologies are chosen to supplement lowactivity waste vitrification.

Cleanup technology development is essential to Hanford cleanup and the Board suggested that DOE scale award fees to the contractors' financial risk and innovation, as well as

provide incentives for contractors to invest their own funds in technology development. The Board also advised DOE take away fee in the event of cost and schedule overruns related to contractor performance.

After releasing the draft RFP in November 2006, DOE held a public comment period and meaningful exchanges with potential offerors. Among the resulting changes are the addition of a "Community Commitment Clause" requiring the successful contractor to work in accordance with DOE's policy to engage regional stakeholders in issues and concerns of mutual interest and to recognize that giving back to the community is a worthwhile business practice; clarifying mentor-protégé agreement requirements to ensure substantive small business participation; and clarifying the environmental and regulatory roles, responsibilities and interfaces between the MSC and other Hanford Site contracts. Changes to the Plateau Remediation Contract RFP included shifting scope from the existing River Corridor Contract (RCC) to the PRC including removing radioactive sludge from the K Basins and adding waste site remediation work. DOE also changed the scope of the TOC to include adding the early feed and operation of the low-activity waste facility, balance of facilities, and the analytical laboratory at WTP. The Board was also encouraged to see that incumbent employees would continue to participate in the Hanford Site Pension Plan even if they are MSC employees.

DOE's goal is to complete contract award before the current contracts expire in 2008. The Board looks forward to the contribution of these contracts and contractors to the cleanup of Hanford.

BOARD WORK & Advice 2007



Board members discuss advice during a meeting in June.

identified, discussed, and framed through a consensus process. During Board meetings, members spend time reviewing and considering draft policy principles developed by the Board's committees. Upon reaching consensus on principles for a particular issue, the Board issues advice describing its position and often recommending specific action. The TPA agencies are required to formally respond in writing to Board advice, which the Board regularly reviews to see how its advice is considered in decision-making.

Based on its values, the Board develops and frames policy issues addressing Hanford cleanup activities, which form the basis for consensus advice to one or more of the TPA agencies. The genesis of advice occurs at the committee level, where issues are

In 2007, the Board produced nine pieces of advice on Hanford cleanup during its five Board meetings. Board advice addressed the following topics:

- Major cleanup contract procurement (Advice #195 and #200)
- Workers' compensation program (Advice #196)
- Groundwater values and flowchart (Advice #197)
- Hanford cleanup funding (Advice #198)
- Future DOE budget baselines (Advice #199)
- S-102 tank spill investigation (Advice #201)
- Clarity and readability of technical reports (Advice #202)
- Tri-Party Agreement negotiations (Advice #203)

"The Board distills, focuses, and unites local and regional concerns on Hanford issues. We deeply appreciate the Board's hard work and dedication. The Board's work today helps protect future generations living near and far from Hanford. The Board's long involvement with Hanford has profound value. As leadership changed hands at the Energy Department, the Board's shared memories and values helped maintain continuity in Hanford's cleanup. "

Jane Hedges Manager, Nuclear Waste Program Washington State Department of Ecology An index and links to all of the Board's advice and agencies' responses can be found on the Board's website at: www.hanford.gov/public/boards/hab/.

Funding and Budget – Fiscal Year (FY) 2008-2009 and Outyear Budgets
The Board continued to spend significant time in 2007 focused on the lack of
adequate funding to meet cleanup schedules and requirements. The Board issued
advice commending DOE for its commitment to provide increased access to budget
information, which enabled the Board and regulatory agencies to provide more
effective, meaningful comments on budget priorities and to identify funding needs.
The Board's advice to the TPA agencies expressed concerns that potential funding
shortfalls in the FY 2008, FY 2009 and outyear budgets will impede cleanup work
necessary to meet existing compliance agreements and cleanup requirements (Advice
#198). The Board believes sufficient funding is lacking for major cleanup projects, such
as groundwater cleanup, retrieval of TRU, tank farm cleanup, and construction of the
WTP. In addition, the Board advised that safeguards and security costs should not
come from cleanup funding, and that a decision on supplemental tank waste treatment
needs to happen soon. Given the closure of some DOE sites, the Board advised DOE

to "live up to its commitment to re-direct cleanup funds back to the larger, more contaminated sites in the DOE nuclear weapons complex" (Advice #198). The Board also reiterated the importance of DOE openly sharing timely budget information with the regulatory agencies and the public.

Funding and Budget – Costs and Baselines

Over the past 13 years, the Board has advised the TPA agencies that budget baselines should reflect compliance with the TPA and other applicable standards, and should also only be changed or adopted after regulatory agency and public reviews. The Board issued advice (Advice #199), expressing concern that the new DOE-ORP baseline and accompanying Five-Year Plan is not compliant with the TPA and did not undergo an adequate review by the regulatory agencies and the public. Further, the Board expressed concern that DOE-ORP's future budgets provide for emptying only one single-shell tank per year, which does not comply with TPA schedules.

Contracting – Request for Proposals

The Board maintains a strong interest in DOE's contract procurement strategy for the three major cleanup contracts soon to be awarded. The Board's goal is to ensure future Hanford cleanup contracts adequately and appropriately describe and outline cleanup priorities and regulatory schedules and requirements. In 2005 and 2006, the Board advised DOE to better frame and clarify the contract procurement strategy (Advice #182 and #188), and outlined what should be included in the contracts. As a follow up to Board advice on DOE's initial draft RFPs, the Board issued Advice #195 recommending areas for further revision and clarification including:

 Safety and health are top priority and contractors are responsible for worker safety and health;

- Use of and support for the HAMMER Training and Education Center;
- Definition of "Market Based" standard for evaluating various contractual elements;
- Management of new facility construction; and,
- Budget and level of effort estimates are consistent with TPA cleanup schedules and requirements.

Contracting – Hanford Cleanup Contracts

The Board recognizes the importance of well-written contracts to ensure effective, timely cleanup progress at Hanford. Since 2005, the Board provided input to DOE's contracting strategy and process to develop RFPs for three major Hanford cleanup contracts (Advice #182, #188, and #195). In 2007, DOE issued final RFPs for the three major cleanup contracts covering Central Plateau remediation, Tank Waste operations and closure, and overall cleanup mission support. The Board reiterated to DOE (Advice #200) that the contracts should align with TPA cleanup requirements and regulatory processes, include retrieval of contaminants and wastes in the soil, scale contractor award fees to the level of financial risk and innovation, include additional emphasis on worker health and safety provisions, and include scope to accommodate design of and waste transfer to facilities to cover a range of possible supplemental Low-Activity Waste treatment technologies.

Workers' Compensation Program

At the Hanford State of the Site meetings in Richland in 2005 and 2006, some current and former Hanford workers expressed frustration about the worker claims and compensation program contracted out by DOE to Contract Claims Services Incorporated (CCSI). In response, DOE initiated three audits that indicated problems with the program including difficulty accessing the program, lack of





Left: Board members discuss advice during a meeting in June. Above: Board Chair and TPA agency managers read draft Board advice during a meeting in September.

"Although we have made great strides to improve the program, we welcome suggestions on further improvements to provide a safe working environment with an efficient and responsive workers' compensation program."

Dave Brockman Manager, Department of Energy Richland Operations Office

"The Board's message [Advice #203 on TPA negotiations] clearly reflects the priorities of the people of the State of Washington and Northwest."

Jane Hedges Manager, Nuclear Waste Program Washington State Department of Ecology

"EPA will continue to work for the development of the Hanford integrated project baseline report that clearly defines scope, schedule and the budget needed for completing the cleanup of the Hanford Site."

Nick Ceto Hanford Program Manager, Environmental Protection Agency

"DOE appreciates the HAB's interest and advice to ensure that tank waste cleanup continues in a manner that is safe to our workers and the public, and protective of the environment."

Shirley Olinger Manager, Department of Energy Office of River Protection timely claims decisions, and a failure to adequately communicate with workers making claims. In response, DOE issued a letter addressing worker concerns and problems with the compensation program, and initiated several steps to enhance and improve program accessibility, oversight, and customer service and assigning a full-time DOE person to manage the program. The Board supported DOE's plans to improve the worker's compensation program and advised DOE (Advice #196) to establish program goals and evaluation metrics, maintain a uniform site-wide claim application, communicate with and monitor contractors to report injuries, and maintain direct communication with worker representatives.

Clarity and Readability of Agency Reports

DOE, its contractors, and the regulatory agencies produce large technical cleanup decision documents regarding Hanford for public review and comment. Public review and comment on these documents is a critical component in the process to ensure cleanup activities consider and reflect public and stakeholder values. Due to the size and complex technical nature of many of these documents, the Board is concerned the public does not have the time or ability to adequately review and provide meaningful comments. To improve public readability of these documents, the Board advised the TPA agencies (Advice #202) to establish a standard template for executive summaries that briefly identifies the purpose of the document, the approach used to examine the issue, conclusions, the impact of conclusions on future decisions, and any resulting action. Further, the Board recommended an Executive Summary of documents be written for non-technical readers, and references should include online addresses where possible.

Tri-Party Agreement Negotiations

In 2007, prompted by several years of delays and cost overruns for design and construction of the WTP, the TPA agencies initiated negotiations of potential changes to the TPA. The Board is concerned about the impacts of delaying cleanup milestones. Since the TPA sets Hanford's cleanup schedule and commitments, the Board is tracking the negotiations closely. The Board advised the TPA agencies (Advice #203) that milestone delays "should be agreed to only if demonstrated to be technically necessary." While the Board supports proceeding with negotiations to set new interim milestones for construction and operation of the WTP and to accelerate groundwater remediation, it recommended delaying negotiations of major milestones until the regulatory agencies and public have the opportunity to review a proposed Hanford Lifecycle Scope, Schedule, and Cost Report, including all related actions necessary to complete the cleanup mission to provide a complete understanding of the resources necessary for the Hanford cleanup mission. Board Advice #203 also reiterated Board values on several cleanup activities under negotiation and recommended additional cleanup activity areas to be included in negotiations.

S-102 Tank Spill

In July, a spill of high-level nuclear waste tank sludge occurred at single-shell S-102 tank. While the spill was determined to be relatively small, the Board is worried about possible health, safety, and environmental impacts. DOE briefed the Board on the spill event and the ongoing investigation to determine the impacts of the spill and recovery actions. The Board expressed concern about the lack of timely notification of the event and that procedural lessons learned from previous release events were not implemented. In an effort to provide stakeholder values for consideration in the final spill investigation report, the Board advised the TPA agencies (Advice #201) to



Demolishing the 241-Z Liquid Waste Facility.



Workers survey a waste drum for radiological contamination.

arrange for an independent investigation of the event, focusing on worker and public safety, emergency response and notification issues, and identification and communication of lessons learned. The Board recommends the results of the investigation report be communicated to the public.

Groundwater

In 2007, the Board focused on developing its groundwater protection and remediation values. For a detailed discussion of the Board's groundwater advice and values flow chart (Advice #197), please see pages 12-17.

Board Work in 2008

The Board's priorities for 2008, outlined in the Chair's message on pages 2-3, will cover site specific cleanup work including tank waste management, Central Plateau waste site cleanup, and construction of the vitrification facilities. The Board will also address topics concerning the TC&WM EIS, groundwater cleanup and integration, funding, institutional controls, and public involvement.

The Board serves as an important conduit for providing meaningful and effective public input into Hanford cleanup decisions. Board meetings are open to the public and serve as a good forum for interested members of the public to become informed about Hanford cleanup and timely decisions. The Board encourages you to come and listen, learn, and participate in determining the cleanup path forward for the Hanford site. Please visit the Board's web site at www.hanford. gov/hab and see the back of this report for more information.

Board Meeting Schedule 2008

February 7-8	April 3-4	June 5-6	September 4-5	November 6-7
Pasco,	Portland,	Tri-Cities,	Olympia,	Tri-Cities,
Washington	Oregon	Washington	Washington	Washington

Groundwater

CONTAMINATION at Hanford



Groundwater remediation location in 100N Area.

"The Board's advice on groundwater values echoes and reinforces many of the principles Governor Gregoire has expressed. We believe the Board's flowchart captures the key steps in groundwater remediation decision making. It is an elegant and thoughtful tool and we will find it very useful."

Jane Hedges Manager, Nuclear Waste Program Washington State Department of Ecology Protecting and remediating groundwater is the primary driver for all cleanup work at the Hanford site. Approximately 450 billion gallons of liquid waste were released to the ground at Hanford between 1940 and 1997, contaminating approximately 80 square miles of groundwater above drinking water standards. Most groundwater contamination occurred through a combination of planned liquid waste releases to the ground through cribs, retention trenches, French drains, reverse wells and ponds, as well as unplanned waste releases, including spills and tank, pipeline, and diversion box leaks. Radioactive contaminants include tritium, iodine-

129, technetium-99, uranium, and strontium-90. Chemical contaminants, including nitrate, carbon tetrachloride, trichloroethylene, and hexavalent chromium are also of serious concern. Groundwater contamination was identified in the following Hanford site areas: 100 H, 100 D, 100K, and the 300 and 200 areas. Contaminants from the 100 and 300 areas have reached the Columbia River and approximately 16,000 meters of the river's shoreline have received contaminated groundwater.

Regulatory requirements and procedures are set by the National Oil and Hazardous Substances Contingency Plan (NCP) under the Comprehensive Environmental Response, CERCLA and the state Model Toxics Control Act (MTCA). These requirements, mandate DOE take steps to define a cleanup level and remediate existing groundwater to restore groundwater to its highest beneficial use, which is protective of all human health, ecosystems, and Native American treaty rights. DOE has identified the following goals for groundwater cleanup, including:

- Prevent exposure to contaminated groundwater
- Control contaminant sources and minimize further migration of contaminants
- Restore groundwater to highest and best use standards

Groundwater Cleanup Progress

Protecting the Columbia River and Hanford groundwater requires actions to identify contaminant sources and control migration of existing contamination. DOE has taken a number of steps to identify and reduce contaminant sources, remediate groundwater contamination, and keep contamination from reaching the Columbia River. DOE manages groundwater remediation efforts according to specific areas of the Hanford site, called operable units. DOE has operated pump and treat systems since March 1994 and has initiated treatment systems to replace pump and treat systems. They have decommissioned over 2,000 wells and stopped un-permitted liquid waste releases to the soil. Over five million tons of soil were removed from waste sites and 65 million curies of radioactive material from along the Columbia River Corridor. Most importantly, DOE completed the

transfer of pumpable liquid waste from all single-shell tanks to more protective double-shell tanks. In addition, the TPA agencies formed the Hanford Groundwater Remediation Project whose mission is to protect the Columbia River from contaminated groundwater resulting from past, present, and future operations at the Hanford Site and to protect and restore groundwater. The Groundwater Remediation Project is responsible for implementing the Hanford Groundwater Management Plan, which seeks to accelerate groundwater cleanup to prevent additional contamination and remediate groundwater according to regulatory standards. Despite these efforts, the TPA agencies and the Board recognize the need for increased or enhanced treatment of existing groundwater contamination to meet groundwater cleanup requirements.



A geoprobe is used to collect soil samples to test for contamination.

In 2006, recognizing the critical need to move Hanford groundwater cleanup forward, Congress dedicated \$10 million to identify and implement additional remediation activities and technologies to protect the Columbia River, identify contamination sources, and stop the migration of contamination. DOE identified key contaminants of concern in the 100, 200, and 300 areas and proposed criteria to evaluate treatment technologies. A steering committee selected 10 of 23 proposed technologies for peer review. The peer review panel recommended six of the 10 proposals and approved projects to address the following contamination:

- Hexavalent chromium in the 100-D and 100-K areas
- Strontium-90 in the 100-N Area
- Uranium in the 300 Area
- Carbon tetrachloride in the 200 Area

The Board and the regulatory agencies supported the technology selection process and are encouraged by Congressional commitment to fund the identification and implementation of new groundwater remediation technologies. Despite this effort, the Board does not want Congress, the TPA agencies, or the public to lose sight of the need for significant additional funding for groundwater cleanup. The Board continues to track the progress and evaluate the success of these groundwater remediation technologies.

Hanford Advisory Board's Involvement in Groundwater Contamination Issues Protecting groundwater and the Columbia River from radioactive and chemical contamination has long been a priority for the Board. Since its inception, the Board has tracked groundwater issues, producing over 30 pieces of groundwater-related advice to the TPA agencies between 1994 and 2007. The Board's advice addresses issues ranging from application of remedial technologies, to integrating site-wide groundwater monitoring efforts, to ensuring adequate funding for groundwater remediation activities.

"EPA would like to commend the Board on another fine product. We realize the development of the groundwater flow chart took many long hours, and we appreciate the thought that went into its development. It will be a great companion document to the flow chart the Board did last year on Central Plateau values."

Nick Ceto Hanford Program Manager Environmental Protection Agency

Values

- Groundwater is to be cleaned up and restored to the highest beneficial use.*
- Restoration should be within a reasonable time frame, commensurate with risk and Tri-Party Agreement timelines.
- Ongoing groundwater remediation activities and review processes should be fully funded.
- Technology development should continually be pursued to remediate and restore groundwater to highest beneficial use.*
- The public and tribes must have input to the remedy selection for groundwater, including the relevant timelines for remediation, and determination of the risk from foreseeable failures of institutional controls.
- Institutional controls are not an acceptable solution for contaminated plumes with the potential for migration.
- Remove, treat and dispose is the preferred action; natural attenuation as a remedy is not appropriate unless existing remedies are not technically practicable and relevant health and environment standards can be achieved in a reasonable time frame.
- The HAB expects DOE and its federal successors to retain control over long term stewardship and institutional controls of groundwater. This expectation should ensure that active measures to monitor and evaluate groundwater remediation will continue until it no longer poses a risk to human health and the environment.
- * Highest beneficial use is protective of all human health, ecosystems and Native American treaty rights.

Hanford Advisory Board — Groundwater Values Flowchart Have the plume and its source(s) been identified? identify plume Yes No and source(s) **Re-Test Against Action Triggers for Unremediated Plumes** Have the plume and its source(s) been adequately characterized? Has the risk diminished characterize No below action levels? plume and source(s) Yes S Can and should a mitigation action be taken immediately? (considering risk, Have any risks increased but also other criteria such as interaction (to drive technology development)? with other site activities) Yes No Can contaminant toxicity, mobility and Has technology matured? Yes volume be contained? No Yes Is Monitored Is remediation technically Natural Attenuation (MNA) or practicable within an acceptable another Institutional Control Yes time frame? acceptable? (consider risk) Is vadose zone Does the contamination No risk warrant Yes migrating to No technology groundwater? development? REMEDIATE AND RESTORE Yes **GROUNDWATER TO HIGHEST** Yes No **BENEFICIAL USE** SEE HAB'S REMOVE, TREAT **Develop new** AND DISPOSE **GROUNDWATER HAS BEEN** RTD) FLOWCHART technology REMEDIATED AND RESTORED TO HIGHEST BENEFICIAL USE = Active stakeholder involvement

Final June 8, 2007

14 | 15

In June 2006, the Board held a groundwater tutorial for all its members, that included presentations from the TPA agencies, which reviewed the history of groundwater issues and provided a comprehensive understanding of the current remedial approach, modeling, timelines and schedules for evaluation, and status of remedial efforts. The groundwater tutorial galvanized Board energy on groundwater issues and focused Board discussion on future groundwater issues. Educating Board members on groundwater issues was critical in preparing them to provide meaningful feedback on the groundwater records of decisions (RODs) that will be issued in the next 6-10 years.

"The U.S. Department of Energy (DOE) appreciates the time and thoughtful discussion to develop the groundwater values flowchart. Protection of the groundwater remains a priority for DOE and we remain committed to prioritizing increased funding for groundwater activities.

Our strategy is currently focused on stopping key contaminants from reaching the river. We believe this strategy is consistent with the Board's groundwater values advice. We also agree that management of groundwater activities should be integrated in an effort to protect the Columbia River. The DOE Richland Operations Office and the Office of River Protection have jointly implemented an integrated plan to manage all of Hanford's groundwater and vadose zone activities."

Shirley Olinger Manager, Department of Energy Office of River Protection

Dave Brockman Manager, Department of Energy Richland Operations Office In 2007, the Board focused on articulating its groundwater values and expressing its support for accelerating and integrating groundwater remediation work across the Hanford site. The Board issued advice expressing concern about inadequate funding, specifically groundwater rememdiation funding, in fiscal year (FY) 2008 and 2009 cleanup budgets to keep cleanup work on track (Advice #198). The cost of initiating required groundwater cleanup planning, investigation, and remediation activities in FY 2009 requires more the \$200 million above the proposed funding level. The \$10 to \$20 million recently dedicated by Congress to identify and implement groundwater remediation technologies to protect the Columbia River is helpful, but falls well short of covering required groundwater cleanup. The Board believes funding shortfalls for groundwater remediation activities should not prevent the TPA agencies from adopting tangible and enforceable goals and schedules for groundwater cleanup.

In addition to concerns about groundwater cleanup funding, the Board issued one of its most substantive pieces of groundwater advice to date. The Board issued Advice #197 in June 2007 outlining its groundwater values and advising action by the TPA agencies. Building on the success and usefulness of the Board's flowchart for Central Plateau cleanup decision-making (Advice #173), the Board used a similar approach to develop and issue a flowchart applying the Board's policy-level groundwater values to Hanford groundwater remediation decisions (Advice #197, see pages 14 and 15). The Board advised the TPA agencies to establish goals and schedules for groundwater contamination characterization, remediation, and cleanup. The Board further emphasized the need to fully fund coordinated groundwater remediation activities and identified opportunities for public input in the decision-making process (Advice #197). The regulatory agencies and DOE commended the Board's work in developing its groundwater values flowchart, noting it serves as a reflection of stakeholder values and is a useful tool for TPA agency discussions during the remediation decision-making process.

In a letter sent to the DOE Hanford field offices in September, the Board expressed its support for developing the Integrated Groundwater and Vadose Zone Management Strategy. The Board emphasized the importance of involving the public in the process to identify assumptions and publicizing work schedules and target dates for completing work outlined in the integrated strategy.

The Board will continue to work on groundwater cleanup issues in 2008. In particular, the Board plans to focus on ways for the agencies to integrate groundwater cleanup work across all projects and field offices, which is crucial to the Hanford cleanup mission. Development of a comprehensive groundwater management plan, encompassing the use of new technologies, and identifying institutional controls, is essential for addressing groundwater issues at Hanford. The Board will continue its vigilance to ensure groundwater remediation meets Hanford stakeholders values.







Top: Worker carefully places a contaminated soil sample into a collection enclosurer.

Left: Workers inject chemicals into the ground to form a mineral barrier that traps contamination in the soil before it reaches the Columbia River.

Right: A worker collects a groundwater sample near the C Tank Farm in the 200 East Area.

BOARD &

Committee Structure



Board members discuss advice during a meeting in September.



HAB informational display board.

The Board consists of five committees that perform the bulk of the Board's work. Committees typically meet monthly to work on multifaceted policy and technical issues, and prepare and draft advice for Board meetings. The committees use a consensus process for bringing forward issues of mutual interest and developing draft advice. Committees assign issue managers, who have an interest and expertise on a specific topic, to work with the agencies to research and frame technical issues for the committee. The committees discuss the issues brought forward by the issue managers and agencies and determine the timeliness and appropriateness of issuing advice. Committees reach consensus on draft advice before it is presented to the Board, which helps create a stronger final product and encourages broader participation.

The Tank Waste Committee and River and Plateau Committee are the two technical committees responsible for understanding and tracking current and planned cleanup work. The three other committees track broader, site-wide issues; those committees are the Public Involvement and Communications Committee, the Health, Safety, and Environmental Protection Committee, and the Budgets and Contracts Committee. When necessary, committees meet jointly to address crosscutting cleanup issues or the full Board meets as a Committee of the Whole when an issue has implications for all committees or the full Board. The Committee of the Whole met in January to discuss proposed changes to the HAB Charter.

Budgets and Contracts Committee

The Budgets and Contracts Committee follows Hanford funding and contracting issues, as well as consistently monitoring and commenting on annual DOE budget requests and future funding requirements. The committee was one of the most active committees in 2007, working on the following issues:

- DOE cleanup contract procurement process The committee tracked the
 procurement process, attended budget workshops, and created two pieces of
 draft advice that were adopted by the Board.
- Hanford cleanup funding The committee commented on the FY 2008 and FY 2009 and outyear budget requests and on DOE's cost and baseline process in two pieces of draft advice that were adopted by the Board.
- TPA negotiations Beginning in the fall of 2007, Budgets and Contracts
 Committee tracked the TPA milestone negotiations between DOE, EPA and
 Ecology.
- Multi-tier pension and benefits program Concern over contract changes resulting in unequal benefits among non-federal Hanford employees led the committee to prepare draft advice for Board approval on Hanford's pension and benefits program.

Health, Safety, and Environmental Protection Committee The Health, Safety, and Environmental Protection Committee considers how cleanup activities and DOE operations impact public health, worker safety, and the environment. In 2007, the committee concentrated on the following issues:

- Workers' compensation program The committee developed draft advice on the workers' compensation program and the difficulties experienced by workers making claims. The final Board advice asked for specific improvements in the workers' compensation program.
- The committee continued to review and discuss contractor safety culture initiatives, medical surveillance efforts, hexavalent chromium policies and effects, Hanford Beryllium Program, and uniform sitewide safety standards.

Public Involvement and Communications Committee
The Public Involvement and Communications Committee
strives to ensure and provide opportunities for the public
and the Board to participate in Hanford cleanup decisions. In
2007, the committee worked on the following topics:

- Budget workshops The committee commented early on and helped shape the structure, format, and schedule of the regional budget workshops.
- State of the Site meetings The committee worked with the agencies to make the State of the Site meetings meaningful to the public. Early in the development process committee members provided input to the agencies on the format, content, and locations of the State of the Site meetings.
- Other DOE public involvement events The committee tracked and commented on DOE-HQ's public involvement initiatives that could impact Hanford cleanup work.
- The committee continued to review the Board's existing methods of public outreach and involvement and to use the traveling HAB informational display at Board meetings and other public events Board members attend.

River and Plateau Committee

The River and Plateau Committee studies cleanup issues in the River Corridor, Central Plateau (excluding tank farms), and 300 Area of the Hanford site. In 2007, the committee focused primarily on the following:

Groundwater values – The committee was instrumental
in the creation of a groundwater values flowchart that
has been used by the agencies and shared with other
SSABs. Draft advice accompanied the flowchart,
discussing river corridor cleanup decision-making
process and advising the agencies to set specific goals

- and schedules for groundwater characterization, remediation and cleanup.
- Environmental Restoration and Disposal Facility
 (ERDF) The committee followed the investigation
 of compaction and quality control issues at ERDF
 and received updates from DOE and its contractor on
 actions taken to resolve the issues.
- The committee reviewed long-term stewardship plans, upcoming Central Plateau waste site cleanup decisions, records management, river corridor baseline risk assessments, and TPA milestone changes.

Tank Waste Committee

The Tank Waste Committee tracks technical issues related to tank waste storage and retrieval, treatment, and disposal. The committee focused on several topics in 2007:

- S-102 tank spill The committee received briefings on the S-102 tank spill and prepared draft advice. The committee will continue to follow the investigation, its results and the cost of the response and investigation.
- Demonstration Bulk Vitrification System (DBVS) –
 The committee continued to track and receive regular
 updates from DOE as they researched the technical
 viability of bulk vitrification as a supplemental
 treatment technology.
- Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) – The committee continued to follow and receive updates on the development of the TC&WM EIS. Committee members regularly attended TC&WM EIS workshops.
- Tank Waste System The committee continued discussions with DOE on Advice #192 and DOE integration efforts for a system-wide approach for tank waste streams.
- Double-Shell Tank Integrity Report Issue managers reviewed the report and worked closely with DOE to successfully address and resolve committee questions and concerns.



Board members discuss advice during a meeting in June.

Soard Leadership

The Board leadership, composed of Board and committee chairs and vice-chairs, held its annual leadership retreat in May to evaluate the previous year's work and outline priorities to guide the Board's work in the coming year. The retreat also afforded Board leadership an opportunity to assess how the Board functioned in the past year and identify ways to improve. The discussion included methods for improving the Board's operating procedures, increasing Board effectiveness, and opportunities for cultivating new members and leadership within the Board. The Board and the TPA agencies also collaborated and developed work priorities for the coming year. In addition, Board leadership commented on what should be included in the Board process manual, identified the need to maintain institutional knowledge, and discussed the potential for committee realignment when the new site contracts are awarded.



Board members discuss advice during a meeting in September.

Board Leadership

Chair: Susan Leckband Vice Chair: Rick Jansons

National Liaison Shelley Cimon

Committee Leadership
Budgets and Contracts Committee

Chair: Gerry Pollet

Vice Chair: Harold Heacock

Health, Safety, and Environmental Protection Committee

Chair: Keith Smith

Vice Chair: Jim Trombold

Public Involvement and Communications Committee

Chair: Helen Wheatley Vice Chair: Steve Hudson

River and Plateau Committee

Chair: Maynard Plahuta

(Jerry Peltier, previous Chair, left the Board in November 2007)

Vice Chair: Jerri Main

Tank Waste Committee Chair: Ken Gasper Vice Chair: Pam Larsen

Workshops and Site Tours

Board members participated in several DOE-sponsored workshops in 2007 on Hanford cleanup issues and also participated in various site tours. Workshops and tours included:

- Budget Workshop/Regional Forums for FY 2009 Hanford Budget Process
- TPA Negotiations workshop
- TC&WM EIS workshops
- State of the Site meetings
- National Academy of Sciences Panel Discussion New Technology Roadmap
- Workshop on an Integrated Approach to Address One Area of Groundwater and Vadose Contamination
- Groundwater Science and Technology Needs workshop
- 100 Area and 300 Area Component of the River Corridor Baseline Risk Assessment workshop
- Central Plateau Ecological Risk Assessment workshop
- Demonstration bulk vitrification tour
- HAMMER facility tour
- WTP tour

National Involvement

The Board's chair and national liaison attended the biannual SSAB chairs meetings that were held this year in Las Vegas, Nevada, and Paducah, Kentucky. The Board understands the importance of preserving institutional knowledge by sharing experiences, strategies and priorities across the DOE site complex. Communication between advisory boards is also essential to share common cleanup approaches and technologies. In 2007, the Board shared its groundwater and Central Plateau flow charts along with some HAB public involvement education products with the SSAB chairs and signed on to three letters issued by the SSAB chairs, which are available at: www.em.doe.gov/stakepages/ssabchairs.aspx.

The Board's National Liaison and a few Board members attended the 2007 Joint Intergovernmental Meeting with DOE in Utah and the First Annual Rad Waste Summit, held in September, in Nevada. Both of these venues provided educational opportunities for informing the Board about the international and national nuclear material management challenges. The Joint Intergovernmental Meeting, in particular, provided an opportunity for collaborative discussions resulting in a consensus letter to DOE. Based on the results of the Joint Intergovernmental Meeting, the Board

decided to also issue a letter (November 2, 2007) to DOE with corresponding recommendations.

Other Board Products

While advice is the Board's most powerful tool to influence cleanup decision-making, the Board also issues letters on non-policy issues or when written response is not required for a particular issue. Often, letters are of a congratulatory nature when an important cleanup goal is met, such as the successful transfer of sludge from K East Basin to K West Basin and letters of appreciation to the retiring DOE field office managers.

The Board also uses letters to express its values or opinion on certain topics. In 2007, the Board issued letters on the proposed TPA modifications for Central Plateau waste sites and groundwater remediation and on the draft Integrated Groundwater and Vadose Zone Management Strategy. In addition, the Board provided a letter and set of comments upon initial review of the Draft Risk Assessment Report for the 100 Area and 300 Area Component of the River Corridor Baseline Risk Assessment.

In 2007, DOE requested that all the SSABs review and make necessary changes to its charter to maintain compliance with Federal Advisory Committee Act (FACA). The Board reached consensus on draft modifications and submitted them to DOE-HQ; the changes are under review by DOE-HQ.

To help codify Board processes and internal workings, the Board developed a process manual in 2007. The manual is an internal tool to help document and guide Board procedures, as well as educate and inform new members about how the Board works. This living document will be reviewed and updated periodically.



Workers use an open-air misting system to control contamination during waste retrieval.

Hanford ADVISORY BOARD membership

New HAB Members and Alternates

Name	Seat	Appointment Date
Phil Brick	Regional Citizen, Environmental and Public	April 30, 2007
	Interest Organizations	

Phil is the Miles C. Moore Professor of Politics and Environmental Studies at Whitman College in Walla Walla. Phil joined the Board to learn more about Hanford cleanup and to raise awareness about Hanford issues at Whitman College and in the Walla Walla community.

Floyd Hodges	Regional Citizen,	April 30, 2007
	Environmental and Public	

Environmental and Public Interest Organizations

Floyd has a Ph.D. in Geology from the University of Texas at Austin and over 35 years of experience in various aspects of geology, geochemistry, and hydrogeology. He retired from Pacific Northwest National Laboratory (PNNL) in 2002, and after a brief stint as a temp for the Washington Department of Ecology in Richland, struck out on his own to enjoy the pleasures of being a gentleman scientist. He is a licensed Professional Geologist and Hydrogeologist in Washington State.

Emmett Moore University August 8, 2007

Emmet is adjunct professor of environmental science at Washington State University. He holds a PhD in physical chemistry from the University of Minnesota. His experience includes serving as assistant professor of physics at the University of Minnesota Duluth, director of power plant siting and transmission line routing for the State of Minnesota, and most recently PNNL project manager for environmental reports for DOE, Nuclear Regulatory Commission (NRC), and EPA on spent nuclear fuel, reactor decommissioning, and emission of radionuclides from DOE facilities. Emmett has served on the Board as an alternate.

New HAB Members and Alternates

Name	Seat	Appointment Date
Gene Schreckhise	University	August 8, 2007

Gene is Academic Director of Sciences and Agriculture Programs at Washington State University Tri-Cities, and an Associate Professor in the School of Earth and Environmental Science. Prior to joining WSU Tri-Cities Dr. Schreckhise worked at Battelle, Pacific Northwest Laboratories, where his work focused on the development and utilization of environmental pathway and dose assessment models and assessing the potential human health and ecological impacts of nuclear facilities and other technologies.

John Martell	Washington State	August 9, 2007
	Department of Health	

John has 18 years experience on the Hanford site, the first six working for a Hanford site contractor in the 200 East and West tank farms, and the past 12 years working with the Washington State Department of Health, Radioactive Air Emissions Section. He is interested in helping the Board to understand the air permitting issues associated with site cleanup.

Bob Suyama Public at Large August 9, 2007

Bob has over 30 years of experience performing engineering development and management roles at the DOE sites including Hanford, Los Alamos and Rocky Flats. He is deeply interested in the long term environmental legacy of Hanford cleanup.

Bob holds engineering degrees from the University of Colorado and the University of Utah.

Mike Korenko Public at Large December 19, 2007

Mike has 25 years experience at DOE sites and nine years in the commercial sector. He is currently the business development manager for Curtiss-Wright Corporation. He graduated with honors from MIT and was a postdoctoral fellow at Oxford University. As vice president and general manager of Westinghouse Hanford, he managed the 300 and 400 areas and all the engineering, safety analysis and construction projects for the entire Hanford site. He also served as the Executive Vice President of Closure for Safe Sites of Colorado at Rocky Flats. In addition to several acknowledgements, he received an award from the Nez Perce Tribe for his work with Native Americans at Hanford.

Current HAB Members & Alternates

Organization/Group	Primary Member	Alternate	
Local Government Interests (7)			
Benton County	Maynard Plahuta	Kenneth Gasper	
Benton-Franklin Council of Governments	Rick Jansons	Gwen Luper	
City of Kennewick	Bob Parks	Richard Smith	
City of Pasco	Robert Davis	Joe Jackson	
City of Richland	Pam Larsen	Vince Panesko	
City of West Richland	Vacant*		
Grant & Franklin Counties	Jim Curdy	Art Tackett	
*Jerry Peltier left the Board in November 2007.			
Local Business Interests (1)			
Tri-Cities Industrial Development Council	Harold Heacock	Gary Petersen	
Hanford Work Force (5)			
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	Laura Mueller Larry Lockrem	
Government Accountability Project	Tom Carpenter	Allyn Boldt	
Local Environmental Interests (1)			
Richland Rod & Gun Club	Gene Van Liew	Paul Kison	
Regional Citizen, Environmental & Public Interest Or	ganizations (5)		
Columbia Riverkeeper	Greg deBruler	Steve White	
Hanford Watch	Paige Knight	Steve Roney Robin Klein Steve Hudson	
24			

Organization/Group	Primary Member	Alternate
Heart of America Northwest	Gerald Pollet	Helen Wheatley Amber Waldref
Washington League of Women Voters	Susan Kreid	Betty Tabbutt
Citizens for a Clean Eastern Washington	Todd Martin	Phil Brick Dr. Floyd Hodges Dr. Mark Beck Dr. Susan Babilon Cindy Meyer
Local and Regional Public Health (2)		
Benton-Franklin Public Health	Dr. Margery Swint	Dr. Gerry Dagle Dr. Tony James
Physicians for Social Responsibility	Dr. Jim Trombold	Dr. Charles Weems
Tribal Government (2)		
Nez Perce Tribe	Gabriel Bohnee	John Stanfill Sandra Lilligren Kriste Baptiste-Eke
Yakama Nation	Russell Jim	Wade Riggsbee David Rowland
State of Oregon (2)		
Oregon Hanford Cleanup Board	Larry Clucas	Maxine Hines Wayne Lei Barry Beyeler Robert Mcfarlane
Oregon Department of Energy	Ken Niles	Dirk Dunning Susan Hughs Tom Stoops Paul Shaffer
University (2)		
University of Washington	Mark Oberle	Michael Silverstein
Washington State University	Gene Schreckhise	Emmett Moore

Organization/Group	Primary Member	Alternate	
Public At Large (4)			
	Norma Jean Germond	Nancy Murray	
	Keith Smith	Shelley Cimon George Jansen, Jr.	
	Bob Parazin	Jerri Main	
	Bob Suyama	Mike Korenko	
Ex-Officio Representatives			
Confederated Tribes of The Umatilla Indian Reservation	Armand Minthorn		
Washington State Department of Health	Earl Fordham	Debra McBaugh John Martell	
US Department of Energy-RL	Dave Brockman	Karen Lutz	
US Department of Energy-ORP	Shirley Olinger	Erik Olds	
US Environmental Protection Agency	Nick Ceto	Dennis Faulk	
Washington State Department of Ecology	Jane Hedges	Nolan Curtis	

Members or Alternates Who Left the Board in 2007

1	1	II
Mark Panther	Jeanie Sedgely	Allen Conklin
Tim Jarvis	Donna Morgans	Jerry Peltier

Acknowledgements

The Hanford Advisory Board would like to acknowledge the following resources used for the content of the Board's Annual Report:

- Agency representatives and Board Chair
- DOE Press Releases
- Hanford Site Groundwater Remediation Project
- The Department of Energy Hanford Site website
- The Department of Energy website
- Washington State Department of Ecology website
- Photos provided by DOE, site contractors, and EnviroIssues

Acronyms and Glossary

Central Plateau: The location of the 200 East and 200 West Areas and waste management facilities situated 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.

CCSI: Coordinated Care Services, Inc. is the contractor responsible for workers' compensation claims services at the Hanford site.

DBVS: The Demonstration Bulk Vitrification System is a treatment technology currently under consideration to treat low-activity tank waste as a supplement to work at the Waste Treatment Plant.

DOE: U.S. Department of Energy.

DOE-HQ: Department of Energy Headquarters in Washington, D.C. Hanford cleanup is overseen by DOE's Office of Environmental Management.

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 the National Environmental Policy Act (see below).

EM: Environmental Management.

ERDF: Environmental Restoration and Disposal Facility, a massive landfill where low-level radioactive waste and mixed low-level wastes from Hanford cleanup are disposed.

EPA: U.S. Environmental Protection Agency.

Federal Advisory Committee Act (FACA): The Federal Advisory Committee Act is a US law (Pub. L. 92-463, Oct. 6, 1972) which governs the behavior of advisory committees. DOE chartered the Board in 1994 under FACA.

FFTF: Fast Flux Test Facility, a fast neutron flux nuclear test reactor owned by the DOE. The facility is located in the 400 Area of the Hanford Site and is currently undergoing deactivation (i.e., shutdown or transition).

FY: Fiscal Year.

HAB or Board: The Hanford Advisory Board.

HAMMER: Hazardous Materials Management and Emergency Response Training and Education Center. Used to train cleanup and emergency response personnel. It is also used for training and education of non-Hanford workers.

K Basins: Water-filled basins located less than 1,000 feet from the Columbia River that were used to store spent nuclear fuel from reactor operations.

MTCA: The Model Toxics Control Act (1989) is Washington state's Superfund cleanup law, which establishes a process to identify cleanup sites, cleanup standards and management, and cleanup enforcement.

MSC: Mission Support Contract. Covers cross-cutting services, including site services, safety and security, information technology, and integrated lifecycle planning.

NCP: The National Oil and Hazardous Substances Contingency Plan establishes procedures for evaluating and selecting cleanup remedies.

NEPA: National Environmental Policy Act of 1969 requiring federal agencies to use an interdisciplinary approach in planning and decision making for actions that impact the environment. NEPA requires the preparation of an Environmental Impact Statement (EIS) on all major Federal actions significantly affecting the human environment.

Plutonium Finishing Plant (PFP): Facility used for stabilizing and repackaging plutonium and plutonium-contaminated material at Hanford. The PFP was used extensively during WW II and the Cold War to purify and convert plutonium-laced solutions into a solid form to be used by nuclear weapons facilities.

PRC: Plateau Remediation Contract. Covers completion of cleanup of PFP; perform non-tank farm waste disposal activities; monitor and remediate groundwater; and characterize, maintain, and/or remediate facilities and waste sites.

PUREX: Plutonium-Uranium Extraction Plant that separated used nuclear fuel into components that produced plutonium, uranium, and waste.

RCBRA: The objective of the River Corridor Baseline Risk Assessment is to assess the risk of contamination exposure to humans and ecological receptors using the Columbia River corridor on the Hanford site.

RCRA: Resource Conservation and Recovery Act, the federal law regulating the handling, storage, treatment, disposal, and overall management of solid and hazardous wastes.

River Corridor or Columbia River Corridor: Hanford facilities and waste sites along the Columbia River.

ROD: Record of Decision. A written decision that identifies the selected method for long-term cleanup of contamination at a site.

RTD: Remove, treat, and dispose. The Board's preferred approach to cleaning up waste.

SSAB: Site Specific Advisory Board, a board that provides consensus advice and recommendations to the DOE's environmental restoration and waste management activities.

Nine local community boards are chartered under the EM SSAB Federal Advisory Committee Act (FACA) Charter.

Tank Closure and Waste Management EIS (TC&WM EIS): The EIS intended to provide a comprehensive and integrated look at near-term waste management and tank waste cleanup actions at Hanford.

Tank farms: Waste storage tanks at Hanford are grouped into "farms." Hanford has eighteen tank farms with anywhere from two to 16 tanks per farm.

TOC: Tank Operations Contract. Covers base operations at the tank farm; retrieve waste from and close single-shell tanks; support the WTP; and close tank farm waste management areas.

TPA: Tri-Party Agreement, the informal name for the Hanford Federal Facility Agreement and Consent Order signed by the U.S. Department of Energy, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology in 1989. Cleanup milestones are identified in the TPA through numbered series, such as M-91 for transuranic waste disposal and M-24 for groundwater monitoring.

TRU: Transuranic waste, which is contaminated debris from nuclear materials production, including protective clothing, gloves, tools, plastics, wood, and metal.

Vitrification: A process that mixes radioactive waste with other materials to form glass. The glass reduces the potential for radioactive and hazardous contamination leaching into the environment.

WTP: Waste Treatment Plant, the facility where tank waste will be vitrified.

WIPP: Waste Isolation Pilot Plant, the world's first underground repository licensed to safely and permanently dispose of transuranic radioactive waste left from the research and production of nuclear weapons.

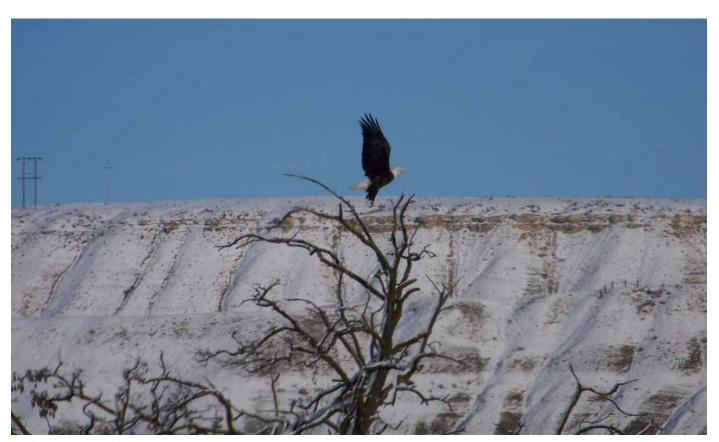
100 Area: 26 square miles of land along the Columbia River where the nine nuclear reactors are located.

200 Area: The location on the Central Plateau of the 177 underground tanks, principal nuclear chemical processing facilities, and defense waste management activities.

300 Area: An area three miles north of the city of Richland, location of former research and development laboratories and reactor fuel manufacturing facilities.



K West Basin sludge retrieval.



Bald Eagle on the Columbia River.

For More Information

Who to Contact about the Hanford Advisory Board:

Susan Leckband, Chair Hanford Advisory Board 713 Jadwin Avenue, Suite 4 Richland, WA 99352 (509) 942-1906

Cathy McCague, Board Facilitator EnviroIssues 1515 SW Fifth Avenue, Suite 1022 Portland, OR 97201 (503) 248-9500

Nolan Curtis Washington State Department of Ecology Nuclear Waste Program 3100 Port of Benton Boulevard Richland, WA 99352 (509) 372-7954

Dennis Faulk U.S. Environmental Protection Agency 309 Bradley, #115 Richland, WA 99352 (509) 376-8631

Erik Olds U.S. Department of Energy - ORP PO Box 450, H6-60 Richland, WA 99352 (509) 372-8656

Karen Lutz U.S. Department of Energy - RL 825 Jadwin Avenue Richland, WA 99352 (509) 376-4766

Additional Written Information

If you would like to receive additional copies of this report, please contact Tammie Holm, EnviroIssues, (509) 942-1906. Information on the Board is also available on the Web at: http://www.hanford.gov/hab

Hanford Public Information Repositories

Portland

Portland State University Branford Price Millar Library 1875 SW Park Ave. Attn: Don Frank

Attn: Don Frank (503) 725-4132

Map: http://www.pdx.edu/map.html

Richland

U.S. Department of Energy Reading Room Consolidated Information Center, Room 101-L 2770 University Dr. Attn: Janice Parthree (509) 372-7443 Map: http://tinyurl.com/2axam2

Spokane

Gonzaga University
Foley Center
502 E. Boone Ave.
Attn: Linda Pierce
(509) 323-3834
Map: http://tinyurl.com/2c6bpm

Seattle

University of Washington Suzzallo Library Government Publications Division Attn: Eleanor Chase (206) 543-4664 Map: http://tinyurl.com/m8ebj

This report was compiled and designed by the staff at

