

HANFORD ADVISORY BOARD
Revised Meeting Summary
April 6-7, 2000
Richland, Washington

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EXECUTIVE SUMMARY

Tri-Party Agreement

The Board discussed the Tri-Party Agreement (TPA) in depth, looking at cleanup along the Columbia River, the Central Plateau, the River Protection Project and TPA compliance issues. The objective for this meeting was for the Board to gain a broad understanding of the TPA to assess the "health" of the TPA at a future Board meeting. Presentations were given by Todd Martin, Physicians for Social Responsibility, in place of HAB Vice Chair Ken Bracken; Harry Boston, U.S. Department of Energy-Richland (DOE-RL); Bill Taylor, DOE-Office of River Protection (ORP); Laura Cusack, Washington State Department of Ecology (Ecology); Roger Stanley, Ecology; and Mike Gearheard, Environmental Protection Agency (EPA).

Cleanup Along the River - 618 Burial Grounds

The Board discussed the upcoming Record of Decision (ROD) for remediation of the 618-10 and 618-11 burial grounds with remove, treat, dispose (RTD) as the preferred alternative. Stakeholder participation in the ROD process is a key concern due to elevated levels of tritium detected and the accessibility of the burial grounds to the general public and the Columbia River. The Board reached consensus and adopted HAB Advice # 106 without any abstentions or objections.

DOE Budget Development

Budgets for the DOE-Richland and the DOE-Office of River Protection were presented for Fiscal Year (FY) 1999, 2000, 2001. An overview of the FY 2002 budget process and an update on the FY 2002 Integrated Priority Lists that was sent to DOE-Headquarters from DOE-RL and DOE-ORP were provided to the Board. The Board held extensive discussion on draft advice on the FY 2002 Integrated Priority Lists for DOE-RL and DOE-ORP to identify key issues.

HAB Advice # 107 was approved by the Executive Committee based on the discussions at the HAB meeting and sent to Carolyn Huntoon, DOE-Headquarters, Dick French, DOE-ORP, and Keith Klein, DOE-RL, on April 20, 2000.

Tank Waste Treatment

The Board received an update on the DOE-Office of River Protection (ORP) Alternatives Study report that examined financing and contract alternatives for the Tank Waste Treatment program. Suzanne Dahl, Washington State Department of Ecology, and Gerry Pollet, Heart of America Northwest, presented on the alternatives study report. The Board also discussed draft advice from the Tank Waste Treatment Ad Hoc Committee on holding a regional forum and returned the advice to the committee for further development.

Update on Spent Nuclear Fuel

The Board received an update on the Spent Nuclear Fuel program and the baseline change request to accelerate removal of sludge from the K Basins, in exchange for delaying K East fuel removal by one year. Acceleration of this program may result in cost savings that can be applied to other site cleanup projects. Approval of the baseline change request was expected to follow in the near future.

Health of the Site Conference

The Board discussed the Health of the Site conference, which is co-sponsored between the University of Washington and the Washington State Department of Health annually with the goal of making technical Hanford issues accessible to the general public. A letter of HAB support to the University of Washington on the Health of the Site conference was adopted.

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This is only a summary of issues and actions in this meeting. It may not represent the fullness of ideas discussed or opinions given, and should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

The Hanford Advisory Board (HAB) meeting was called to order by Marilyn Reeves, Chair, Public-at-Large. This meeting was open to the public and offered four public comment periods on Thursday, April 6, 2000 at 11:45 am and 4:45 pm and on Friday, April 7, 2000 at 11:45 am and 3:45 pm.

Board members and alternates in attendance are listed in Attachment 1, as are members of the public. Board seats not represented were: Greg deBruler, Columbia River United (Regional Citizen, Environmental, and Public Interest); Patrick Sobotta, Nez Perce Tribe (Tribal Government); and Richard Berglund, Central Washington Building Trades (Hanford Work Force).

WELCOME AND INTRODUCTIONS

Marilyn Reeves, Chair (Public-at-Large), welcomed all to the meeting and reviewed changes to the meeting agenda. Marilyn asked for introductions of new Hanford Advisory Board (HAB) members, alternates and meeting attendees.

- Shelley Cimon, Oregon Hanford Waste Board (State of Oregon), introduced Norm Dyer as the new alternate for her seat.
- Paige Knight, Hanford Watch of Oregon (Regional Citizen, Environmental, and Public Interest), introduced Bill Kinsella as the new alternate for her seat.
- Ken Niles, Oregon Office of Energy (State of Oregon), introduced new Oregon Energy staff member, Sue Safford.
- Wade Ballard, Deputy Designated Federal Official, U.S. Department of Energy (DOE), announced four positions recently filled at DOE – Richland (DOE-RL).
 - Marla Marvin – Director of Intergovernmental, Public, and Institutional Affairs
 - Betty Hollowell – Chief Counsel
 - Beth Bilson - Assistant Manager of Environmental Restoration and Waste Management, and
 - Paul Kruger - Assistant Manager for Science and Technology.

ANNOUNCEMENTS

- Wade Ballard announced a reception for the HAB to be held at his house Thursday evening.
- Wade Ballard introduced Harry Boston, DOE-RL, Deputy Site Manager for Site Transition.

- Marilyn Reeves encouraged Board members to review the Board packet prior to meetings because it provides a good background of the issues to be discussed. Ruth Siguenza, EnviroIssues, reviewed the facilitation team process for distributing Board packet materials. Ruth reviews news clips and correspondence 3-5 times a week and pertinent material is sent to Donna Sterba, Nuvotec, to be included in the packet. The packet deadline is two weeks and two days prior to the meeting date. The extra 2 days are used for assembling the packets. Minutes for committee meetings are normally available one week after the meeting date, except in months with a Board packet. Marilyn thanked the facilitation team for the extensive work that goes into disseminating Board packets.
- Max Power, Washington State Department of Ecology (Ecology), announced that discussions between Washington State Governor Locke and Energy Secretary Richardson regarding importation of off-site waste had been cancelled, and had not been rescheduled at this time.
- Susan Leckband, Non-union, Non-management Employees (Hanford Work Force), announced an Earth Day celebration April 22nd at the Howard Amons Park where she will staff a HAB booth to distribute information about the Board.
- Wanda Munn, Benton-Franklin Council of Governments (Local Government), announced the death of Don Sandberg.
- Marilyn Reeves announced that Leon Swenson, Public At Large, would be the Board representative for a dinner with Deputy Secretary Glauthier in the following week.

APPROVE FEBRUARY MEETING SUMMARY

Ruth Siguenza announced that revisions to the February meeting summary had been submitted by Madeleine Brown, Ken Niles, Marilyn Reeves, and Leon Swenson. Marilyn suggested that the tank waste treatment discussion from the February meeting summary be transmitted to the Northwest Congressional delegation, which also received the Tank Waste Treatment statement from the Board in February. Interest groups are welcome to transmit the summary of the April discussion to illustrate the diversity of views on the Board.

TRI-PARTY AGREEMENT

Overview

Todd Martin, Physicians for Social Responsibility (Local and Regional Public Health), provided an overview of the Tri-Party Agreement (TPA) overview. Ken Bracken, Benton County (Local Government), worked with TPA agencies to put this meeting together but was unable to attend due to a heart attack. Ken's objective was to provide the Board with an understanding of the TPA and to assess the "health" of the TPA. The TPA has been around since 1989 and formally made DOE activities at Hanford subject to external regulation. The TPA cleanup schedule sets milestones for bringing site activities into compliance with existing regulations. In 1989, when the TPA was signed, there were 25 milestones. In 1997, 20% of these had been met, almost 50% had been deleted, and another 20% had been altered. This illustrates the evolving nature of the TPA. For

example, between 1995 and 1998, issues arose on the treatment of tank waste resulting in changes to 55% of the related TPA milestones. The TPA was a method for getting the site into compliance rather than using the legal system. The TPA is one of the driving forces for obtaining funding for Hanford cleanup. Copies of the TPA were made available to HAB members. Copies may also be obtained on the DOE web site, www.hanford.gov/tpa/tpahome.htm.

Cleanup Along the River

Harry Boston observed that a lot of cleanup progress has resulted from the TPA in the last 10 years but challenges remain, such as the 200 Area. The TPA and the clear organizing principles developed by Keith Klein, DOE-RL, are the driving forces behind cleanup. Increased efficiencies and better technologies are key to accelerating cleanup across the site. Now is a good time for DOE to examine outcomes and challenges for regulatory, policy, and technical decisions ahead. DOE has plans to work with stakeholders to look at the entire site and welcomes policy recommendations on cleanup progress in the summer ahead. Work along the River has been laid out based on outcomes in the K Basins milestones (M-34), 100 Area waste site milestones (M-15 and M-16), and bringing closure of waste sites under the TPA.

Harry Boston shared a draft River cleanup scorecard that measures reduced threats to the River, land made available for other uses, freeing up money for other cleanup, and reduction of worker risk. A comparison of the current baseline with the potential work that could be completed was included in this scorecard. N Reactor is scheduled to be done by 2017, and non-200 Area groundwater issues should be addressed by 2040. With the exception of the 618-10 and 618-11 burial grounds, the 100 Area and 300 Areas could be cleaned up by 2015 with adequate funding. The K Basins could potentially be cleaned up by 2011. Harry encouraged the Board to think about how risk issues should be dealt with, such as tradeoffs between addressing higher risk river cleanup work over reactor work along the river. All work along the River could potentially be completed by 2015, which could free up funds for other work. In the 300 Area, DOE is asking if early mortgage reduction can free up cleanup funds because surveillance activities could cost millions of dollars over many years. DOE sees the TPA as a living document to complete Hanford cleanup and is committed to meeting the TPA schedules. Harry asked the HAB for help in securing funding and support to ensure that the TPA schedules are met.

Laura Cusack, Ecology, provided Ecology's perspective on the TPA and river cleanup. A number of TPA milestones remain to be determined, such as setting M-15 dates for investigating cleanup in the 100, 200 and 300 Areas, as well as the tank waste operable units. Laura highlighted Milestones 89 to 92, which include the project management plan (PMP) for retrieval of low-level waste. The PMP for transuranic waste retrieval is due in June. As DOE develops new policies and major changes to the TPA, Ecology will be focused on the current baseline and ensured compliance.

Mike Gearheard, U.S. Environmental Protection Agency (EPA), said EPA has a strong interest in successful work along the River. Currently, 350 of 400 waste sites in the 100 Area are covered under Records of Decision (RODs), but RODs on the remaining waste sites must be completed this year. 100 Area cleanup is a highlighted success at Hanford, and EPA agrees with DOE on the potential to complete cleanup of these waste sites by 2008. Groundwater pump-and-treat activities have been included in the EPA five-year review process. EPA understands that DOE is interested in cleaning up the 300 Area for reuse. EPA plans to work with Ecology and DOE regarding cleanup of the 618-10 and 618-11 burial grounds.

Board Discussion

Betty Tabbutt, Washington League of Women Voters (Regional, Environmental, and Public Interest), asked if there are real examples of accelerated cleanup work to illustrate the possibilities. The Plutonium Finishing Plant (PFP) was cited as an example by Harry Boston.

Norma Jean Germond, Public-at-Large, asked if the Hanford site can prove to DOE-Headquarters (DOE-HQ) that technical capabilities will support accelerated cleanup. DOE-HQ has been presented with the concept, but the site must prioritize what activities to accelerate. Marilyn Reeves asked what the relationship is between TPA milestones and funding. Baseline charts are based on flat funding assumptions from DOE-HQ guidance. However, the assumptions for acceleration do not consider current funding limitations. Gordon Rogers, Public-at-Large, suggested that the best approach may be to increase efficiencies to get the most cleanup out of existing funds available under flat funding. Ken Niles, Oregon Office of Energy (State of Oregon), said TPA commitments and other issues, such as the 618 burial grounds, cannot be deferred at the cost of accelerated cleanup.

Paige Knight, Hanford Watch of Oregon (Regional, Environmental, and Public Interest), asked how will risk be determined from a policy perspective. How will decisions be made on what work to defer and what work to accelerate? Paige also asked how much delay has resulted from past management changes.

Susan Leckband, Non-Union, Non-Management Employees (Hanford Work Force), asked if there is clear coordination between DOE-RL and DOE-Office of River Protection (ORP). Harry Boston said the offices on site are very closely coordinated on regulatory issues.

Madeleine Brown asked how B Reactor and the proposed museum fit in with DOE planning.

Keith Smith, Hanford Atomic Metal Trades Council (Hanford Work Force), said employee layoffs, training, and transition of management teams are costly, especially addressing the loss of skilled labor after layoffs.

Central Plateau

Harry Boston discussed the Central Plateau, which encompasses 50 square miles that will not be released for other uses. DOE plans to use the Central Plateau for long-term waste management that requires continuous government presence and implementation of stewardship measures. Central Plateau cleanup activities include: Plutonium Finishing Plant, tank farms, transuranic waste retrieval, 200 Area waste sites, and groundwater/vadose zone issues. The bulk of these are covered under the TPA.

He described a draft scorecard on progress on the Central Plateau that measures treatment and disposal of waste; stabilization of contaminant sources; elimination of hazards to workers; the public and the environment; and freeing up money for other cleanup. An ongoing activity will be preparing transuranic waste for shipment to the Waste Isolation Pilot Plant. Reducing costs for stabilizing wastes, such as the Canyon Disposition Initiative, could free up funds for other cleanup activities. Harry asked for Board advice on policy issues on the following questions:

- Can accelerated deactivation of the Plutonium Finishing Plant reduce mortgage costs?
- Is it possible to close the canyons in place?
- Should 200 Area waste sites be deferred to complete River cleanup first?

Laura Cusack responded to Harry's comments on behalf of Ecology. The Project Management Plan for Central Plateau activities is due in June 2000. Negotiations will fill in the To Be Determined (TBD) dates in the schedule. EPA is concerned about 200 Area soil cleanup sites because the TPA may not be driving this work effectively. Ecology is concerned about Milestone-24 that addresses groundwater-monitoring wells. DOE has until 2003 to comply with the Resource Conservation and Recovery Act (RCRA) by installing adequate groundwater monitoring wells. The groundwater table has dropped, so some groundwater monitoring wells have dried.

Mike Gearheard said groundwater pump-and-treat projects are addressing carbon tetrachloride, technetium, and uranium in the 200 Area. There is potential for cleanup in 100 Area and 300 Area waste sites to wind down by 2010, when 200 Area waste site cleanup should be ready to begin. There are about 750 waste sites in the 200 Area that must be characterized for the Remedial Investigation/Feasibility Study (RI/FS) process. Efficiencies discovered and lessons learned in the 100 Area should be applied to 200 Area work.

Board Discussion

Merilyn Reeves said DOE-HQ has established a new security agency that will take \$40 million from the Hanford Environmental Management cleanup budget.

Ken Niles asked what is preventing PFP from being included in the TPA. This is a high priority for the Board. Roger Stanley said the TPA did not originally include facility transition, and failed negotiations in 1997 prevented the Plutonium Finishing Plant from

being brought into the TPA. Susan Leckband added that stewardship must be included in the TPA.

River Protection Project

Bill Taylor, DOE-ORP, updated the Board on TPA negotiations. DOE-ORP presented Ecology with its final proposal containing five milestones in January 2000. The milestones included in the DOE-ORP proposal included:

- **M-62 series**- Addresses the vitrification plant including construction, hot operations, commercial options, completion of work in 2018, and the BNFL dangerous waste permit.
- **M-20 series** – Addresses the Canister Storage Building and RCRA permitting for the M-62 series.
- **M-47 series** – Addresses definitions and a schedule to address waste feed to BNFL facilities.
- **M-90 series** – Addresses the Canister Storage Building construction and the trench associated with the vitrification plant and glass product.
- **M-45 series** – Addresses the waste retrieval program, including three specific milestones currently not achievable due to budget shortfalls. Single shell tank retrieval milestones will be re-negotiated in August 2000.

He said Ecology and DOE were in agreement with most of these milestone series, except for M-47. Ecology also wanted enforcement power for out-year milestones. These were the two points of disagreement that caused the TPA negotiations to fail.

Roger Stanley, Ecology, provided background information on the TPA negotiation process. Negotiations in 1989, when the TPA was initially signed, involved extensive discussion on tank waste treatment and retrieval of waste from single shell tanks. Early TPA schedules would have resulted in the vitrification plant operating one year ago. In October 1998, Ecology developed an Agreement In Principle, which was signed in May 1999. Last month, Tom Fitzsimmons, Director of Ecology, issued a Director's Determination that unilaterally sets the schedule for tank waste treatment without deviating from what DOE and BNFL have already been working toward. This schedule includes the following dates:

- Authorization To Proceed – August 2000
- Start of construction - 2001
- Hot operations – 2007
- Commercial operations - 2009
- Treatment of 10% of waste – 2018
- Treatment of 100% of waste – 2028

Timely delivery of tank waste for feed and disposal facilities for vitrified glass are remaining issues. Single shell tank retrieval is also of great concern to Ecology. Schedules in the Director's Determination will be implemented in May if DOE does not appeal within 30 days. From Ecology's perspective, the largest issue that held up

negotiations was DOE accountability to the State and the State's ability to take enforcement action against DOE.

Paige Knight asked what the points of contention were that led to failed negotiations, and asked how many milestones were involved. Ecology's perspective is that holding DOE accountable to fewer milestones over time requires interim progress checks to ensure milestones are met. Ecology believes that it must have enforcement authority to ensure that milestones are met and the schedule proceeds without delay. DOE cannot agree to allow Ecology to enforce today for an out-year milestone.

Compliance and Enforcement

Roger Stanley explained Ecology's enforcement tools under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), RCRA and the TPA. The TPA dispute resolution process is often used to negotiate agreement under RCRA. Disputes can move from the project manager level to the interagency management team and then to the Director of Ecology. If necessary, a Director's Determination is issued to DOE. DOE then has 30 days to accept or appeal the Director's Determination. An appeal can proceed through federal district court or the State Pollution Control Board. Under RCRA and the TPA, the State can impose penalties up to \$10,000. Under State law, fines of up to \$10,000 per day can be issued. For violations of the TPA or the State Hazardous Waste Management Act, the State has three enforcement tools: fines, administrative orders or litigation. Any enforcement action looks at the history of the offense. Criminal action can also be taken if warranted.

Outside of the TPA, Ecology can take enforcement action under the Hanford RCRA permit. Roger cited two recent enforcement actions Ecology has taken against DOE: the Director's Determination on tank waste treatment and an action regarding double shell tank integrity. There have been very few fines issued under the TPA. Any money from fines is applied toward non-TPA regional environmental work and is usually taken out of the program budget related to the fine.

Mike Gearheard outlined EPA's basic enforcement tools under the TPA: dispute resolution, stipulated penalties, and citizen suits. EPA is not interested in enforcement outside of the TPA. Enforcement action taken between federal agencies is problematic and must be approved through the Department of Justice.

Board Discussion

Ken Niles asked if EPA or Ecology can hold Congress accountable for funding milestone activities. Under RCRA, Mike Gearheard explained that DOE cannot use lack of funding as an excuse for non-compliance. DOE is obligated to seek adequate funding. Ecology can work with DOE through the budget process to address the tension between Congressional funding issues and federal regulatory requirements that must be met regardless of funding.

Gordon Rogers asked if EPA or Ecology have authority to take charge of the work in the instance that DOE performance fails to meet requirements. This is not an option for DOE.

Gerry Pollet asked if in the history of the TPA, DOE has ever been fined as a result of inadequate funding. Dennis Faulk, EPA, said there has never been a case of going to Congress to pay for a fine due to inadequate funding from Congress. Gerry also asked if the State can seek judicial decrees to address compliance. Ecology does not have a definitive policy on judicial decrees but does issue consent decrees for specific cases, such as single shell tank interim stabilization. Tim Takaro, University of Washington (University), asked about additional RCRA enforcement options, such as jail. In rare cases, jail is an enforcement option.

CLEANUP ALONG THE RIVER – 618 BURIAL GROUNDS

Shelley Cimon introduced draft advice on the 618-10 and 618-11 burial grounds. Shelley explained that in January, EPA convened a Remedy Review Board to examine DOE plans to remove, treat and dispose of waste and remediate the burial grounds. Estimated costs to remove, treat, and dispose of transuranic wastes were over \$300 million. The 1998 RCRA ROD for these burial grounds, issued by EPA, calls for remove, treat, and dispose. DOE did not concur with the findings of the Remedy Review Board. The burial grounds contain transuranic waste and CERCLA action may apply. The Remedy Review Board raised the issue of potential flooding in the 300 Area, an additional reason to recommend remove, treat, and dispose. DOE's response letter identified containment in place as an option. Ecology supports remove, treat, and dispose in the RCRA ROD. Prior to identifying elevated tritium levels in January 2000, DOE had no characterization plans for the 618 burial grounds. The ROD is expected to be issued by the end of September 2000. The cost estimate assumes the burial grounds contain transuranic waste.

Dennis Faulk, EPA, outlined an inventory of waste sites by area: 100 Area – 400 sites; 200 Area – 700 sites; and 300 Area – 300 sites, for a total of 1400 waste sites.

Board Discussion

Madeleine Brown said the Environmental Restoration committee drafted this advice because of the close proximity of the burial grounds to a public highway, the Columbia River, and the potential of future release of this land.

Norma Jean Germond said consideration should be given to the timeframe for remove, treat, dispose (RTD) in relation to CERCLA and Model Toxics Control Act (MTCA) standards. EPA noted that transuranic waste shipments and treatment technology should be addressed first.

Harold Heacock, Tri-Cities Industrial Development Council (TRIDEC) (Local Business), raised concern about the unknown, potentially high costs for addressing the 618 burial grounds. Ecology explained that proposed costs for these burial grounds is \$300 million,

but agreed that the burial grounds contain unknowns. For example, tritium had not been identified as a concern until recently.

Pam Brown, City of Richland (Local Government), said the HAB must stress the need to develop safe, effective technologies to address the burial ground materials.

The HAB reached consensus and adopted Advice #106 without any objections or abstentions.

DOE BUDGET: FY 1999, 2000 AND 2001

DOE-Richland

Bob Tibbatts, DOE-RL, discussed the Fiscal Year (FY) 1999, 2000 and 2001 budgets for Richland. The FY 1999 RL budget was \$689 million. For FY 2000, the Richland budget was \$755 million. An additional \$35 million was added to address critical needs; \$26 million of this is to fund TPA milestones. The budget submittal for FY 2001 included \$683 million for the DOE-RL budget, but a significant portion was shifted to DOE-ORP, resulting in a \$168 million shortfall for Richland, \$95 million of which was from the Environmental Restoration program. While \$21 million has been added to fund ER program TPA milestones, the program still faces a \$72 million shortfall. For FY 2001 and 2002, Fluor Hanford has agreed to reduce base operations funding by 10%, which is over \$400 million.

Office of River Protection

Steve Wiegman, DOE-ORP, explained that Congress gave DOE-ORP two objectives: keep the tanks safe and get the waste out of the tanks. These objectives drive every aspect of the DOE-ORP budget. Between FY 2000 and 2001, there is growth in funding for the tank delivery systems. In FY 2002, the BNFL set-aside increases. DOE-ORP is working to clarify essential safety and services costs, as requested by the HAB. DOE-ORP plans to comply with the consent decree, ahead of schedule if possible.

Board Discussion

Norma Jean Germond, Oregon League of Women Voters (Public-at-Large) asked what specific costs Fluor Hanford is targeting with its 10% reduction. Bob Tibbatts responded that base operation costs for essential safety and services will be reduced by about \$30 million.

Susan Leckband asked why there is still a shortfall in TPA compliance. Gerry Pollet, Heart of America Northwest (Regional Citizen, Environmental, and Public Interest), said there has never been a time when the Hanford site has not fully funded TPA compliance. Dennis Faulk said DOE re-prioritizes site funding to cover TPA compliance but warned that there will be a time when these funds will not be available in the site budget.

Susan Leckband asked about DOE-ORP's expectations of Congress to adequately fund the BNFL set-aside. Steve Wiegman explained that the request of \$450 million for FY

2001 was short and funding will have to be made up in future years. It was acceptable to request less this year because in this year Congress will determine the future of the project.

Leon Swenson, Public-at-Large, asked about the Fluor Hanford 10% reduction and current worker concerns about maintaining infrastructure. Bob Tibbatts said DOE reductions to infrastructure over the last five years are being monitored for impacts. DOE will object to reductions that are found to be unacceptable as judged by individual programs.

Jim Trombold, Physicians for Social Responsibility (Local and Regional Public Health), stated that base operation costs must not jeopardize worker safety. Keith Smith, Hanford Atomic Metal Trades Council (Hanford Workforce), agreed.

Bob Larson, Benton-Franklin Regional Council (Local Government), asked about recent changes to how the BNFL set-aside will be scored in Congress. Peter Bengston, Pacific Northwest National Lab (PNNL), explained that there is an unresolved issue between the Congressional Budget Office and the Office of Management and Budget regarding the "scoring" of the project. Scoring is the schedule for how a project will be funded with federal dollars.

DOE Budget Development – FY 2002

Steve Wiegman said the FY 2002 budget process is not in line with the four critical dates faced by DOE-ORP in this year. The current DOE-ORP budget is based on assumptions of what BNFL will submit in its cost proposal on April 24. After the proposal is submitted, DOE-ORP will modify its FY 2002 budget request. Steve outlined the costs related to tank waste cleanup included in its FY 2002 budget request:

- Salt well pumping of single shell tanks
- Vadose zone activities
- Support to BNFL feed delivery in 2006
- Infrastructure to support the vitrification plant (water, roads, power)
- Infrastructure for receipt back of vitrified glass
- Single shell tank closure

Flat funding is problematic for the needed ramp-up in activities associated with feed delivery system, single shell tanks, and tank closure. DOE-ORP does not plan to submit a budget containing a compliance gap, but it is submitting a target budget as mandated by DOE-HQ.

Board Discussion

Paige Knight asked why essential safety and services play a bigger role than TPA compliance in the DOE-ORP Integrated Priority List. This sends the wrong message to the general public. Marilyn Reeves explained that essential safety and services have always been at the top because these support all cleanup work.

Wade Ballard outlined the Richland budget development process that began last December with a meeting of the regulators, Dollars and Sense committee members and DOE-RL staff to discuss criteria for the Integrated Priority List. Safety and essential services were to remain a top priority and the TPA was an overriding issue for compliance. Prioritization developed for the FY 2002 Integrated Priority List included: river cleanup projects, Defense Nuclear Facilities Safety Board safety issues, TPA ongoing issues, TPA new starts, and compliance with other environmental regulations. Other projects funded for FY 2002 include: K Basins (on schedule), facility stabilization, the Plutonium Finishing Plant, central waste management (transuranic waste retrieval and WIPP shipments), T Plant preparation, maintenance of minimum safe conditions for Environmental Restoration facility stabilization, RCRA monitoring wells, and groundwater vadose zone activities. Base operations funding includes infrastructure. DOE-RL was required to submit a budget with a 10% increment increase in which it proposed to additionally fund accelerated facilities stabilization, interim safe storage of reactors, and an assessment of the 200 Area.

Max Power gave Ecology's perspective on the DOE-RL FY 2002 budget request. Creation of DOE-ORP did not result in a decrease in the DOE-RL budget. However, tight budgets and level funding create tension between regulators, local communities, and DOE. There is a need to develop an urban metropolitan constituency to support cleanup. Level funding and compliance gaps are unacceptable and waste management issues are below the line. RCRA groundwater monitoring must be in compliance with TPA commitments and DOE must complete an adequate land disposal restrictions document. Shipping low-level waste to Hanford at this time is inconsistent and unacceptable.

Dennis Faulk was pleased with the summary of public comments compiled by DOE, which included comments from regulators. The DOE process of setting criteria with regulators and the HAB for budget development worked well for EPA because it was visible when DOE did not follow the criteria set. EPA concerns include cleanup funds paying for non-cleanup activities and DOE-RL's funding of most services, which is a subsidy for DOE-ORP.

Suzanne Dahl, Ecology, provided an Ecology perspective on the DOE-ORP budget. Level funding will not work. The actual budget is \$382 million, while the project requires \$508 million to meet compliance for Readiness To Proceed for delivering tank waste and infrastructure for the vitrification plant, including the Canister Storage Building. Additional Ecology concerns are on TPA mandated vadose zone corrective action addressing eight of the single shell tanks farms. The Tank Waste Remediation System (TWRS) Environmental Impact Statement (EIS) ROD required that Phase 1 tank waste treatment (10%) include waste from single shell tanks and work to develop retrieval technologies. The current, flat budget leaves this requirement unfunded. Tank integrity, including pipelines for the double shell tank system, has moved to the bottom of the priority list, which is not acceptable. Also, the BNFL set aside of \$450 million will delay start of construction unless it is increased to \$690 million in FY 2001.

Budget Advice

Gerry Pollet introduced draft budget advice for the FY 2002 Integrated Priority List, addressing both the DOE-RL and DOE-ORP budgets. The total compliance gap is \$277 million, of which \$114 million belongs to DOE-ORP and \$163 million belongs to DOE-RL. The compliance gap for the Environmental Restoration program is \$15 million from the \$163 million. Critical needs must be clarified to clearly identify compliance gap issues. Wade Ballard explained that the target level budget is \$732 million, the 10% budget includes an additional \$84 million, and the compliance budget includes an additional \$147 million. DOE-HQ requires DOE-RL to submit each of these three budgets. Under the TPA, DOE-RL must send a "compliance" budget to DOE-HQ. DOE-HQ then passes this compliance budget on to the Office of Management and Budget (OMB). OMB and DOE-HQ pass the budget back and forth before it is submitted on to Congress, where the actual allocation is determined. OMB, not DOE, has the final say on what is included in the budget submittal to Congress.

Gerry Pollet outlined major themes of the budget advice:

- Uncertainties
- Demonstrated increased efficiencies to overhead and indirect costs (e.g., Fluor Hanford re-organization cost savings)
- Stop funding non-cleanup activities with cleanup funds (e.g., security costs from EM budget)
- DOE-ORP compliance gap of \$144 million, including double shell tank integrity
- Need to increase funding for Readiness To Proceed

Gerry Pollet said the compliance gap is a higher priority than the \$20 million for 300 Area accelerated cleanup planning. Leon Swenson said figures listed in budget advice must be referenced as taken from the "target" budget, rather than the "compliance" budget. Jim Trombold said HAB advice must focus on the ideal, the compliance budget from a high-level policy expectation that DOE will meet legal cleanup requirements. Todd Martin said Hanford's most significant challenge is the reality of inadequate funding that will continue to cause the compliance gap and bow wave to grow. Marilyn Reeves stated that DOE must "pay now, or pay more later."

Board Discussion

Harold Heacock, Tri-Cities Industrial Development Council (TRIDEC) (Local Business), said focus on requirements, such as TPA and the Defense Nuclear Facilities Safety Board do not recognize other work that addresses safety hazards.

Joe Richards, Confederated Tribes of the Umatilla Indian Reservation, said the Hanford Environmental Management Program is an essential program dealing with the Clean Water Act and Integrated Safety Management System requirements. He also said Energy Secretary Richardson issued a directive for all DOE sites to implement Integrated Safety Management System, which does not fall under TPA requirements. Prioritization of TPA compliance issues must recognize the importance of continued funding for meeting "other" regulatory requirements and treaty trust obligations. Joe Richards said DOE

should provide a breakout of budget items under essential safety and services to assess efficiencies

Harold Heacock said DOE had not yet provided the Board with detailed budget information on the proposed changes to the Spent Nuclear Fuel program so the draft budget advice does not address this program.

Harold Heacock and Madeleine Brown, Non-Union, Non-Management Employees (Hanford Work Force) said the HAMMER line item covers the building costs, while off site users of the facility are not subsidized by DOE and must pay the full cost of using the facility. Gerry Pollet argued that base operation costs are not included in rental fees for off-site users of the HAMMER facility.

Madeleine Brown said the 233-S building must be addressed in the advice because there are significant dangers to workers to remediate this building.

Keith Smith said lack of funding has resulted in rapidly deteriorating facilities posing great hazards to workers. He also noted that contractor cost validations cost money and warned of excessive cost validations because they eat into cleanup funds.

Merilyn Reeves asked if 200 Area planning efforts are addressing soil cleanup and groundwater contamination. Dennis Faulk explained that there is no money available for assessments of investigations to proceed with groundwater cleanup.

Tom Carpenter, Government Accountability Project (Hanford Workforce), said litigation, such as downwinder cases, is funded through a specific U.S. Department of Justice budget, and must not be taken out of cleanup funds.

Gerry Pollet strongly opposed the proposal to take \$40 million from the Hanford cleanup budget to pay for security costs, which are primarily focused at the Plutonium Finishing Plant. Wade Ballard recognized the HAB's concern and explained that DOE-HQ has requested that all DOE sites across the complex transfer funds to centralize security at DOE-HQ.

Gordon Rogers, Public-at-Large, asked about the current baseline change request process. Wade Ballard said changes to baseline budget allocations must be requested by the contractor and approved by DOE. Part of this process includes a cost validation done by DOE. Merilyn Reeves noted that additional cost validations independent of DOE are valuable.

Gerry Pollet said for FY 2000 DOE committed to an indirect overhead baseline budget of \$243 million, but was critical of how line items were shifted to different budgets rather than actual reductions.

David Johnson, Heart of America Northwest (Regional Citizen, Environmental, and Public Interest), said research and development of new technologies are needed to

address tank leaks. Shelley Cimon added that robotics for remote handled transuranic waste must also be addressed by technology development funds.

Tom Carpenter and Ken Niles said characterization has not been adequately funded and is needed to support the extensive modeling and data integration work that is funded under the groundwater/vadose zone integration project. Gerry Pollet stated that funding for the integration project must be balanced between characterization and modeling work. Wade Ballard observed that the fundamental question for HAB advice to address is if the correct balance exists between budgets for program activities.

Gerry Pollet said DOE must follow the appropriate process to accelerate work in the 300 Area as is planned without jeopardizing other site cleanup efforts that pose greater hazards. Gordon Rogers said DOE must recognize the tradeoff of accelerated remediation of 300 Area buildings with completing cleanup of the 300-FF-2 operable unit, which is a higher priority.

Paige Knight said DOE must improve public involvement for out year cleanup priorities. Marilyn Reeves said DOE should address the difficulties faced in this year's budget process with three separate budgets and new site management.

Dennis Faulk said under CERCLA there is a requirement that any project that faces a 30% budget increase must undergo a cost validation. EPA would like to see a cost validation on elevated costs for remediation of the 233-S building before DOE begins work on 224-B. On groundwater/vadose zone funding, EPA would like to see the \$14 million spread out between data collection, characterization, data integration and modeling to create a balanced program.

Suzanne Dahl observed that the budget advice does not contain specific advice on the DOE-ORP budget, such as Readiness To Proceed funding, vadose zone corrective action, double shell tank integrity, and single shell tank retrieval.

Marilyn Reeves outlined the Board process to be followed for finalizing FY 2002 budget advice. A clean copy of the draft advice would be sent out to all Board members early in the week following the Board meeting. Comments or edits must be sent to Amy Grotendorf, EnviroIssues. The Executive Committee will finalize the advice within two weeks via conference call. DOE-RL will be submitting its final budget to DOE-HQ on April 13, so HAB advice should precede this submittal. If the HAB advice does not meet this deadline, DOE-RL will still provide a response.

TANK WASTE TREATMENT

Suzanne Dahl gave a synopsis of Ecology's perspective on the DOE-ORP alternatives review report. Ecology was involved in the scoping process and throughout the DOE-ORP review and feels if TPA negotiations had been successful, the alternatives review report would have met TPA requirements. Ecology's Director's Determination sets the

schedule for the tank waste treatment program with a goal of getting a treatment complex on line without any further delay.

The current privatization approach assigns project management to BNFL and contract management to DOE. Payment to BNFL will be made when product is delivered years down the road. A major question in executing this project is determining how the project will be funded. Suzanne Dahl explained that the Congressional Budget Office (CBO) uses either budget authority (permission to borrow money) or budget outlay, (cash up front) to determine how a project will be funded. Scoring refers to the schedule of when budget outlay or budget authority applies to Congressional funding. Congressional budget caps, which are limitations on budget outlay available to DOE in a given fiscal year, significantly affect Congressional Budget Office scoring for the tank waste program. Privatization is more expensive because money is borrowed from banks with higher interest rates rather than the government with lower interest rates.

Until recently, planning for the tank program has assumed that Congressional Budget Office scoring would allow BNFL to borrow money in the early program years and get paid back from the government in later project years. This assumption reflects the theory that as other DOE sites are closed, more funds will be available for Hanford cleanup. However, CBO has just changed its scoring to require over half of the project funds as budget outlay in the first year of the project. Currently the Congressional Budget Office, Congress, and OMB are negotiating the proposed scoring changes, which could result in significant delay to the tank waste treatment program. The options for addressing this potential delay are to:

- Change the scoring back to allow private financing to work
- Secure budget outlay from Congress, eliminating budget caps to accommodate scoring changes
- Re-prioritize the DOE-EM budget
- Re-prioritize the Hanford budget

Private financing is \$1 to \$1.5 billion more expensive than government financing, but DOE-ORP says private financing puts more risk on the contractor and results in better performance. Ecology's view is that resolving the scoring issue to allow privatization to work now is the best option, even though it is not the cheapest, because it will prevent delay.

Draft Advice

Paige Knight introduced draft advice from the Tank Waste Treatment (TWT) Ad Hoc Committee. The big question is what will it take to make the vitrification plant a "go" now? The TWT committee proposed that a collaborative effort be formed between TPA agencies and the Board to ensure that treatment can move ahead. A forum could be held with informed stakeholders to reach consensus on a doable path forward for the vitrification project. TWT agreed that this forum should be proposed as HAB advice and should not occur before the April 24 BNFL cost submittal date.

Board Discussion

David Johnson said an outstanding issue is how to deal with leaking tanks. Currently, there is not a way to address the problem if more than one tank is leaking at the same time. This is a major technology gap that should be addressed by the budget.

Madeleine Brown was concerned that the draft advice was suggesting that the BNFL privatization contract was being abandoned.

Tom Carpenter commented on recent BNFL management issues in Britain, and said BNFL's questionable credibility must be addressed.

Keith Smith said the union believes that BNFL is on track technically, despite the problems faced in Britain. Keith asked for Ecology's estimation of delay if the financing or contract mechanism changes for BNFL. Suzanne Dahl said the DOE-ORP report said one to three years of delay could result. Ecology feels this estimate is too conservative and that a change in financing may result in BNFL starting over completely.

Todd Martin clarified that the purpose of the forum concept was to bring together DOE-ORP and stakeholders to develop a solution, not to criticize DOE-ORP or emphasize all the problems the program faces. Peter Bengston said DOE-ORP is concerned about this forum concept because it is viewed as criticizing DOE-ORP for not doing its job. DOE-ORP is conducting behind-the-scenes work to identify solutions. Todd Martin said the committee supports holding this forum to prevent the historic pattern of failure and delay for securing treatment of tank waste at Hanford. Mark Beck, Citizens For a Clean Eastern Washington (Regional Citizen, Environmental, and Public Interest), agreed and said the advice provided a valuable statement of HAB commitment to the success of tank waste treatment regardless if the forum materialized.

Susan Leckband said because the HAB cannot lobby Congress, any recommendation from this forum may not be useful until after Congress makes its determination in August 2000. Paige Knight responded that the concept was to engage a broad base of the public, DOE and regulators with the intent of finding a solution agreeable to all involved.

Gordon Rogers asked about the timing of the congressionally mandated independent review. The Expert Independent Review team will submit its report to Congress in June. However, scoring and budget cap issues will not be addressed by this report.

Jeff Luke, Non-Union, Non-Management Employees (Hanford Work Force), expressed concern about the forum because it would be second-guessing the current BNFL path to Congress, which may detrimental to the program.

The Board agreed to send the advice back to the TWT Committee to develop the forum concept further.

DOE-ORP Alternative Studies

Gerry Pollet presented his personal perspective of the alternatives study, including the following points:

- Savings of between \$400 million and \$2.2 billion could be gained using government financing rather than private financing.
- No schedule delay would result from switching the privatization contract to government financing.
- HAB expectations were not met because the study does not align with TPA expectations
- The study does not address or calculate the financial risk to DOE and does not analyze a fixed-price, incentivized government contract. It uses a management and operations contract as a point of comparison.
- The interest rate assumption for private financing is very low.
- The study did not address whether or not significant savings could fund the compliance gap or exceed the requirement that 10% of tank waste be treated by 2018.

Gerry Pollet said before the recent CBO scoring changes were proposed, key members of Congress viewed the privatization contract as just too expensive. The DOE-ORP alternatives report fails to describe concerns cited in HAB Advice # 101.

HANFORD VIDEO FROM THE OREGON OFFICE OF ENERGY

Ken Niles shared a recently produced video called "Protecting the Columbia River," which provides an overview of the issues faced at the Hanford site, including the TPA, environmental threats, human health threats, and financial threats to the region. It also highlights the significant cleanup challenges at Hanford, such as K Basins, tanks, and the Plutonium Finishing Plant. The video is intended for use in public forums to explain the problems faced at Hanford. Ken Niles will provide copies to interested groups.

UPDATES AND ANNOUNCEMENTS

Distribution of the HAB Progress Report

Merilyn Reeves encouraged HAB members to distribute the 1999 HAB Progress Report, which can be obtained through EnviroIssues or Gail McClure, DOE-RL. The Progress Report has been distributed to:

- Chairs of all the DOE Site Specific Advisory Boards (SSABs)
- Northwest Congressional Delegation local offices
- State Legislative offices
- Regional Governor's offices
- Regional State Agencies
- Oregon Governmental Agencies via the Oregon Hanford Waste Board
- Regional Interest Groups
- Media
- DOE-RL

- DOE-HQ

SSAB Chairs Meeting in Idaho

Shelley Cimon gave an update to the Board on the recent Site Specific Advisory Board (SSAB) Chairs' meeting attended by Shelley Cimon and Marilyn Reeves. The SSAB chairs agreed to develop a Statement of Principles similar to the ones developed between Secretary Richardson and a number of state governors. Marilyn Reeves felt this should be a high priority for the SSABs. Marilyn hopes the HAB will provide input into this Statement before the next SSAB meeting in August. Any comments should be directed to Marilyn.

At the SSAB Chairs' meeting, Shelley Cimon suggested that the SSABs hold a national workshop on burial grounds. Past workshops have focused on stewardship and transportation. Shelley suggested that the burial grounds workshop be held at Hanford in Spring 2001 because Hanford is the "poster child" for burial grounds, even though all DOE sites have old burial grounds.

UPDATE ON SPENT NUCLEAR FUEL

Jeannie Schweir, DOE-RL, provided an update on the Spent Nuclear Fuel project. The current strategy will reduce environmental risk by removing sludge 13 months ahead of schedule. She said the baseline change request was expected to be signed that morning. DOE has already spoken with EPA and Ecology and sees no major issues with modifying the appropriate TPA milestones. The first enforceable milestone is the K-East Integrated Treatment system due February 2001. Removal of fuel will be phased. The baseline cost may be reduced and the entire project may be completed in two years, freeing up money for other cleanups. The Phased Startup Initiative for the Spent Nuclear Fuel project has been beneficial for bringing problems to light early.

Dennis Faulk said EPA supports the proposed K Basin changes, but that milestones will have to be re-negotiated because the changes do not support the current milestone schedule. One concern is the plan to send sludge to T Plant, which is not operable at this time.

Board Discussion

Harold Heacock noted that there is concern about the lack of details shared by DOE on the proposal, the absence of plans for what will happen to sludge after it is sent to T Plant, the costs for treating sludge at T Plant, and plans to prepare the basins for decommissioning.

Keith Smith said the proposal must address the transitioning of workers once the K Basin work is completed. The specific training for removing K Basin fuel is not necessarily transferable to other jobs on site.

Gerry Pollet asked about the proposal's increased staffing costs. He also asked how T Plant sludge would be classified for disposal. Jeannie Schweir said DOE has authority to classify sludge, and discussions began in January to look at the options.

HEALTH OF THE SITE CONFERENCE

Merilyn Reeves explained that the HAB decided at the December meeting in Portland to send a letter of support to the University of Washington regarding the Health of the Site Conference. Tim Takaro drafted a letter addressed to University of Washington President McCormick. He said the conference organizing committee welcomes HAB input. It organizes the conference around a central goal to make science easily understandable to the general public. Board members discussed Board endorsement of the conference and comments and suggestions for conference improvements including:

- A balanced representation of the Tri-Cities interests and perspectives must be included.
- A national overview on worker-related health problems must be put into perspective.
- Papers submitted for the conference should be peer-reviewed for increased conference credibility. However, peer review may take away from the cutting edge science value of research presented.
- HAB members are welcome to participate in the process of choosing abstracts.
- Changing the frequency of the conference could improve the quality of scientific presentations.
- Chemical contamination must also be addressed for workers because radiological contamination has been extensively addressed.
- The conference is a valuable vehicle for presenting ongoing site research.
- Washington State Department of Health has co-sponsored the conference over the years and would like to see the quality of presentations improve in the year ahead.
- Conference presenters should also focus on future worker health protection decisions.

Merilyn Reeves suggested that the Health, Safety, and Waste Management Committee revisit the discussion points at its next meeting. The Board decided to send the letter to the University of Washington stating HAB support for the Conference. Madeleine Brown suggested transmitting the Health, Safety, and Waste Management Committee meeting summary to the Health of the Site organizing committee.

JUNE HAB MEETING

Shelley Cimon said the HAB meeting in La Grande in June would be at the Eastern Oregon University. Reservation information and a map will be distributed for the Board prior to the meeting.

PUBLIC COMMENT

Gai Oglesbee, Richland resident, commented on progress seen in addressing citizens and former workers harmed by radiation exposure. She said Assistant Secretary David Michaels was not aware that some down-winders were former workers at Hanford. Gai thanked the Board for its focus on human safety issues, and suggested that the Board further discuss worker exposure issues.

ATTENDEES
April 6-7, 2000

HAB Members and Alternates

Pam Brown, member	Norm Dryer, alternate	John Erickson, ex-officio
Madeleine Brown, member	Ben Floyd, alternate	Joseph Richards, ex-officio
Tom Carpenter, member	Norma Jean Germond, alternate	
Shelley Cimon, member	Abe Greenberg, alternate	
James Cochran, member	David Johnson, alternate	
Harold Heacock, member	Robin Klein, alternate	
Charles Kilbury, member	Jeff Luke, alternate	
Paige Knight, member	Todd Martin, alternate	
Robert Larson, member	Wanda Munn, alternate	
Susan Leckband, member	Nanci Peters, alternate	
Gary Miller, member	Dan Simpson, alternate	
Victor Moore, member	William Kinsella, alternate	
Ken Niles, member	Keith Smith, alternate	
Gerald Pollet, member	Stan Stave, alternate	
Merilyn Reeves, member	Art Tackett, alternate	
Gordon Rogers, member	Dave Watrous, alternate	
Leon Swenson, member	Tom Zeilman, alternate	
Margery Swint, member		
Elizabeth Tabbutt, member		
Tim Takaro, member		
Jim Trombold, member		
Jack Yorgesen, member		

Agency Staff and Contractors

Janis Ward, DOE-ORP	Laura Cusack, Ecology	Bill Dehn, CHG
Steve Wiegman, DOE-ORP	Suzanne Dahl, Ecology	Kevin Kjarno, CHG
Wade Ballard, DOE-RL	Jane Hedges, Ecology	Joyce DeFelice, Rep. Doc Hastings staff
Harry Boston, DOE-RL	Max Power, Ecology	Amy Grotefendt, EnviroIssues
Al Hawkins, DOE-RL	Roger Stanley, Ecology	Ruth Siguenza, EnviroIssues
Marla Marvin, DOE-RL	MaryAnne Wuennecke, Ecology	Tara Williams, EnviroIssues
Gail McClure, DOE-RL	Dave Bartus, EPA	Larry Hafer, FH
Felix Miera, DOE-RL	Dennis Faulk, EPA	Greg Perkins, FH
Jeanie Schweir, DOE-RL	Mike Gearheard, EPA	Janice Williams, FH
Dan Tano, DOE-RL		Barbara Wise, FH
		Sharon Braswell, Nuvotec

		Chris Chamberlain, Nuvotec
		Donna Sterba, Nuvotec
		Richard Meznarick, PAI
		Peter Bengston, PNNL
		Mark Triplett, PNNL
		Ginger Benecke, TRI
		John Stang, Tri-City Herald

Members of the Public

Aiichiro Fujinaga	Gai Oglesbee	Fawn McNeeley, HIN
David Lacey	Don Sayre	Cyndi Nunn, HIN
Bernice Mitchell		Graham Tewksbury, HIN