

DRAFT MEETING SUMMARY (v.1)

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HANFORD ADVISORY BOARD

RIVER AND PLATEAU COMMITTEE

November 14, 2002

Richland, WA

Topics in this Meeting Summary

Welcome and Introduction..... 1

116-N-1 Trench..... 1

Groundwater Protection Program – Groundwater Strategy..... 3

Groundwater Protection Program – Master Schedules..... 4

Systems Assessment Capability (SAC) Draft Document..... 5

Draft Long Term Stewardship Plan..... 7

Planning for December Board Meeting..... 8

183 H Solar Basin Engineering Evaluation/Cost Analysis (EE/CA)..... 9

B/C Risk Assessment Pilot Update..... 10

Committee Business..... 11

Miscellaneous 11

Handouts 11

Attendees..... 12

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.

Welcome and Introduction

Pam Brown, Chair of the River and Plateau Committee, opened the meeting and welcomed the committee. The summary from the August committee meeting was adopted without modification.

116-N-1 Trench

Susan Leckband distributed the written issue manager overview Shelley Cimon prepared on the 116-N-1 Remedial Action.

Chris Smith, Department of Energy – Richland Operations Office (DOE-RL), confirmed Shelley’s written recap of recent activities. He introduced John Fancher, Bechtel National, Inc. (BNI), who presented the Explanation of Significant Difference (ESD), which is a change to the Record of Decision (ROD) but does not fundamentally alter the scope, performance, or cost. John discussed cleanup progress on the cribs and trenches in the N Area, where in trench 116-N-3 154,578 tons were excavated, representing a 63% increase over baseline due to plumes. In trench 116-N-1, over 100,000 tons have been

excavated so far, and there is a projected 120% tonnage increase over the baseline due to plumes. The Direct Exposure Remedial Action Objective (RAO) is attainable, and the Columbia River Protection RAO will be met, but the 116-N-1 Groundwater RAP will be difficult to achieve. A comprehensive aquatic receptor is due to the Washington State Department of Ecology (Ecology) in 2004. A balancing factors analysis was authorized in the interim action ROD and will include safety, environmental, and Native American issues. Recommendations from the balancing factors analysis are to follow the existing institutional controls at 116-N-1 as stated in the interim action ROD (the final ROD will address institutional controls) and to modify the rural residential scenario assumption to exclude irrigation at 116-N-1.

The 30-day regulator review of the ESD will end on December 9, and after the draft for public review has been finalized, it will be released for a 30-day public comment period from December 16 – January 14. At the end of January, the public comments will be addressed and the ESD will be approved.

Regulator Perspective

Ecology

John Price, Ecology, said that Ecology recognizes there would be problems in reaching remedial actions, especially regarding groundwater since pump and treat has not been as effective as anticipated. In addition to groundwater problems, DOE-RL notified Ecology that it would not reach the soil remediation deadline. Ecology replied that that was not acceptable and required a plan for the future. Ecology is in favor of the ESD because it complies with regulations as well as the interim ROD and avoids workers receiving large doses of radiation with extra excavation. Although Ecology supports the ESD, the following outstanding issues are still of concern: 1) the ESD needs an integral plan incorporating groundwater, river and soil management; 2) Ecology wants to avoid implying that the interim ROD precludes the final ROD, forcing DOE to depend on excavation to remove the contaminants; 3) Ecology wants to ensure that institutional controls stay in place to ensure that irrigation and other activities are monitored closely; and 4) it is necessary to study the ecological receptors with regard to groundwater.

EPA

Dennis Faulk, EPA, suggested that the proposed timeline was ambitious, and he said that comments from the Board by February would still be useful. He recommended the committee have a meeting to discuss the issues raised because the time allotted to the topic was not sufficient to answer all questions. Pam agreed and said that interested people should compile a list of questions and bring relevant individuals to provide in depth presentations to answer those concerns. She asked that committee members send comments and questions to Shelly by December 6 and the January meeting would be shaped around those concerns. She asked that Rex Buck be included for tribal issues.

Committee Discussion

- Jean Vanni, Department of Ecology (Ecology), asked if the N reactor was scheduled to be completed by 2012. John Price responded that 2012 was the Tri-Party Agreement's deadline for end remedial action.
- Wade Rigsbee asked if DOE was still considering auguring in the open pit and what the basis for cost was. He was informed that DOE looked at cost, and engineering costs were based on the work they had been doing.
- Greg de Bruler expressed concern over several issues. He said that pump and treat was never intended to be a remedial action; it was meant as an interim action. He also said that the ecological assessment that DOE is planning on studying would be written by insiders and could not be subjective. He asked that it be an open process with an external group working on the assessment. He asked where the innovative technologies were that the Innovative Treatment Remedial Demonstration (ITRD) outlined. He expressed concern that the decisions were predetermined and DOE was settled on natural attenuation.

Dib Goswami, Ecology, said the technology that Ecology identified was directed at groundwater, whereas the ITRD process concentrated on groundwater processes in the N-area; the innovative technologies for soil were not considered in the ITRD process. John Morse, DOE-RL, said that strontium would not reach the river before it decays.

- Greg said that, if fertilizers were used, it could get to the river sooner. If the problem is the contaminants in the vadose zone, and Ecology is only looking at groundwater, it would be overlooking the mass amounts of contaminants in the soil. It is unreasonable to separate groundwater and soil issues. Dib said that ITRD looked at the existing source lying under the two cribs and that the material would not reach the river in 300 years. ITRD identified those two things that were contributing to contamination along the shoreline and it lead Ecology to focus on those areas.
- Greg asked why Ecology would excavate far from the river if the source term was close to the river. John Price explained that the modeling shows that the problem contaminants are already in the aquifer, so Ecology will be focusing efforts on where the exchange is between the aquifer and the river.
- Greg wanted clarification on where the source term is. He also requested a workshop on this topic so that issues could be brought up and resolved with an adequate amount of time.
- Dirk said that sometime within the next hundred years, the land will return to agricultural land, so institutional controls must be in place. It will also be necessary to complete quantitative risk assessments to determine how fertilizers would impact the remaining contaminants. He expressed concern about the project not addressing various laws, including safe drinking water standards and the Clean Water Act.

Groundwater Protection Program – Groundwater Strategy

Jane Hedges, Ecology, said that the groundwater strategy was devised from the Constraints and Challenges to Cleanup Team (C3T) talks and outlined the vision for the document as satisfying regulatory requirements and coordinating and integrating other requirements. Ecology's main goal is to support cleanup in a timely manner, focus on risk reduction and to help DOE make decisions to avoid the spread of contamination or further degradation of groundwater. There must be special monitoring for single shelled tanks (SST) as well as plume-wide research to efficiently assess the tanks that cause contamination. She also said that, despite how the document seemed to perceive the future of remediation, Ecology would be continuing remediation and that the next steps were to incorporate stakeholder input and urge DOE to implement the groundwater plan.

Committee Discussion

- Pam asked if Ecology had a plan for incorporating stakeholder input. Jane answered that it did not, but wanted to receive HAB advice for guidance.
- Greg said that the groundwater strategy was not using a holistic approach and needed to incorporate a committee process by which the committee would spend time looking at what the strategy implies. He said that the Exposure Scenarios Task Force found that DOE's estimation that the groundwater would be usable in 150 years was not a realistic goal and stated that it is premature for agencies to develop strategies until stakeholders could input their values and concerns. He expressed confusion as to how characterization and monitoring would reduce risk.

Groundwater Protection Program – Master Schedules

Dick Wilde, Fluor Hanford, addressed the integrated site wide plan and asked for specific comments on the master schedules. He said that they were having discussions with EPA and Ecology on how to best protect groundwater, including reducing precipitation and other factors from pushing contaminants into the groundwater. The integrated management team would be addressing five specific high-risk source terms: 1) Choosing to make uranium, the B/C crib, iodine, tank farms, and other select contaminant sites a priority, 2) Reducing situations that drive waste into the groundwater, including unused wells and recharge, 3) Cleaning up outside the core zone, 4) Accelerating pump and treat, and 5) Adding additional monitoring wells. The master schedules are compatible with key guiding documents, including the Hanford Performance Management Plan (PMP), the budget baseline, and the Science and Technology roadmap. He asked the committee to look at key events in the schedules in order to plan meetings to discuss the events a year or two in advance, rather than just as things were gearing up for action.

The committee broke into small groups, to review the individual master schedules. DOE and contractor staff explained the detailed schedules, answered questions and responded to comments. The breakout session lasted approximately half an hour.

Committee Discussion

- Wade asked if the tentative date for the river contract was included.

- Jim Curdy noted that another agency had been testing wells over the past fifty years and had isolated the contaminants down to trace parts. Has DOE been comparing its tests to those well readings?
- Maynard Plahuta said that, if necessary, the Board should incur the cost of hosting the workshops because it would prove to be invaluable, much more so than conference calls.
- Susan was pleased with the summary schedule as well as the detailed schedules. The decision points would make it easy to notice when workshops should be planned.
- Gariann Gelston said that the committee should identify key decision points so that the committee knows in advance the times when workshops are necessary.
- Wade said that DOE should look at integration as well as the failure of water lines and solid waste burial grounds to prevent driving waste into the groundwater. He noted that decommissioning would be favorable, but should be considered a site-wide problem. In the past, DOE has identified collapsing and deteriorating potentials for plumes, the Systems Assessment Capability document does not really demonstrate this; it is an issue and should remain a priority. Dennis said that the project addressed burial grounds in the carbon tetrachloride discussion.
- Maynard asked where the 300 Area was covered. Dick responded that the river corridor contractor includes the 100- and 300-Areas.

Regulator Perspective

Dennis Faulk, EPA, though the schedules looked good, but questioned why DOE had not used this format all along. He applauded the desire to have meetings and hoped that the committee would constructively criticize the schedules.

Systems Assessment Capability (SAC) Draft Document

Charlie Brandt, Pacific Northwest National Laboratory (PNNL), named the objective of the site-wide assessments as being able to assess the cumulative impact of Hanford on human health and ecological, economic, and cultural systems. This goal makes examining alternatives for their potential a more realistic scenario. He described how the assessments were approached and how the models worked. The model that was used focused on ten of the worst radioactive elements and replicated how the contaminants entered the vadose zone. The team solved many design problems by making the inventory estimates more reasonable, developing a more realistic 3-D model, and obtaining a more sophisticated hardware device to run the model on. He displayed several predicted groundwater concentration models, which demonstrated the areas that would be most efficient and logical to focus on first. The model attempts to understand the site inventories since accurate records were not kept. He outlined the radiological doses which resident farmers and subsistence Native Americans would be exposed to and noted that the current model would be most appropriate for situations with narrow parameters and less detailed information. The SAC model will be used in the solid waste

EIS, but the EIS would also incorporate other site-wide groundwater modeling information.

Committee Discussion

- Greg asked why the technetium-99 plume dissipated prior to reaching the river. Bob Bryce, PNNL, responded that technetium-99 dilutes with water and would reach the river below the drinking water standard levels.
- Dirk asked why levels in the model do not always match reality. Bob suggested it might be related to differences in recharge or the groundwater conceptual model. As the contours are colorized, the model may not show contaminants below a certain level, though they are indeed present.
- Greg noted that, since the model did not take sodium, fertilizers, or various lesser contaminants into account, the model would not show the full picture. Bob responded that those lesser, individual contaminants are what Science and Technology would look at; one single model could not look at every factor.
- Dirk said that the models did not represent real-world estimates. Bob responded that the model attempts to capture the reality within the estimates.
- Pam asked if offsite waste at Hanford was anticipated in the model. Charlie responded that it was.
- Pam was encouraged that the SAC would be incorporated into the EIS.
- Dirk suggested examining how contaminants bind to the soil and asked how DOE plans on dealing with contaminants that escape into the soil despite the covers. He questioned how the model could assume information about movement, but state that it prevents movement. Dick responded that how far horizontally the covers go makes a substantial difference in the infiltration.

Regulator Perspective

EPA

Dennis Faulk, EPA, noted that EPA uses the United States Geological Survey (USGS) for its groundwater analysis, and the USGS acknowledged that the model had evolved significantly. The model is useful for pointing out obvious situations and tells agencies where to focus efforts, but would most likely not be an ideal tool for the river. He noticed that carbon tetrachloride results did not match with reality, so he wanted to move forward with caution, as the model is not always accurate.

Ecology

Dib Goswami, Ecology, said that the model could be used for broad subjects, though it does not have much site-specific data because it was originally designed for relatively simple demonstration abilities. Ecology supports the tool because it can represent cumulative impacts. For subsequent revisions of the document, Ecology would like to see information describing impacts of long lasting contaminants beyond 1,000 years and would like to see alternative concepts incorporated. Bob responded by saying that they

have shifted their focus of the revision process from what needs to be assessed later to focusing on changes to the upcoming composite analysis; what needs to be in place for specific assessments.

Draft Long Term Stewardship Plan

Susan Leckband introduced the Long Term Stewardship (LTS) advice and noted that the advice would be most productive to offer to the December Board meeting so that it would allow for more time for it to be incorporated into the LTS plan. The advice consisted of a letter of actual advice as well as a list of common themes culled out of the comments made during the November 12, 2002 LTS workshop, which was facilitated by Jim Daily, DOE-RL. He said that the mission of LTS could change because, at some point, people will need to use the land. He told the committee that the next version would be more reader friendly.

Committee Discussion

- Pam expressed concern that the Board's communication with DOE-RL has been lost with the current administration's lack of interest in LTS. Jim responded that there was a mission statement for 2035, and the document refers to how DOE will complete the goal as well the transition between now and 2035.
- Maynard asked that maintaining control throughout administration changes be added to the list on the second page of the advice. Perhaps a financial commitment would be difficult, but there ought to be some kind of a guarantee so that trust is easily maintained. The HAB should suggest ways for a trust to be established to ensure that the program is kept alive. Susan suggested a trust fund to provide a way for funds to continue despite budget cutbacks.
- Gordon expressed dissatisfaction at the draft advice. He said he does not think that Hanford is a significant enough portion of the federal budget to be prioritized over all other funding concerns. He asked that the advice say that it does not attempt to imply that issues will not change, because issues would change over time.

Regulator Perspective

EPA

Dennis said that a values-based document is critical to translate the Exposure Scenarios Task Force views into the LTS plan.

Ecology

Max Power, Ecology, said that the Atomic Energy Commission requires perpetual care and maintenance and, rather than asking for unlimited funding to be guaranteed, lower cost options, including maintenance and monitoring, could possibly be guaranteed for a continuing basis. With the decreasing funds in the current administration for domestic programs, there has to be some confidence that there will be some money left for Hanford in thirty years.

Planning for December Board Meeting

Pam said that the plan that Jane presented was moving quickly and added that a workshop would be very helpful so that the HAB could comment, even if it was not in the form of advice.

The committee discussed whether or not to have a Wednesday night workshop prior to the December Board meeting. Some felt that the Board members not involved with the technical aspects of the issue might be lost during the advice discussion and waste time asking basic questions. Others felt that the attendance at the workshops tend to be low, and the committee and presenters would be risking a duplication of effort because they would need to re-explain the information Thursday morning for those who did not attend the workshop. The group consensus was to not hold a Wednesday night workshop.

The committee also discussed the agenda for the Board meeting. The consensus for Thursday was to have Gariann provide a brief historical perspective on the subject, followed by Jane, Dick and Dennis' presentations and a mentioning of the master schedules, which would not be shown until Friday. Perspectives from Oregon and tribal groups would follow. Friday's agenda would include an overview of the subject and the schedules. A breakaway section would follow in which four small groups and DOE or contractor staff would present the schedule information and show the groups specifically where the public involvement processes would be taking place. Flip charts would be available to note ideas from other groups. The Board would then be asked to provide DOE and the committee with direction.

The committee decided to allow only clarifying questions during presentations, and would ask that Todd Martin, Chair of the Board, enforce the rule.

Committee Discussion

- Gordon did not want the full Board to look at the detailed schedules, as it would be too much information in too a short time. Dennis disagreed and said that the information on the schedules clearly outlines how cleanup money will be spent. EPA wants to know if the schedule is missing important steps or has any fatal flaws.
- Greg suggested discussing the draft groundwater strategy report and following that discussion with the schedule information.
- Dirk expressed confusion on which direction the presenters were going to take, since DOE focused on moving forward with the cleanup process, while Ecology emphasized making sure the process is done correctly; the two approaches might not be identical.
- Dirk suggested creating a primer to outline concepts or acronyms that might not be intuitive to the rest of the Board. Dick volunteered to assemble a primer with general concepts for the Board.
- Dib asked for comments prior to the Board meeting so they could be incorporated into the presentations.

- Greg suggested providing a general overview rather than informing the Board of the specific details of the project.
- The committee agreed that the format that provided a section of the day for each Board member to go around in the circle and have three minutes to state their views was an effective way to get ideas circulated. Penny suggested that members be asked to respond to a specific question.

183 H Solar Basin Engineering Evaluation/Cost Analysis (EE/CA)

Greg Siton, DOE-RL, and Ron Skinnarland, Ecology, presented the 183-H Solar Evaporation Basins Low Level Mixed Waste, Engineering Evaluation and Cost Analysis (LLMW EE/CA). Greg discussed the teams that were examining the issue, which included the Waste Management and Environmental divisions of DOE-RL as well as Ecology and EPA contractors, and said that those organizations were looking to eliminate constraints to Hanford cleanup. The current plan for cleanup includes using offsite treatment and disposal and involves significant repackaging and relabeling of drums stored at the Central Waste Complex (CWC). Because the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) has authority over low level mixed waste and allows consideration of the Environmental Remediation Disposal Facility (ERDF) as a disposal alternative as well as providing a sound decision making process, the Tri-Party Agreement agreed that CERCLA was the best way to evaluate the disposal options for the waste. The EE/CA path was chosen because it allows for flexible public involvement approaches. There were three EE/CA removal action alternatives: no action, partial treatment/ERDF disposal, and no treatment/ERDF disposal. The recommended alternative is the second option because it is the most protective of the three. The ERDF comment period would be in December or January.

Ron added that the drums have been partially characterized and partially treated; DOE is attempting to move toward treating the remaining waste and finishing the project by defining what is in the waste and explaining how to dispose of it. The goal is to ensure that the waste is appropriately treated and determine where that waste can be sent.

Committee Discussion

- Dennis asked what material is in the drums in the basins. Greg responded that the drums contained radioactive mixed waste, including dried up sludge, protective equipment and debris.
- Maynard asked what the criteria are for treatment. Greg responded that 46% of the waste needed to be treated in order to deactivate the sodium nitrate. When the alternative states that the waste would be partially treated, it is that 46% that would be treated. Maynard said that it sounded as if DOE was only doing part of the job.
- Maynard asked if the materials in the drums were characterized. Ron answered that it was and that DOE is in the process of determining the exact content of the drums.

- Dan Simpson asked if the drums were produced in the 300-Area but shipped to other areas. Greg responded that they were made in the basins in the 100-Area, specifically in 183 basin, and moved elsewhere.
- Dirk said that there were assurances made about offsite waste. He asked how hazardous the material was, what it might do to the container liner and how it might react with other contaminants. Greg said that the waste would meet the waste management requirements, which would answer each of Dirk's questions. He said that the waste was stabilized with cement, which Dirk thought was not adequate treatment. Dirk asked if the material would be delisted and if it was Resource Conservation and Recovery Act (RCRA) based. Ron responded that waste to be disposed of at Hanford must meet certain standards and this waste would meet both RCRA and Hanford standards. Dennis added that the waste would not be delisted, but it would be coded because it might have something specific in it.
- Dirk questioned whether this waste could be RCRA compliant since RCRA compliance is not regulated by the State Department of Ecology.
- Dennis asked DOE to be very clear about what the waste contains.

Regulator Perspective

Dennis said that EPA sees the project as making perfect sense. The waste was pre-ROD and was never sent to ERDF, so DOE should ensure it meets ERDF waste standards and ship it away.

B/C Risk Assessment Pilot Update

Ken Gano, Bechtel Hanford, Inc., reviewed the update of the B/C Risk Assessment Pilot. He said that they started the project last spring and met with DOE-RL, EPA, Ecology and trustees as well as hosting two workshops for the HAB. From those discussions, DOE-Office of River Protection (DOE-ORP) was able to identify key issues that will be addressed in the Data Quality Objectives (DQO), three of which are getting the US Fish and Wildlife Service (USFWS) added to the project team, developing Native American scenarios and addressing groundwater in the assessment. He explained how each of the three issues would be addressed and said that DOE hopes to have an internal working draft in December. DOE's next steps for the project include preparing the Data Quality Objectives Summary Report, completing the Sampling and Analysis plan and beginning environmental sampling.

Committee Discussion

- Greg thought that the performance of an ecological risk assessment would not go smoothly. He said that the B/C pilot should be comprehensive and he has reservations that outside influences will not represent a strong enough voice to balance against internal pressures. Greg asked that the pilot be inclusive and that the players who ought to be included are included. Dennis responded that the SAP is the next phase, and a peer review panel should be set up to ensure that the job is done correctly.

- Dirk asked if DOE studied the organisms in the hyporeic zone. Ken responded that they had not studied that in-depth yet.
- Maynard asked if the integrity concerns with the pipeline were addressed in the corrective actions. Dennis replied that the infrastructure group would most likely replace the lines and may install new pipes as well.
- Dan asked what the time frame is for when the risk assessment would apply. They are analyzing data for the present conditions, though in terms of radionuclides, they are carrying that out for 1,000 years.
- Pam asked how the committee could help the pilot project along. Dennis replied that when the draft SAC is written, they would present the information to the committee and ask for input at that time. He thought that that might occur in March of 2003.
- Greg asked for a list of the eighty issues that DOE sifted through to determine the three key issues that Ken presented and also asked for a response on the development of the steering committee/peer review.

Regulator Perspective

Dennis Faulk, EPA, encouraged DOE to look at upland habitat and riparian and river impacts. EPA is pleased that USFWS is engaged, but expressed skepticism of the March deadline DOE imposed for completing the Sampling and Analysis Plan.

Committee Business

The committee discussed whether or not to have a meeting in December and if so, what topics should be addressed during that meeting. The general consensus was that there was a lot to be presented at the February Board meeting and that the only way to complete the tasks assigned to the committee would be to meet in December. Because the topic to be discussed in December, transuranic (TRU) waste, cross-cuts with the Tank Waste committee, a joint meeting would make sense.

The River and Plateau Committee call was cancelled.

Miscellaneous

- Pam announced that Dick Wilde was willing to escort committee members around the site to explain the groundwater initiative actions.
- Greg asked that the topic of the 618-11 cleanup be added to the December agenda. He suggested exposing that, while DOE claims that technology is the barrier to completion, in actuality it is funding that is lacking.

Handouts

- River and Plateau Committee Agenda, November 14, 2002.
- 116-N-1 Remedial Action, Shelly Cimon.

- 116-N-1 Explanation of Significant Differences.
- Hanford Site Groundwater Strategy, Jane Hedges.
- An Initial Assessment of Hanford Impact performed with the System Assessment Capability, September 2002.
- System Assessment Capability Initial Assessment Results, Bryce, Kincaid, Brandt, and Morse.
- Draft HAB Advice on Long Term Stewardship.
- Chronology: 183-H Solar Evaporation Basins Low Level Mixed Waste, November 2002.
- 183-H Solar Evaporation Basins Low Level Mixed Waste Engineering Evaluation/Cost Analysis, Greg Sinton, November 14, 2002.
- B/C Risk Assessment Pilot Update, November 14, 2002.
- Plutonium Finishing Plant Regional Cleanup (Carbon Tetrachloride) Master Schedule: Summary of Activities, V.J. Rohay
- Eliminate Enhanced Recharge Conditions: Summary of Activities, J. D. Davis.
- Summary of Activities: Interim Action Monitoring, GW Maintenance, Refurbishment, and Abandonment, Purge Storage and Treatment Facility, and Long-Term Monitoring, M.E. Byrnes.
- 100-Area Groundwater Action: Summary of Activities, J. V. Borghese.
- 200-Area Groundwater Remediation and Soil Vapor Extraction: Summary of Activities, M.E. Byrnes.
- Waste Site Remediation Master Schedule, Summary of Activities, B.H. Ford.

Attendees

HAB Members and Alternates

Madeline Brown	Pam Brown	Jim Curdy
Greg de Bruler	Dirk Dunning	Gariann Gelston
Harold Heacock	Susan Leckband	Maynard Plahuta
Wade Riggsbee	Gordon Rogers	Dan Simpson
		John Stanfill

Others

Jim Daily, DOE-RL	Rick Bond, Ecology	Julie Atwood, BHI
R.D. Hildebrand, DOE-RL	Joe Caggiano, Ecology	Dru Butler, Bechtel Hanford
John Morse, DOE-RL	Dib Goswami, Ecology	Pam Doctor, BHI
Yvonne Sherman, DOE-RL	Jane Hedges, Ecology	Jack Donnely, Bechtel Hanford
Chris Smith, DOE-RL	Max Power, Ecology	Nancy Myers, BHI
Jamie Zeisloft, DOE-RL	John Price, Ecology	Steve Weiss, BNI
Robert Yasek, DOE-ORP	Ron Skinnarland, Ecology	Tony Knapp, CHG
	Jean Vanni, Ecology	Virginia Rohay, CHG
	Dave Bartus, EPA	Courtney Harris, EnviroIssues
	Dennis Faulk, EPA	Penny Mabie, EnviroIssues

	Mike Priddy, WDOH	John Fancher, ERC
		J. V. Borghese, Fluor Hanford
		Mark Byrnes, Fluor Hanford
		Jerry Davis, Fluor Hanford
		Tom Fogwell, Fluor Hanford
		Barb Wise, Fluor Hanford
		Dick Wise, Fluor Hanford
		Chris Wright, Fluor Hanford
		Gabriel Bohnee, Nez Perce Tribe
		Sandra Lilligren, Nez Perce Tribe
		Bob Bryce, PNNL
		Charlie Brandt, PNNL
		Mark Freshley, PNNL
		Tom Page, PNNL
		Randy Price, PNNL
		Doug Sherwood, River's Edge Environmental
		John Stang, Tri-City Herald