Office of River Protection Look Back/Look Forward
to the
Hanford Advisory Board

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Acting Manager
September 6, 2007

Office of River Protection

Environmental Management

safety  performance  cleanup  closure
<table>
<thead>
<tr>
<th>Board 2007 Priorities</th>
<th>Results</th>
<th>Influenced DOE Decisions/Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Policy Values</td>
<td>Advice #196 Workers’ Compensation*</td>
<td>• RL manages program and we are working with them to improve the program</td>
</tr>
</tbody>
</table>
| Prioritization of Cleanup Work – Sequencing of Work | Advice #192 Tank Waste Program Path Forward                              | • Big picture advice that helped to move ORP and Tank Waste Committee (TWC) to higher level of detail  
• Allowed us to pursue individual technical topics in context of the total program  
• Created functional logic diagram and initiated ongoing dialogue  
• Plan to meet with issue managers on River Protection Project Low-Activity Waste Treatment Review and Technology Readiness Assessment  
• Helped to craft high quality transmittal for FY 2009 budget submission  
• Recognized the HAB’s values and priorities for more tank retrievals and cleanup of contamination from tank leaks; and, continue full funding for the Waste Treatment and Immobilization Plant. We agree that a decision on Demonstration Bulk Vitrification System is critical  
• Continue to share information with the Budgets and Contracts Committee  
• Working response                                                                                                                                 |
|                                              | Advice #198 FY 2008-2009 & Outyear Budgets*                              |                                                                                                                                                                  |
|                                              | Advice #199 Costs and Baseline Schedules                                 |                                                                                                                                                                  |

*ORP and RL Advice
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<th>Board 2007 Priorities</th>
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<tr>
<td>Institutional Controls</td>
<td>Advice #197 Groundwater Values Flowchart*</td>
<td>• RL has the lead and we are working with them to strengthen Groundwater integration</td>
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<tr>
<td></td>
<td>Educational and informational meetings</td>
<td></td>
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<tr>
<td>Develop methods and recommendations to achieve public confidence on end state decision points</td>
<td>Advice #193 Double Shell Tank (DST) Integrity Assessment Report</td>
<td>• Identified HAB’s values and priorities on DST program</td>
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<td>• Initiated dialogue with ORP, ORP’s prime contractors and TWC issue managers</td>
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<td>• Collaborated and worked through areas of concern to provide details of the DST program</td>
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<tr>
<td></td>
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<td>• Built confidence in program</td>
</tr>
<tr>
<td>Groundwater Integration</td>
<td>Advice #197 Groundwater Values Flowchart*</td>
<td>• Identified areas requiring better integration</td>
</tr>
<tr>
<td></td>
<td>Groundwater/Vadose Zone Management Plan discussions and informal feedback</td>
<td>• Recognized Board’s values for Groundwater cleanup</td>
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<tr>
<td></td>
<td></td>
<td>• Continue to strengthen Groundwater integration efforts with RL</td>
</tr>
<tr>
<td>Public Involvement</td>
<td>Advice #198 FY 2008-2009 &amp; Outyear Budgets*</td>
<td>• Created Hanford Pie-Chart exercise</td>
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<tr>
<td></td>
<td>State of the Site 2007</td>
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</table>

*ORP and RL Advice
Specific issues for the HAB to address in the coming year

• Tri-Party Agreement
• River Protection Project Low-Activity Waste Treatment Review
• Tank Closure & Waste Management Environmental Impact Statement (TC & WM EIS)
• Demonstration Bulk Vitrification System
• Vadose Zone and Groundwater
• Integrated Disposal Facility Performance Assessment once TC & WM EIS draft is available
Cleanup Achievements

- Waste Treatment and Immobilization Plant (WTP)
  - Certification of the WTP Revised Ground Motion (RGM)
  - Resume Construction on Pretreatment Facility and High-Level Waste Facility
  - Deputy Secretary approved project baseline
  - WTP goes GREEN
  - Voluntary Protection Program application
  - Certification of Bechtel National, Inc. Earned Value Management System
  - Completed all three milestones on schedule
Cleanup Achievements

- Final steel placement on the Analytical Laboratory

- Low-Activity Waste Facility
  - Enclosure of facility
  - Completion of roof
  - Placement of roof stack

EM  Environmental Management
Hanford Tank Cleanup Status

Retrieval Summary Updated through July 1, 2007

RETRIEVED

S-112
• Capacity of tank: 730 Kigals
• Completion date: March 20, 2007

C-202
• Capacity of tank: 55 Kigals
• Completion date: August 11, 2005

C-109
• Capacity of tank: 530 Kigals
• Retrieval started: June 19, 2007
• Volume of waste to be removed: 65 Kigals

C-204
• Capacity of tank: 55 Kigals
• Completion date: December 11, 2006

C-108
• Capacity of tank: 530 Kigals
• Completion date: December 20, 2006
• Volume of waste to be removed: 63 Kigals

C-203
• Capacity of tank: 55 Kigals
• Completion date: March 20, 2006

C-102
• Capacity of tank: 750 Kigals
• Retrieval started: December 17, 2004
• Volume of waste to be removed: 644 Kigals

C-105
• Capacity of tank: 530 Kigals
• Volume of waste to be removed: 259 Kigals
• Retrieval to begin: FY 2006

C-107
• Capacity of tank: 530 Kigals
• Volume of waste to be removed: 259 Kigals
• Retrieval to begin: FY 2006

C-103
• Capacity of tank: 530 Kigals
• Completion date: December 1, 2006

C-106
• Capacity of tank: 530 Kigals
• Completion date: December 31, 2003

C-104
• Capacity of tank: 530 Kigals
• Volume of waste to be removed: 259 Kigals
• Retrieval to begin: FY 2006

C-109
• Capacity of tank: 530 Kigals
• Completion date: December 11, 2006
• Volume of waste to be removed: 65 Kigals

NEXT IN LINE

S-101
• Capacity of tank: 55 Kigals
• Completion date: March 23, 2006

Acid Dissolution

Modified Sluicing

Vacuum Retrieval

Saltcake Dissolution

Remote Water Lance (Salt Mantis)

Mobile Retrieval Tool (Sand Mantis)

High Pressure Mixer (Rotary Viper)

Mobile Retrieval Tool (Foldtrack)
Tank Farm Achievements

- Certification of CH2M HILL Hanford Group, Inc. Earned Value Management System – the first in complex
- Retrieved seventh single-shell tank S-112
- Demonstration Bulk Vitrification System full scale dryer and integrated melt test completed
- Completed 242-A Evaporator campaigns to reduce approximately 1.21 M gallons of waste
- Deployed five new tank retrieval technologies
- Double-Shell Tank integrity activities (on track to complete milestone M-48-15 by the end of September 2007)
- Completed 5 of the 14 milestones on schedule and 2 are on track to be completed on schedule
## Building a Strong Foundation of Safety

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Metric/Goal</th>
<th>Tank Farm FY 2007 Actual Performance</th>
<th>WTP FY 2007 Actual Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Safety</td>
<td>Occupational Safety – Total Recordable Case (TRC) Rate. 1.6 cases and below (CH2), 2.1 cases and below (BNI) per 200,000 hours equals green; &gt; 2.5 red</td>
<td>1.33 1.31 0.32</td>
<td>1.24 0.53 1.41</td>
</tr>
<tr>
<td></td>
<td>OSHA Lost Work Days (Days Away from Work or Restricted Days – DART). Metrics below 0.7 cases (CH2) and 0.4 (BNI) green; &gt; 1.0 red.</td>
<td>0.66 0.33 0.32</td>
<td>1.03 0.00 0.94</td>
</tr>
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Cleanup Challenges

- **WTP**
  - Resolving outstanding technical issues
  - Quality Assurance
  - Safety
  - Consistent and predictable funding
  - Staffing the workforce
- **Tank Farm**
  - S-102 event
  - Retrieving waste
  - Supplemental treatment solution
Look Ahead

- Tri-Party Agreement
- Tank Closure and Waste Management Environmental Impact Statement (TC & WM EIS)
- WTP
  - Ramp up full construction
  - Pretreatment Experimental Platform startup
- Tank Farms
  - Demonstration Bulk Vitrification System
  - Pretreatment at Tank Farms
  - Complete retrieval from two Single-Shell Tanks using innovative technologies
  - Continue Double-Shell Tank integrity activities
  - Perform 242-A Evaporator campaigns
  - Continue characterization for Tank Farm soils

EM Environmental Management

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