

Reducing Risks and Uncertainties to Environmental Management Projects

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EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Strategic Planning for Engineering and Technology Activities

- **Office of Engineering and Technology has a lead role in supporting EM projects by reducing technical barriers and uncertainties**
- **Strategic planning and approach**
 - Selected critical, high-risk, high-payoff projects
 - Technical workshops and exchanges
 - External Technical Reviews
- **Continue close collaboration with national laboratories and universities for innovative technologies and technical exchanges**



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External Technical Reviews as a Valuable Tool to Resolve Risks and Uncertainties

- **High degree of concern for EM projects prompted the use of External Technical Reviews**
 - Waste Treatment Plant at Hanford
 - Tank 48 at Savannah River Site
 - Demonstration Bulk Vitrification System at Hanford
 - Salt Waste Processing Facility at Savannah River Site
 - Groundwater and Soils Remediation at Hanford and Paducah
- **Important to organize engineering and scientific expertise through a structured review process to address difficult technical problems or resolving project management issues**



Recent External Technical Reviews Summary Results

- **WTP at Hanford report issued 3/17/06; examined issues related to current flowsheet, identified one issue that could prevent plant operation (line plugging)**
- **Tank 48 at SRS report issued 8/10/06; assessed the viability of preferred path forward in disposition of tetraphenylborate, confirmed steam reforming as preferred technology**
- **DBVS at Hanford report issued 9/28/06; reviewed status of DBVS program in meeting program objectives, no fatal flaws identified**
- **SWPF at SRS report issued on 11/22/06; focused on determination if design was technically sufficient to support development of baseline cost and schedule, found that project ready for CD-2 review**
- **Remediation systems at Hanford for ZP-1 Operable Unit; evaluation of existing remedial systems will support Feasibility Study for Record of Decision to be provided 5/31/07**



Proposed Future External Technical Reviews

- ETRs being considered for FY2007
 - Plutonium Disposition Plans at SRS
 - Calcine Disposition Project Alternatives at ID
 - High Flux Beam Reactor D&D at BNL
 - West Valley Demonstration Project D&D
 - GDP D&D Project at Portsmouth
 - Groundwater monitoring at Paducah
 - Groundwater monitoring at Hanford



Conclusion

- External Technical Reviews have been organized and implemented to reduce uncertainties for EM projects across DOE complex; proven useful in supporting critical project management decisions
- Strong endorsement by Assistant Secretary Rispoli to have ETRs as mainstay to reduce risks and improve operations and safety
- Need to identify major risks using project's risk management plans to help resolve technical uncertainties

