

# EM Site-Specific Advisory Board Topics and Achievements

EM Site-Specific Advisory Board Chairs Meeting

June 15-16, 2011 ◊ North Las Vegas, Nevada



#### Solid Waste Burial Grounds

- ▶ 450,000 cubic meters radioactive solid waste in unlined trenches
- Draft Tank Closure & Waste Management Environmental Impact
  Statement identified unacceptable impacts to groundwater
- ▶ DOE preparing 200-SWBG RCRA Facility Investigation/ Corrective Measures Study and Remedial Investigation/ Feasibility Study (RI/FS) Work Plan that will define work leading to actions to remediate burial grounds in the 200E & 200W Central Plateau
- ▶ HAB believes more characterization is needed to support remedy selections
- ▶ More pre-1970 buried transuranic (TRU) element inventory than post-1970 TRU planned for retrieval (Note: HAB believes TRU is TRU, regardless of when it was buried)

- RCRA Site-Wide Permit
  - WA State 10 year permit required for site operations
  - Huge, complicated, document to review
    - Draft for review expected October/November timeframe
    - Planned public comment period 60-90 days (HAB will probably ask for extension)
  - Includes the Waste Treatment Plant (WTP)
    - WTP permitting is ongoing as plant is constructed

- Potential Baseline Funding Reduction in 2012 and Beyond
  - Some cleanup projects will stall
  - Loss of younger, trained workforce
  - Economic impacts

- ▶ Accomplishment: HAB Annual Report
- Major Board Activity: Workshops
  - ▶ October 2010, Solid Waste Burial Grounds
  - ▶ January 2011, beginning HAB and public dialogue on tank closure
    - Regulatory framework
    - TPA milestones
    - ▶ Early, collaborative public involvement



The urgency for DOE/Blue Ribbon Commission to address the path forward for spent nuclear fuel and high-level waste

Spent Nuclear Fuel and Waste Under Responsibility of DOE Idaho		
	Idaho Settlement	_
<b>Material</b>	Agreement Commitment	Amount
Spent Nuclear Fuel	Remove SNF(except navy fuel) by	285 Metric Tons Heavy Metal
(SNF)*	January 1, 2035	
High-Level	Submit RCRA Permit by	4,400 cubic meters or between 3,500 and
Waste Calcine	December 1, 2012	5,000 canisters of treated calcine waste
	Complete treatment by	product
	December 31, 2035	
Sodium-Bearing	Complete treatment by	900,000 gallons or between 650 and 700
Waste	December 31, 2012	canisters of treated sodium-bearing waste

<sup>\*</sup>The amount of SNF in Idaho slowly increases through receipt of SNF from foreign and domestic research reactors and the generation of SNF in the Advanced Test Reactor and Neutron Radiography Reactor.





- Provide sufficient funding to achieve or meet the deadlines associated with DOE-ID's accelerated cleanup plan
  - INL has been a premier site for accomplishing cleanup
  - The CAB supports accelerated cleanup to maintain the momentum
  - Additional EM funding would be required in the near-term to achieve acceleration



#### Minimize impacts to cleanup project workforce

- The CAB continues to follow workforce changes and how they are being managed
- The CAB views the accelerated cleanup initiative as a way to minimize impacts to the workforce
- The contractor is recognized for its efforts to help employees undergoing a reduction in force, such as working with area contractors and other potential employers for placement in nuclear-related work



#### Accomplishments

- Comments to Blue Ribbon Commission on Idaho cleanup project, spent nuclear fuel, and high-level waste management
- Improved communications and outreach annual report and new member recruitment

#### Major Board Activity

- CAB member involvement in events such as Waste
  Management 2010 and Long-Term Surveillance Conference
  enhances understanding of DOE EM cleanup program
- Letters to DOE on contractor safety performance and on the need for additional funding to support accelerated cleanup

# Nevada

- Underground Test Area (UGTA) Groundwater Models
  - The NSSAB has an ongoing interest in the results of technical analyses and encourages continued incorporation of peer review recommendation regarding UGTA groundwater models to instill public confidence in determining the location of groundwater contamination and flow paths

# Nevada

#### Disposition

Lack of requirement and funding mechanism within DOE to evaluate and disposition items having historic or cultural value outside DOE when there is a significant cost for disposition other than waste or excess material

# Nevada

#### Positive Effects of Committee-of-the-Whole

- Decision to address Work Plan items using a mix of subjectspecific committees and acting as a Committee-of-the-Whole has proven to be effective
- ▶ Of the 12 FY 2011 recommendations requested by DOE Environmental Management, the NSSAB made seven in the first six months of the fiscal year
- ▶ The combined approach has worked to increase member awareness of all Board activities



▶ DOE provide funding in FY 2012 and beyond for Los Alamos National Laboratory (LANL) to meet completion of the New Mexico Order on Consent



- ▶ DOE should expedite high priority cleanup work
  - ▶ Complete remediation of Technical Area 21 (TA-21)
  - Remove TRU waste from Material Disposal Area G (MDA G) to support complex wide goal of 90% removal of TRU waste by 2015



▶ DOE should focus on continued development of an integrated site-wide Surface Water and Groundwater Monitoring Program, to optimize execution of the Consent Order



#### Accomplishment:

Transition the focus of Board recommendations from characterization to end points (remediation and mitigation) including long-term stewardship and land transfer

#### Major Board Activity:

- ▶ The NNMCAB continues its outreach to local communities and the Eight Northern Pueblos, one of which shares a boundary with LANL
- Increased member participation in national, regional and local environmental forums

# Oak Ridge



- Current Budget
  - ▶ Risks are not being addressed because of insufficient funding
- Long-Term Budget



# Oak Ridge



#### Potential Offsite Releases

Several areas on the Oak Ridge Reservation have ongoing issues of contamination moving offsite, but there is no reasonable plan to address the problem any time in the near future

# Oak Ridge



- Accomplishment: Support for the new member recruitment drive
- Major Board Activity: Participation in the public workshop on the FY 2013 Oak Ridge EM budget



#### Re-enriching Uranium Tails

- Paducah has roughly 40,750 cylinders of depleted uranium. A portion of these cylinders represent a potential asset to DOE for future mission activities. The re-enrichment of the tails provides a very cost effective return on investment. The operator of the PGDP has also indicated that their future operations are at risk and that the opportunity to re-enrich the tails at the GDP may be lost in the near future
- ▶ The Paducah CAB believes re-enrichment of these tails could greatly benefit on-going clean-up activities including long term D&D by generating barter revenue

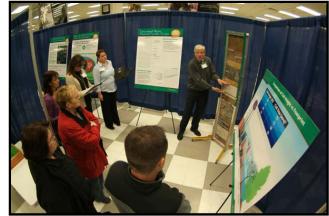


- Integrate a Future Use Plan with the cleanup strategy
  - ➤ CAB believes that there is an opportunity for DOE to develop a holistic approach that can benefit all stakeholders and all types of future use (DOE, Community, Recreation, Economic Development, Site Heritage and History)
  - ▶ CAB believes that, where feasible, sequenced cleanup of key areas could aid community efforts to replace the eventual loss of the PGDP



 Accomplishment: The CAB played an integral role in the public participation process with its involvement in the DOE Public Information Exchanges and the Waste Disposition Options educational workshop







Major Board Activity: CAB recommendations helped initiate a community-wide Future Use Study conducted by the Kentucky Research Consortium on Energy and Environment









- Waste Disposition
  - On-site disposal cell size and location
  - Recycling
  - Regulatory Issues
    - Speculative accumulation
    - Waste acceptance criteria







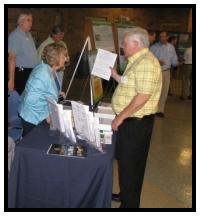


- ▶ Reuse of Real Property
  - Guidance needed from HQ
  - Asset Revitalization Initiative
    - New Task Force may allow for no-decision
  - Roles & responsibilities of SSAB, CRO, local government, and other stakeholders





Accomplishment: The PORTS SSAB recommended that DOE go forward with a broad-based community-wide end use study (Recommendation 10-01). In response, DOE granted Ohio University Voinovich School to engage the community, establish methods and opportunities, which allows collaboration within the development of the future use of the Portsmouth Site.











Major Board Activity: Developing a future use for the

plant site





#### ▶ Concern for Effective Utilization of H-Canyon

- ▶ Facilities to be placed in minimum safe condition
- Disposition decisions not made for Plutonium (Pu) and Used Nuclear Fuel (UNF)
- H-Canyon should be performing at full operations for disposition of some limited nuclear materials, pending Environmental Impact Statement decisions
- Differential Cost between Full Operations/Warm Standby relatively modest (significant cost savings?)
- ▶ H-Canyon is extremely effective: disposition of UNF, Pu, and other Nuclear Materials; blend-down of Highly Enriched Uranium
- ▶ H-Canyon scale-down may lead to loss of unique capability



- Concern for prioritization of site activities in view of likely budget cuts
  - Major emphasis and top priority should be H-Canyon and liquid waste/tank closure
  - Other site remediation should be scaled back to permit continued operation of these two most significant risk-reduction activities
  - Emphasis should be placed on stabilization of UNF in basins and Pu while maintaining the capability to process "yet to be located/known" unstable nuclear materials
  - Important to have clearly defined treatment and disposition path for all nuclear materials, hazardous, mixed waste, or low level wastes presently on site or destined for the site





- Resolve the major legacy of nuclear weapons production at SRS by treating and disposing of liquid waste and closing tanks
  - ▶ Risk Reduction: highest risk in State of South Carolina
  - Safely treat and disposition 37 million gallons of radioactive liquid waste and close 49 additional underground storage tanks
  - Execution of the Liquid Waste System Plan (Rev. 16) is underway to accelerate tank closures; utilizes key technology deployments
  - Salt Waste Processing Facility will have major impact with scheduled operational status by May 2013



- Activities and Achievements
  - Increased our knowledge-base:
    - Members participated with Blue Ribbon Commission on America's Nuclear Future in Augusta, January 7, 2011
    - CAB Chairman and a member gave papers at 2011 Waste
      Management Conference in Phoenix
  - Expanded our community outreach:
    - Provided input for article in Augusta's "Metro Spirit" community newspaper about CAB, entitled "Legacy Waste." (6 people interviewed)
    - Continue to actively use and explore on-line meeting capabilities
    - Re-implementing CAB's Speakers Bureau
  - Improved our overall performance:
    - CAB conducted an Educational and Process Retreat October 2010

