Top Issues

Idaho National Laboratory

1) Tank Farm Closure

- DOE's proposed approach entails:
  - o Cleaning and closure of all underground tanks
  - o Converting liquid sodium bearing waste to solid form
  - o Disposing of solidified sodium bearing waste at WIPP
  - o Cleaning up tank soils, including high-level waste spills

- The CAB's concerns about this approach:
  - o It relies on a new treatment facility that is yet to be designed, permitted and constructed
  - o The transportation and disposition approaches have not yet been approved by DOE-Carlsbad, New Mexico and the regulators
  - o DOE has yet to formulate a cleanup plan for the tank soils

Top Issues

Idaho National Laboratory

2) Master Plan for Accelerated Cleanup through 2012

- The new cleanup contractor will present the new master plan to DOE in September. It will outline plans to:
  - o Excavate "targeted" buried waste
  - o Complete shipment of stored transuranic waste to WIPP
  - o Move spent nuclear fuel from wet to dry storage
  - o Demolish reactors and other high risk facilities
- In reviewing this plan, the CAB will focus on:
  - o What buried waste will be targeted for excavation, what will be left behind, and how much will be left behind
  - o DOE's plans to keep WIPP shipments on schedule
  - o Schedule for the proposed dry storage and packaging facility
  - o Demolition plans – the end state and overall approach have not yet been disclosed

Top Issues

Idaho National Laboratory

3) Other key cleanup issues the CAB is monitoring

- The CAB wants to make sure that DOE maintains a focus on worker safety, especially as cleanup moves forward aggressively and deals with high-risk facility disposition
- The CAB wants to make sure that DOE stays on track with all Idaho Settlement Agreement milestones
- The CAB has continuing interest in major efforts that will occur **after** the current contract is completed:
  - o Spent nuclear fuel storage until disposal at repository
  - o Disposition of calcine (solidified high level waste)
  - o Decontamination and decommissioning of the excess facilities that remain after 2012, including facilities constructed specifically for cleanup operations
  - o Final closure of the Subsurface Disposal Area

Top Issues

Fernald

1) Settlement of NRD Claim

- DOE and the State have still not agreed to a settlement. A court date has been set for June 2006.

2) Transition of Site from EM to LM

- EM will shift management of the physical Fernald site to LM in April 2006. There are significant issues to resolve both before and after that date.

3) Formation of an LSO

- We believe public involvement will be a critical form of institutional control at the site. Local stakeholders and governments have agreed to try an LSO, it needs to have a clear, meaningful mission, inclusive membership and good operating procedures.

Top Issues

Hanford Advisory Board

1) Cleanup decisions in the Central Plateau.

- Risk Assessments and NEPA documents.
  - Ability to make cleanup decisions made without sufficient risk data.
  - Inconsistency between NEPA analyses.
  - Delays in NEPA documents.
- Budget.
  - Impacts to Waste Treatment Plant.
  - Plutonium storage requirements.
  - New Threat Basis requirements.
  - Impacts to Central Plateau work.

Top Issues

Hanford Advisory Board

- Tank waste challenges.
  - Budget.
  - Cost and schedule impacts.
  - Design challenges.
  - Supplemental treatment.

Top Issues

Community Advisory Board for Nevada Test Site Programs

1) Underground Test Area Project

Background

- 828 historical underground nuclear tests conducted at the NTS released ~132 million curies of radioactivity into subsurface regions, resulting in some groundwater contamination.
- Independent peer review of UGTA project strategy conducted at request of the CAB.
- DOE invited CAB to study issue and provide recommendation for future well siting.

Top Issues

Community Advisory Board for Nevada Test Site Programs

CAB Issues Formal Recommendation Letter

- Fund/install a system of 3 wells strategically located down gradient of region where major testing occurred; up gradient of the residents of Oasis Valley, Beatty, and Amargosa, NV.

Status

- CAB preparing comprehensive "white paper" report to document activities/recommendations.
- CAB continuing to work with DOE on recommendations; providing status reports to interested stakeholders.

Top Issues

Community Advisory Board for Nevada Test Site Programs

2) Funding Equity for the Nevada Test Site (NTS)

- It is essential that the current ~$90M funding level be maintained to ensure that (a) NTS cleanup schedules are met, and (b) NTS can continue to serve its key role to other sites' cleanup and closure schedules.

3) Ongoing Stakeholder Involvement

- Regardless of where the remaining EM work is placed (within Environmental Management or transferred to the National Nuclear Security Administration), there will remain a need for stakeholder involvement. It is essential that up-front planning take place to ensure that the CAB remains a viable voice for the community in the following ongoing EM projects: Low-Level Waste, Mixed Low-Level Waste, Transuranic/Mixed Transuranic Waste, Industrial Sites, Soils, and the Underground Test Area.

Top Issues

Northern New Mexico Citizens' Advisory Board

1) *Top Issue 1* – **Protection of Groundwater**
   a. Will compliance w/NMED's Consent Order protect groundwater?
   b. Reliability of discrete well samples across 43 square miles?

2) *Top Issue 2* – **Insufficient Funds for NMED Consent Order**
   a. Budget – it will cost much, much more than anticipated.
   b. Estimates range up to $700 M shortfall
   c. Completion Report Due at 2015 is totally unrealistic

Top Issues

Northern New Mexico Citizens' Advisory Board

3) Top Issue 3 – Long-Term Waste Management Strategy

a. Remediation of old radioactive MDAs (e.g., MDA B)

b. Future of pre-1970 TRU waste – will it stay or go to WIPP?

c. Future planning for D&D wastes, construction debris, etc.

Top Issues

Oak Ridge

1) D&D of K-25, K-27

- Handling of fissile material

2) Stewardship

3) Additional EM Scope at Y-12 and ORNL

Top Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

1) Extended Procurement of a New Remediation Contractor

The PGDP CAB is concerned that the extended, stop-and-start procurement process for a new remediation contractor to replace Bechtel Jacobs Company, LLC (BJC) may adversely impact site clean up schedule, cost, and continuity.

Background

- DOE initiated procurement of a new contractor in 2003.
- Remediation contract awarded to Northwind in January 2005
- The contract award was contested, and DOE decided to rebid the contract.
- The new RFP was issued on 6/20/2005 with responses due 8/4/2005.

Top Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

- The new contract is expected to be awarded by 11/2005.
- The BJC contract has repeatedly been extended, most recently until 1/29/2006.

Top Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

2) Groundwater contamination source removal

The C-400 Cleaning Building is the source of a TCE and Tc-99 groundwater plume that extends over 4 miles to the Ohio River. This plume is the primary cause of off-site contamination. Removal of the TCE source material is necessary to reduce the plume concentration.

Activity

- Electrodes buried deep in the ground beneath the building will evaporate the degreaser and the vapor will be pumped to the surface and trapped in carbon filters.
- ROD signed 8/9/2005.
- RFP bids due 8/30/2005.
- Treatments expected to continue for over 2 years.
- Uncertain of long-term remediation efforts beyond source removal.

Top Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

3)) D&D of PGDP as it relates to Reindustrialization

The suitability of the PDGP site and surrounding property for reindustrialization following D&D efforts has yet to be determined.

- The degree to which the site can (will) be decontaminated is not yet known
- Potential purchase of surrounding property with groundwater contamination may expand the property available for reindustrialization

Top Issues

Rocky Flats

Physical cleanup at Rocky Flats will be complete this fall. The Rocky Flats Citizens Advisory Board is pleased that the cleanup work is ahead of schedule, under budget, and most importantly, was accomplished with a good safety record. The Board has the following concerns related to the final regulatory closure of the site.

1) ***Top Issue 1: Ensuring public confidence in the cleanup***

The Board is concerned with how the site develops and presents final information to the community outlining the areas of residual contamination and the related risk assessments. It is important for the credibility of the cleanup that this information be presented in a way that in understandable to the general, non-technical public.

Top Issues

Rocky Flats

2) Top Issue 2: Future Public Participation

The Board continues to be concerned about the development of post-closure public involvement at Rocky Flats. The development of the Local Stakeholder Organization (LSO) continues to favor local governments over interested citizens and non-governmental groups and organizations. Legacy Management wishes to focus its future public participation through the LSO, but with limited direct participation by the general public on the LSO, this may prove problematic and ineffective.

Top Issues

Rocky Flats

3) Top Issue 3: Loss of Site Expertise

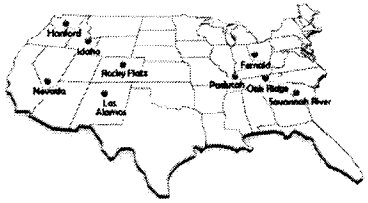
Once physical completion of Rocky Flats cleanup is complete, there will still be work to be done on the "regulatory closure." Major documents, such as the Remedial Investigation / Feasibility Study, the Proposed Plan, and the Corrective Action Decision / Record of Decision, remain to be completed. With the end of physical cleanup, most of the site personnel will be leaving, especially site contractor employees. The Board is concerned with the loss of expertise at the site when it is still needed to complete the regulatory closure activities.

Top Issues

Savannah River Site (SRS)

1) Nuclear Waste (High Level Waste)

- Nuclear Waste is made up of two parts- sludge and salt. Salt makes up 92% of the volume of nuclear waste at SRS. Sludge processing is proceeding adequately through the Defense Waste Processing Facility (DWPF). Salt processing has not yet begun due to resolution of the WIR lawsuit with the lengthy process established by the NDAA sec 3116 to show that the decontaminated nuclear waste can be safely disposed at the Saltstone vaults. Tank Space is becoming limited. Both the interim Salt processing plan (dissolution, deliquification, and adjustment or DDA) and the long-term plan (Salt Waste Processing Facility) rely on waste disposal at Saltstone.



Top Issues

Savannah River Site (SRS)

1) Nuclear Waste (High Level Waste) contd.

Without DDA, operation at DWPF will stop and bring all nuclear waste disposition activities to a halt. Tank Closures are also being held up by the 3116 implementation process.

- Ultimately the vitrified nuclear waste glass logs will be disposed at Yucca Mountain.
- Issues: NRC Review (ongoing); NAS Review (partly completed); DOE WD (forthcoming in December); and DHEC permit (late January).

Top Issues

Savannah River Site (SRS)

2) Transuranic Waste

- SRS has drummed TRU waste with high Pu loadings that cannot be transported to the WIPP in the existing TRUPACT-II shipping container. Modifications to the TRUPACT-II NRC License have been requested by the National TRU Program to allow higher loading drums to be shipped. If all of SRS's drums cannot be shipped within the modified requirements or with new technology, SRS must repackage the high activity drums using existing or temporary facilities with subsequent increased exposure to workers.

Top Issues

Savannah River Site (SRS)

- SRS also has non-drummed TRU waste that requires shipment to WIPP using the new TRUPACT-III shipping container with the loading capability for 5ft by 5ft by 8 ft boxes. The TRUPACT-III is to be provided by the TRU National Program and licensed by the NRC no later than 2007. Non-destructive assay/non-destructive examination equipment for large items must be developed and is to be provided by the National TRU Program

Top Issues

Savannah River Site (SRS)

3) Plutonium Storage/Disposition

To date, DOE has:

- Canceled the Actinide Packaging and Storage Facility
- Canceled the Immobilization Project
- Shut down FB-line so there is no way of [re]stabilizing and repackaging Pu
- Abandoned 235-F so there is no way to do destructive examinations
- Agreed to ship fuel rods from Hanford to SRS for storage although there is no shipping container (SRS cannot store the rods in the current Pu storage facility)
- Resurrected a plan to vitrify the Pu (project in infancy)

Top Issues

Savannah River Site (SRS)

DOE cannot yet consolidate its excess plutonium at SRS. There is no completed plan to process Pu into a form for permanent disposition; some of the Pu is not in a form that SRS planned to store; and recent changes in security requirements required additional costs. The SRS CAB is currently reviewing GAO recommendations that DOE develop a comprehensive strategy to consolidate, store and eventually dispose of its plutonium, something the SRS CAB has been requesting for a number of years. Over 15 recommendations dating back to 1997 have asked DOE to develop a plan, share it with the public and provide adequate funding to execute.

Top Waste Disposition Issues

Fernald

1) *Final Disposition of Silos 1 and 2 Waste*

- WCS is taking this waste as storage, final disposition is not yet assured. The waste cannot return to Fernald.

2) *Not a Thing*

- After years of worrying about where everything will go, we now have a path for everything and most of it is already gone.

Top Waste Disposition Issues

Hanford Advisory Board

1) Plutonium.

- The current disposition path does not seem viable. As a result, Hanford is making provisions to spend hundreds of millions of dollars to continue to store plutonium.

2) Low Level and Mixed Low Level planned for disposal at Hanford.

- There is great uncertainty surrounding disposal of this waste (e.g. will the waste arrive, when will it arrive, under what conditions will it arrive, where will it be disposed, etc).

Top Waste Disposition Issues

Hanford Advisory Board

3) High Level Waste.

- Provisions have not yet been made to store Hanford's high level waste canisters in the event Yucca Mountain does not open as scheduled.

Top Waste Disposition Issues

Idaho National Laboratory

1) Yucca Mountain

Concern about the schedule for opening Yucca Mountain

- Idaho National Laboratory (INL) cleanup program needs final waste acceptance criteria to proceed with designs for disposition of high level waste (calcine) and spent nuclear fuel
- DOE should make contingency plans for interim waste disposal in case Yucca Mountain does not open in a timely manner

Concern for adequate capacity even if Yucca Mountain does open

2) Buried Waste Disposition

DOE is planning to excavate "targeted waste" from the Subsurface Disposal Area. The CAB is concerned that some of the excavated waste may not meet the waste acceptance criteria for the Waste Isolation Pilot Plant and will require another approach to disposal.

Top Waste Disposition Issues

Idaho National Laboratory

3) Special Nuclear Materials (SNM)

Under accelerated cleanup SNM are being moved out of INL.

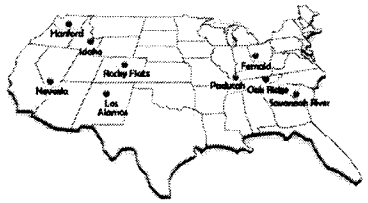
However there are proposals that would bring significant quantities of SNM to the INL site:

- Consolidation of Pu-238 production and fabrication of radioisotope power systems ("space batteries")
- Consolidation at Idaho of SNM currently stored at other DOE sites

Top Waste Disposition Issues

Community Advisory Board for Nevada Test Site Programs

1) ***The U.S. Department of Energy should issue guidance regarding "small quantity" TRU waste sites***
   - The NTS is considered a "small quantity" site; therefore, the ongoing need for characterization of TRU classified drums is not on a priority list and has no preferential schedule for characterization or disposal.
2) ***Funding Equity for the Nevada Test Site (NTS)***
   - It is essential that the current ~$90M funding level be maintained to ensure that (a) NTS cleanup schedules remain, and (b) NTS can continue to serve its key role to other sites' cleanup and closure schedules.



Top Waste Disposition Issues

Northern New Mexico Citizens' Advisory Board

1) Waste Disposition Issue 1 – Expansion of Area G

a. LLW Disposal expanding by another 30 acres.

b. Insufficient hard data to support unlined pits, trenches & shafts.

c. Current 63-acre site-closure remedy remains uncertain.

2) Waste Disposition Issue 2 – Rate of TRU Waste to WIPP

a. "Quick to WIPP" doesn't seem all that quick!

b. Characterization snafu's at LANL impede progress.

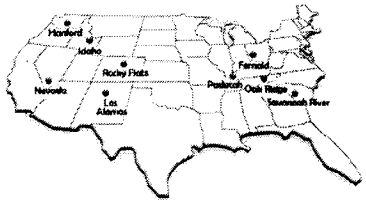
c. Will the pre-1970 TRU really stay buried or be pulled for WIPP?

3) Waste Disposition Issue 3 – Future of MDA's – D&D Waste

a. Large volume of old MDA wastes w/o disposition paths.

b. Huge volume of D&D construction waste with no path forward

c. DOE continues to bury things – take away the shovels!



Top Waste Disposition Issues

Oak Ridge

1) No Path (aka orphan)

- Approximately 22,670m3 of LLW and MLLW streams have no disposition paths for various reasons.
- A related problem is 215m3 of wastes that have pathways but are difficult to treat.

2) TRU Waste (CH and RH)

- Current onsite quantities: ~ 1100m3 CH
  ~1450m3 RH

  (80% of total RH activity is in Oak Ridge)

Top Waste Disposition Issues

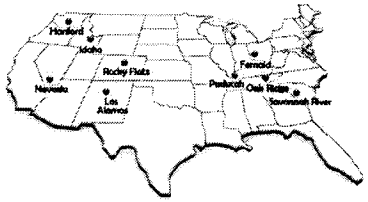
Oak Ridge

3) Continued availability of long-term waste disposal sites and waste treatment technology

- NTS
- Envirocare
- WIPP
- TSCAI

NOTE: Greater than 90% of waste to be generated by Oak Ridge Accelerated Cleanup will remain on site.

Less than 10% of waste will go off site.



Top Waste Disposition Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

1) Future Use of the On-Site Landfill

- Waste streams include: DOE plant operations, scrap metal, DOE Material Storage Areas, legacy waste and remediation activities.
- 401 KAR 48:050, Section 5 prevents disposal facilities within 200 feet of faults which have exhibited displacement in the last 10,000 years. Faults may be present under the proposed C-746-U Landfill expansion. Currently, there are no alternative waste disposition paths if landfill expansion is deemed unfeasible due to fault activity.

Top Waste Disposition Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

2) Potential for excavation of Burial Grounds

- Measures such as capping and institutional controls are now proposed for three Solid Waste Management Units (3, 6, 145) previously identified for excavation. If a decision is made to excavate burial grounds, it will increase the volume of remediation activity waste streams.
- SWMU 3 (C-404 Landfill) Contains uranium, non-uranium radionuclides, metals and radioactively contaminated trash, smelter furnace liners, toxic hazardous wastes and PCBs
- SWMU 6 (C-747-B Burial Ground) Waste includes magnesium scrap, laboratory exhaust ductwork contaminated with perchloric acid fumes, contaminated aluminum scrap and a single contaminated UF6 condenser.

Top Waste Disposition Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

- SWMU 145 (Construction/Demolition Debris Disposal and Spoils Area) Construction debris including concrete, roofing materials, wire, wood, welding rods and shingles with asbestos and a tar-laden material containing elevated levels of uranium and technetium.

Top Waste Disposition Issues

Paducah Gaseous Diffusion Plant Citizens Advisory Board

3) Decontamination and Decommissioning of the PGDP

- There are no current estimates for waste streams that will be generated when enrichment operations cease and disposition is made of PGDP buildings and facilities.

Top Waste Disposition Issues

Savannah River Site (SRS)

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Top Waste Disposition Issues

Savannah River Site (SRS)

3) Mixed Waste

- SRS has a mixed waste stream with no identified path to disposal, the Legacy Mixed Contaminated Debris Waste (High Rad) stream. This stream is identified in the SRS Site Treatment Plan (STP) as SR-W091. This waste is primarily solvent rags and other debris contaminated above the NRC 10 CFR 61 Class A limits for both Pu-239 and Sr-90. The waste is transportable, but currently there is no commercial or DOE facility available to treat and dispose this waste nor one which can accept greater than Class A waste which retains listed waste codes. SRS is investigating treating this waste onsite or offsite using alternative debris treatment standards. The recent announcement that Nevada Test Site will be permitted for offsite disposal of MLLW should provide a disposal path for this waste.