



DRAFT AGENDA
ADMINISTRATIVE COMMITTEE MEETING
Stoller-Navarro, 7710 W. Cheyenne, Conference Room 130
January 11, 2006 - 5:00 - 7:30 p.m.

- | | | |
|--------------------------|--|--|
| I. | Chair's Opening Remarks
Approval of Agenda | Kathleen Peterson (5 min) |
| | Review of Ground Rules | Carla Sanda |
| II. | Meeting with James Rispoli, DOE Asst. Secretary for EM | Kathleen Peterson (10 min) |
| III. | Briefing: Overview of Performance Assessment Activities:
PA Revisions, GCD Status, TRU in the Trenches | Dr. Bruce Crowe,
Apogen Technologies
(45 min) |
|
BREAK

 | | |
| IV. | Committee Updates | (30 min) |
| | <ul style="list-style-type: none">• Budget• Diversification• Transportation/Waste Committee• UGTA Committee | Dave Hermann
Jack Ramsey
John Pawlak
Genne Nelson |
| VII. | Other CAB Business (40 min) | |
| | <ul style="list-style-type: none">• Update: Nye Co. Stakeholder Groups• February Public Meeting Planning<ul style="list-style-type: none">➢ Where➢ Topics• CAB Travel• CAB Meeting Refreshments• January State of Nevada Closed in Place Corrective Actions<ul style="list-style-type: none">➢ The DoD will not be submitting any CADDs, CADD/Closure Reports, or SAFER Work Plans proposing closure-in-place to the NDEP before January 11, 2006 | John Pawlak

All

Kelly Snyder
Kelly Snyder |
| V. | Meeting Evaluation (5 min) | |



TRANSPORTATION / WASTE COMMITTEE

FY 2006 Work Plan – Developed at December 3, 2005 CAB Retreat

Committee Members

John Pawlak, Chair

David Hermann Vice-Chair

Committee Members: Marian Lawrence, and Kathleen Peterson

The following initiatives were developed at the CAB's December 3, 2005, Work Plan Retreat

1. Review and comment on options for preparing to the National Low-Level and Mixed Low-Level Waste Disposition Plan
2. Work with David Shafer in developing a presentation for public outreach on the DRI Transportation Study –they conducted a study to assess the potential exposure from truck transport of low-level radioactive waste to the Nevada Test Site - possibly at the February 2006 Pahrump public meeting.
3. Review the DOE CAU Process and consider a method of providing the reports to those who are interested.
4. TRU
 - TRU in the Trenches
 - A presentation by Dr. Bruce Crowe on the Performance Assessment and TRU in the Trenches
 - MLLW Waste Acceptance Criteria
 - TRU Letter to Joni Norton
 - CAB Tour of Area 5
5. Recruit new members for the T/W Committee
6. Review the 5 options considered by the T/W Committee for the Clean Slate Soils Remediation.



UNDERGROUND TEST AREA (UGTA) COMMITTEE

FY 2006 Work Plan – Developed at December 3, 2005, CAB Retreat

Committee Members

Engelbrecht von Tiesenhausen, Chair
Genne Nelson, Vice Chair

CAB Committee Members: Robert Gatliff, Steve Hopkins, Charley Phillips

UNLV Technical Support Team Members: Dr. Helen Neill, Savanna Reid

The following initiatives were developed at the CAB's December 3 Work Plan Retreat:

1. Finalize formal detailed letter to Steve Mellington, NNSA/NSO, recommending locations for original three wells and including the change for well #3 and a path forward.
2. Review new data from DOE (maps and Flow Model Report) and based on the new data, change the previous location of well 3 and develop additional well locations for recommendation.
3. Finish development of the comprehensive report supporting the original well recommendations developed by UNLV support staff.
4. Review any additional pertinent UGTA reports.

Notification for
Closed in Place Corrective Actions
January 11, 2006
Nevada

The Department of Defense will not be submitting any final Corrective Action Decision Documents (CADDs), CADD/Closure Reports, or Streamlined Approach for Environmental Restoration (SAFER) Work Plans, proposing closure-in-place to the Nevada Division of Environmental Protection (NDEP), before January 11, 2006.



DIVERSIFICATION COMMITTEE

FY 2006 Work Plan – Developed at December 3, 2005 CAB Retreat

Committee Members

Jackson Ramsey, Chair

**Members: Kaye Allisen-Medlin, David Hermann, Marian Lawrence, Kathleen Peterson,
and Charley Phillips**

The following initiatives were developed at the CAB's December 3, 2005, Work Plan Retreat:

- 1. Review CAB By-Laws related to liaison members; consider revising membership and inviting "new faces" to participate (e.g., Brent Jones, Nye County Emergency Preparedness) and make recommendations to the Board by February 2006.**
- 2. Place recruitment ads (public service announcements, internet databases, etc.) by January 2006 and review responses by February 2006**
- 3. Conduct personal interview of applicants in March 2006 and recommend qualified people to the Board by April 2006**
- 4. Invite new members May 2006**



BUDGET COMMITTEE

FY 2006 Work Plan – Developed at December 3, 2005 CAB Retreat

Committee Members

David Hermann, Chair
Jack Ramsey, Vice Chair

Committee Members: Bob Gatliff, Kaye Allisen-Medlin, Charley Phillips

The following initiatives were developed at the CAB's December 3 Work Plan Retreat:

1. January 2006: Conduct first meeting and assign projects to CAB Members
2. January and February 2006: Meet with project managers
3. March 2006: Establish priorities and draft recommendation letter
4. March 2006: Presentation of project priorities to Board at March or April meeting and approval of recommendation letter to DOE.

CAB Monthly Update
January 2006

Transuranic Waste:

Accomplishments (December)

- Operations continue remediation and disposition of the prohibited items that were removed from waste drums during repackaging. These items include liquids, powders, and aerosol cans that are low-level/mixed low-level waste.
- Twenty-two of the classified drums that were determined to be low-level waste were disposed at the NTS.

Expectations (January)

- Continue planning for the disposition of the oversized boxes. Safety analysis is being performed to allow the boxes to be moved from the TRU Pad Cover Building in Area 5 to the radiography unit to determine if any prohibited items are in the boxes. A contractor is being procured to perform assay on the boxes to determine if they are low-level or transuranic waste. This work will begin in February 2006.
- The Acting TRU Project Manager will attend the TRU Corporate Board meetings in Carlsbad, New Mexico to discuss the shipment of remaining TRU wastes to another DOE site in the complex for certified characterization and shipment to WIPP.

Low-Level Waste (LLW):

Accomplishments (December)

- Conducted two LLW Generator Facility Surveys (Permafix and Stoller-Navarro) in December.
- Participated in the Permafix Generator workshop in Oak Ridge, TN
- Received 250,246 ft³ of LLW in 157 shipments by December 25, 2005.
- LLW Operations has worked 236,000 hours since last lost time accident.

Expectations (January and February)

- Will conduct three LLW Generators Facility Surveys (Foster-Wheeler, Brookhaven, and Paducah) in January.
- Will conduct two LLW Generators Facility Surveys (Bechtel Nevada and West Valley) in February
- Expecting to receive an additional ~124,000 ft³ of LLW by the end of the January.
- Expecting to receive an additional ~120,000 ft³ of LLW by the end of the February.

Mixed Low-Level Waste:

Accomplishments

- On January 5, 2006 submitted the Site Treatment Plan 2006 Annual Update draft to the NDEP for approval. This document set the expected accomplishments and milestones for the upcoming year.
- On December 1, 2005, the NTS RCRA operating permit went into effect for a period of 5 years. This permit provides for the continued operation of the Hazardous Waste Storage Unit in Area 5 and the Explosive Ordnance Disposal

Unit in Area 11. In addition, rather than issue a permit for disposal of radioactive low-level hazardous waste (mixed waste) the Mixed Waste Disposal Unit (MWDU) (Pit 3, Area 5) will continue to operate under RCRA interim status.

- Disposal of mixed waste permit expires after five years (December 1, 2010) or when a disposal capacity of 20,000 cubic meters (706,000 cubic feet) is reached.

Expectations

- NNSA/NSO is required to submit within 180 days (June 1, 2006) of the effective date of the permit a Closure Plan for the MWDU.
- The TSCA Incinerator (located in Oak Ridge, TN) burn plan has been submitted and approved by the State of Tennessee for FY 2006. NSO will dispose of approximately 8,600 lbs of PCB contaminated material through this program in FY 2006.
- NSO Staff and NDEP are planning upcoming inspection schedules for the year.
- Annual active landfill inspections are anticipated for March, and inspection of the inactive landfills will occur in March or April 2006.

Underground Test Area Project:

Accomplishments (December)

Pahute Mesa/Frenchman Flat

- No deliverables, continuing flow model analysis

Expectations (January)

Pahute Mesa/Frenchman Flat

- No deliverables, continuing flow model analysis

Yucca Flat

- No Deliverables, continue Geology Documentation Package

Industrial Sites:

Accomplishments (November and December)

- Completed characterization fieldwork at Corrective Action Unit (CAU) 274: Septic Systems
- Received NDEP approval for CAU 540: Spill Sites (DP) Streamlined Approach For Environmental Restoration (SAFER) Plan, CAU 137: Waste Disposal Sites Corrective Action Investigation Plan, and CAU 165: Area 25 and 26 Dry Well and Washdown Areas Closure Report

Expectations (January)

- Receive NDEP approval for CAU 511: Waste Dumps (Piles and Debris) Corrective Action Decision Document/Closure Report, CAU 309: Area 12 Muckpiles Corrective Action Decision Document/Closure Report and CAU 555: Septic Systems (DP) Corrective Action Investigation Plan
- Begin characterization fieldwork at CAU 118: Area 27 Super Kukla Facility
- Begin corrective action fieldwork at CAU 219: Septic Systems and Injection Wells
- Begin post-closure site repair work at CAU 424: Area 3 Landfill Complex, CAU 453: Area 9 Landfill, and CAU487: Thunderwell Site

Nevada Offsites

Accomplishments (December)

- At the Central Nevada Test Area (CNTA) well development and aquifer testing on the three newly installed monitoring/validation wells began and continues into the spring of 2006. A total of three wells were installed at total depths of 4,100', 3,660', and 4220' below ground surface during the summer of 2005.
- Revision 2 of the final Corrective Action Decision Document/Corrective Action Plan for Project Shoal Area Subsurface was submitted on December 28, 2005 in response to continued discussions with the Nevada Department of Environmental Protection.
- Pre-field planning activities for drilling at the Project Shoal Area were initiated. These activities include procurement of subcontractors, materials, and supplies; preparation of health and safety documents; preparation of detailed field execution documents; and coordination of logistics between DOE, Stoller-Navarro Joint Venture, and the Desert Research Institute.

Expectations: (January)

- The newly installed wells at CNTA will be continued to be developed.
- Pre-field planning for drilling at the Project Shoal Area will continue.
- Revision 2 of the final Corrective Action Decision Document/Corrective Action Plan for Project Shoal Area Subsurface will be approved by NDEP.

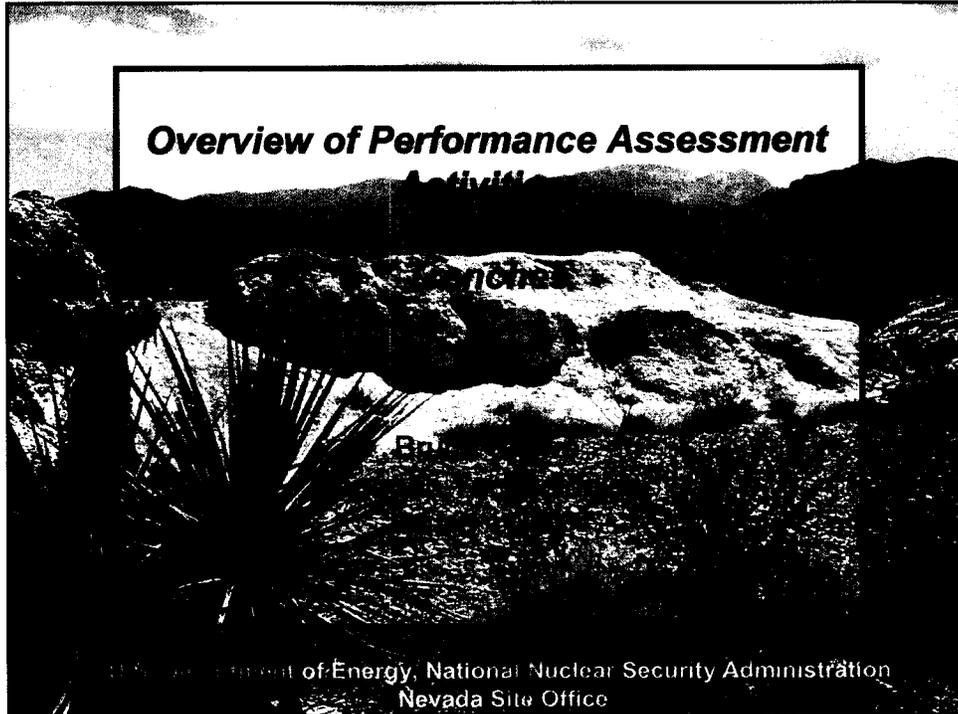
Soils

Accomplishments (November and December):

- Continued work on a detailed analysis of a broad range of alternatives for the cleanup of the Clean Slate (CS) III site (CAU 414).
- Completed the detailed evaluation of alternatives for the CS II site (CAU 413).
- Final CS II and CS III Environmental Restoration Documented Safety Analysis submitted for approval by DOE Headquarters.
- Continued planning radiological area access control fieldwork for CS II.
- Continued to work on Preliminary Assessment type work on 25 sites with the highest potential to be additional Soils Sites.
- Finished a draft of the Remediation Strategy Document for CS III (CAU 414) and provided a draft to DOE/NNSA.

Expectations (January):

- Finish the detailed evaluation of alternatives for the CS II Site (CAU 413).
- Continue detailed evaluation of alternatives for the CS III Site (CAU 414).
- Continue planning radiological area access control fieldwork for CS II.
- Finish Preliminary Assessment-type packages for the high likelihood additional Soils Sites similar to the Neptune Crater Site (25 highest potential additional Soils Sites) and prepare a summary including recommendations for each site.



Overview

- Recent performance assessment activities
 - Major step: approval ***without conditions*** of revised probabilistic PA for Area 5 RWMS
- Background on Greater Confinement Storage TRU Materials
 - Final *minor* activities associated with closure planning
- TRU in the Trenches
 - What is the issue?
 - What are possible solutions?

CAB Admin 507 January 11, 2006

Performance Assessment

- What is a performance assessment?
 - Overview evaluation of the estimated behavior of a waste disposal system (Area 5 and Area 3 RWMS) used for evaluating compliance (1,000 yrs) and for long-term management of the facilities
 - Traces processes that can disperse waste after burial (fate and transport) and the resulting radiological effects (human health effects for receptor scenarios)

CAB Admin Mtg - January 11, 2006

How Is a Performance Assessment Used?

- Establish compliance against the regulations of DOE Order 435.1
 - Regulator: Low-Level Radioactive Waste Federal Review Group (LFRG; pronounced L – Frog)
 - Issue Disposal Authorization Statement (DAS)
 - Provides operational controls: waste concentration limits
- Performance Objectives
 - Atmospheric pathway (10 mrem yr⁻¹)
 - All pathways (25 mrem yr⁻¹)
 - Surface radon flux (20 pCi/m²/sec)
 - Groundwater protection
 - Inadvertent Human Intruder (IHI; chronic and acute doses)

CAB Admin Mtg - January 11, 2006

Performance Assessment (PA)/Composite Analysis (CA) History

- 1995 Area 5 PA completed / submitted
- 1996 Area 5 PA reviewed / *conditionally* accepted
- 1998 Area 3 PA/CA completed / submitted
- 1998 Area 5 PA revision completed
- 1999 Area 3 PA/CA review / *conditionally* accepted, **DAS** issued with conditions
- 2000 Area 5 CA completed / submitted
- 2000 Greater Confinement Disposal (GCD) PA completed/submitted
- 2000 Area 5 CA reviewed / *conditionally* accepted, **DAS** issued with conditions

CAB Admin M, January 11, 2006

PA/CA History (continued)

- 2002 GCD PA, reviewed, *conditionally* accepted (*except assurance requirements*)
- 2002 **DAS** Conditions, Area 3 PA/CA and Area 5 CA Response Packages submitted by NNSA/NSA
- 2003 **DAS** Response Packages accepted by LFRG; conditions resolved
- 2005 Revision Area 5 PA, submitted
- 2005 Area 5 PA revision, reviewed, **ACCEPTED** without conditions (final acceptance letters in progress)

CAB Admin M, January 11, 2006

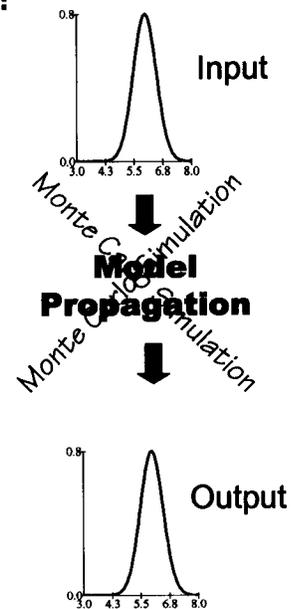
Accepted Area 5 Revised PA

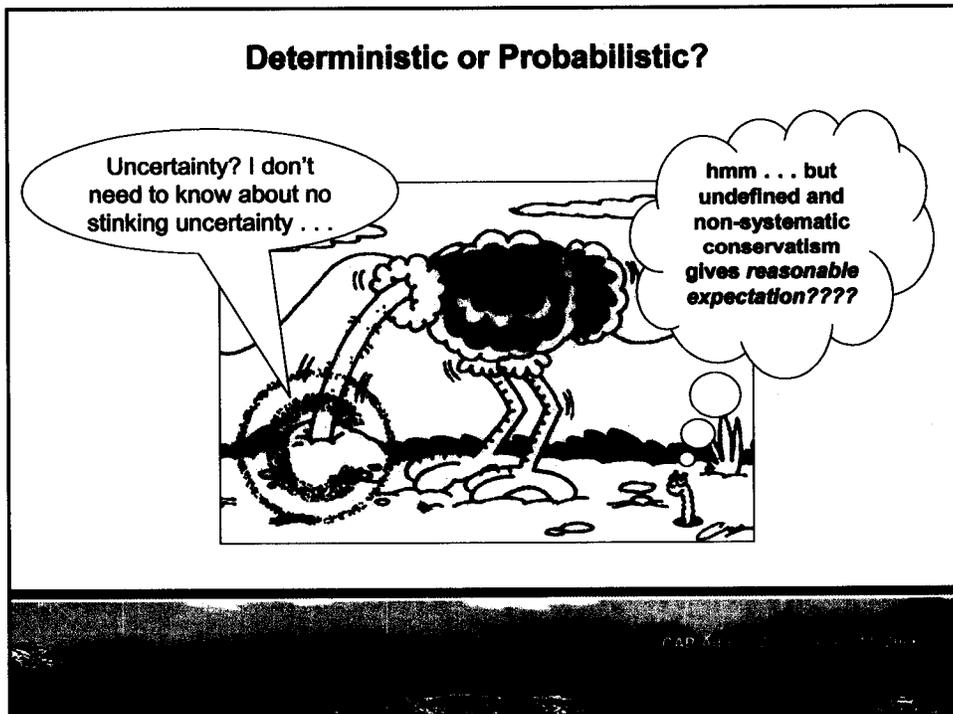
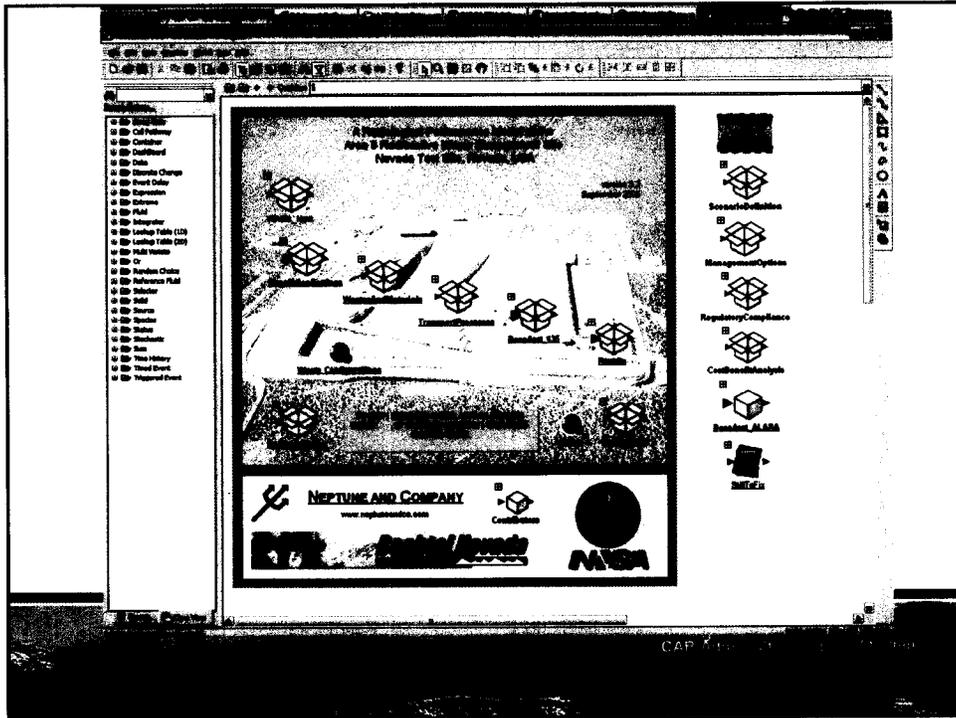
- Probabilistic PA using the GoldSim simulation software: Why?
 - Probabilistic modeling is the future
 - Quantification of uncertainty (*scientific community is just beginning to grasp the impact of uncertainty for complex environmental problems*)
 - Reduction in conservatism and uncertainty for full utilization of NTS disposal capacity: Regional Disposal Center, 2000 (*best disposal site in the country*)
 - Enhanced facility management
 - Maintenance, monitoring, closure
 - Fully defensible performance assessment

CAB Admin. Serv. Bureau, 11, 2006

What Is GoldSim?

- Simulation software designed to facilitate development of probabilistic performance assessment modeling (as well as other applications)
 - Modular design corresponding to major components of a PA (source term, source term release, transport, receptor doses)
 - Accepts input as probability density functions
 - Uses Monte Carlo simulation to propagate model calculations
 - Model results (output) as probability density functions



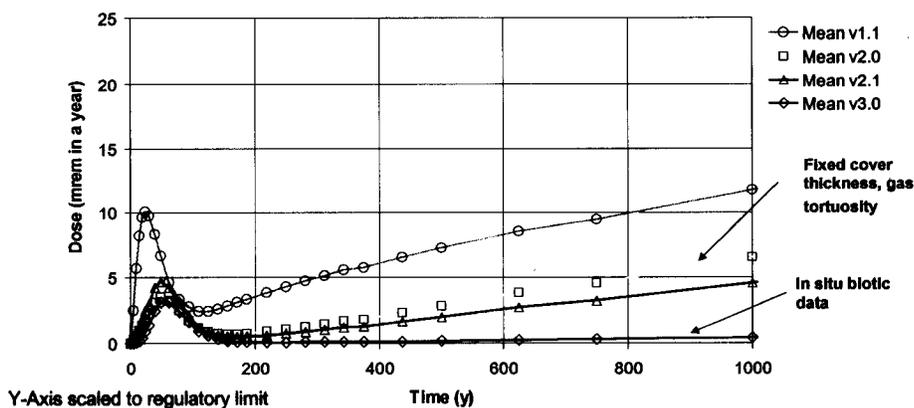


Probabilistic PA

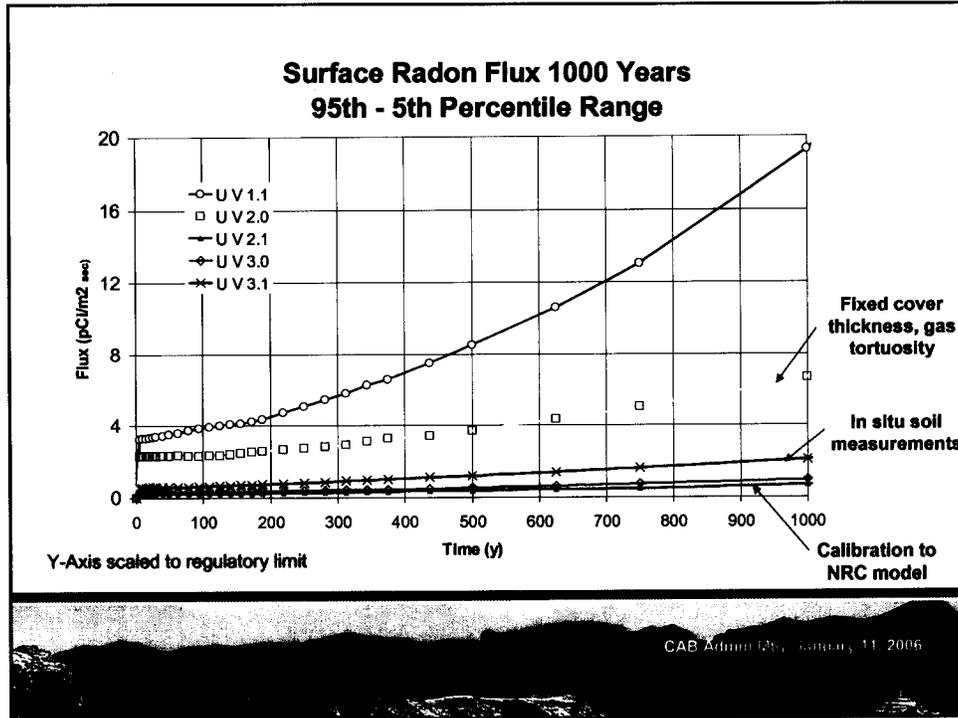
- First disposal site to develop a fully probabilistic PA model (and reviewed successfully)
- Multi-year effort
 - Multiple presentations, Probabilistic Modeling Position Paper for the LFRG (permission to proceed)
 - Model development, reduction in conservatism, reduction in uncertainty
 - PA revision (BN, Neptune, Apogen, NSO)
- Multiple Sites Migrating to Probabilistic PA
 - Savannah River Site
 - Los Alamos, MDA-G
- Nuclear Regulatory Commission: using GoldSim as a PA review tool

CAB Admin Mtg. January 11, 2006

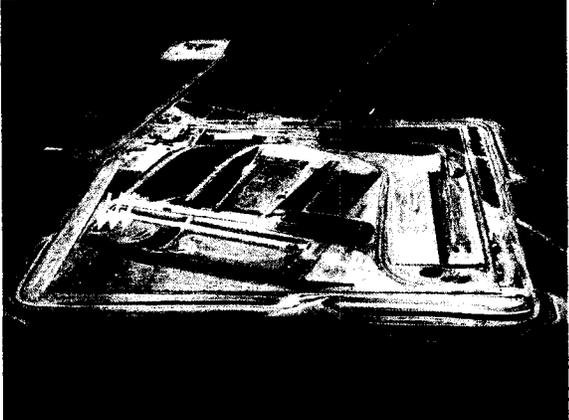
Changes in Mean with Model Version Resident Farmer All-Pathways TEDE



CAB Admin Mtg. January 11, 2006



Greater Confinement Disposal TRU Boreholes



- 4 boreholes used for “storage” of classified TRU materials
- GCD TRU PA completed and submitted 2000-2001
- Reviewed against requirements of EPA 40 CFR 191
- PA accepted; assurance requirements not accepted

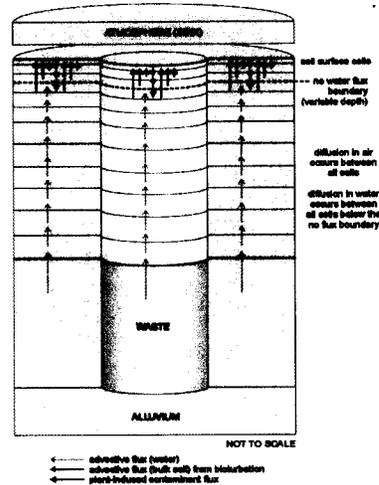
CAB Admin Rep. 000000, 11, 2006

Conceptual Borehole Model

(Modified from Sandia GCD TRU 2001 PA)

- Wastes are buried between 36 and 21 m deep, and hole is backfilled with alluvium
- Contaminant transport mechanisms include upward advection of water, diffusion in the air and water phases, advection of soil by animal burrowing, and translocation of contaminants by plant intrusion

Conceptual Model of a Greater Confinement Borehole
Navajo Test Site - Area 5 RWMS



Remaining GCD TRU PA Review Issues

- Engineered Barriers and Assurance Requirements
 - Engineered barriers and their performance not included in performance assessment
 - *Definition of engineered barrier*
 - *Performance benefits specific to barriers*
 - Passive/active institutional controls; monitoring, removal of waste
 - *Cannot be resolved until facility closure (2021)*

Unresolved

Assurance requirements were not approved; will be resolved at facility closure

Current GCD Efforts

- Review and respond to the remaining assurance requirements (mostly minor)
- Engineered barriers
- State interactions
- Do **not** bring back the GCD PA
1200 curies, > 10 years, > 10 \$ million

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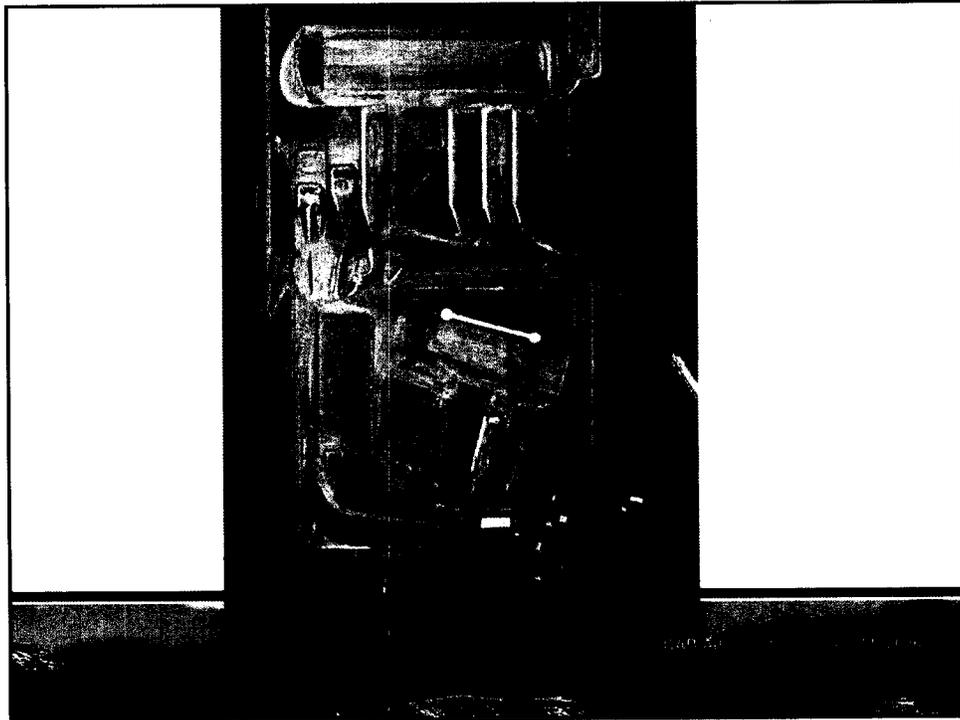
TRU in Trenches

- ~ 102 55-gallon steel drums with classified TRU materials disposed accidentally in trench T04C of the Area 5 RWMS (2 shipments in 1986)
 - Probably intended for GCD disposal
- Shallow-land disposal configuration does not meet the requirements of EPA 40 CFR 191 (geologic disposal)
- ~ 30 m³; 229 Curies including isotopes of Pu, Am, and U
- Pre-1988 disposal
 - Inventory currently included in composite analysis
 - Meets all requirements of 435.1

Issues

Is it safe in the present configuration and what needs to be done for final disposition?

CAB Admin Mtg January 11, 2006



Issue Necessity/Urgency

- Closure plan, 92 acres portion of the Area 5 RWMS
 - Requires resolution of TRU in the Trenches
- Trench is adjacent to the Pit 3 Mixed Waste Disposal Unit
 - 5-yr operational phase and closure per agreement with the State of Nevada

Background TRU Disposition (cont)

- Disposal site: WIPP
 - Characterization, certification, shipment to WIPP
- DOE complex: what to do with pre-1970 TRU waste?
- What about small quantities of post-1970 TRU waste?
- DOE asked the National Academy of Sciences to evaluate issues for both HLW and TRU waste
 - Recommended a risk-informed process (cost-benefit tradeoffs)
- Solutions in progress: no clear positions developed at the National level

CAB Admin Staff Meeting, 11/2006

What to Do?

- Hoping for leadership at other DOE sites (deeper pockets)
 - NSO did GCD TRU so let someone else take the lead
- Developments have been slow; other waste streams current priority
- Identification of a range of remediation options
- Use a risk-based perspective to evaluate and select a preferred remediation option

CAB Admin Staff Meeting, 11/2006

What are the Remediation Options?

- **Option 1:** Excavation, certification and shipment to WIPP
- **Option 2:** 40 CFR 191 performance assessment LFRG review (TFRG)
- **Option 3:** Exemption and risk-informed process recommended by the National Academy of Sciences

CAB Admin Mtg January 11, 2006

Remediation Options (cont)

- **Option 4:** EPA Federal Register notice to approve alternative disposal requirements
- **Option 5:** Leave T04C unclosed until regulatory issues with non-geologic disposal of TRU waste are resolved (National Level)

CAB Admin Mtg January 11, 2006

Current Perspectives

- Remediation options: Presented to the LFRG, June, 2005
 - LFRG agrees with Option 2
 - Consistent with regulatory authority: 435.1
- NSO Preference: Option 2 but conduct studies needed to evaluate risk/benefit for all options
 - Assess risk/cost associated with Option 1 (shipment to WIPP)
 - Conduct technical work necessary for assessing the requirements of 40 CFR 191 under LFRG review



CAB Admin Staff Meeting, 11/2006

[Back](#)

State, federal agency settle Hanford lawsuit

THE ASSOCIATED PRESS

YAKIMA — Washington state and the U.S. Department of Energy have agreed to settle a lawsuit challenging out-of-state shipments of radioactive and hazardous waste to the Hanford nuclear reservation, the two sides announced Monday.

□ The agreement appears to end a two-year court battle between the state and federal government over proposed waste shipments to the south-central Washington site.

As part of the agreement, the Energy Department will prepare a new environmental impact statement that evaluates the potential effects of storing, treating and disposing of certain types of waste at Hanford. In exchange, the state agreed to drop its lawsuit challenging the current environmental impact statement and will play a greater role in developing the new document.

The new impact statement is to be completed by 2008. The Energy Department will not ship waste to the site until the document is completed, with the exception of some waste the state had already agreed to accept at Hanford.

"With this agreement, both parties will be able to shift their focus and resources away from litigation and toward partnership and our shared cleanup goals," Energy Secretary Samuel Bodman said in a statement. "The settlement of this lawsuit signals a new day in our cleanup efforts, where both the federal government and the state jointly address Hanford's cleanup challenges and seek common ground and quality solutions."

The Energy Department manages cleanup at the 586-square-mile Hanford reservation, which is the nation's most contaminated nuclear site following 40 years of plutonium production for the nation's nuclear weapons arsenal. Cleanup costs are expected to total \$50 billion to \$60 billion.

"Although I'm disappointed we had to file a lawsuit to get this result, this is a great outcome for a long and contentious case," state Attorney General Rob McKenna said in a statement. "I'm very pleased the Department of Energy has agreed to re-examine the impacts of waste disposal at Hanford so we have greater confidence that future waste disposal will not increase the threat to the Columbia River."

Washington sued the Energy Department in 2003 to bar shipments of offsite waste to the Hanford site on the banks of the Columbia River. The state expanded its lawsuit in 2004, challenging the adequacy of the current environmental impact statement, released that year.

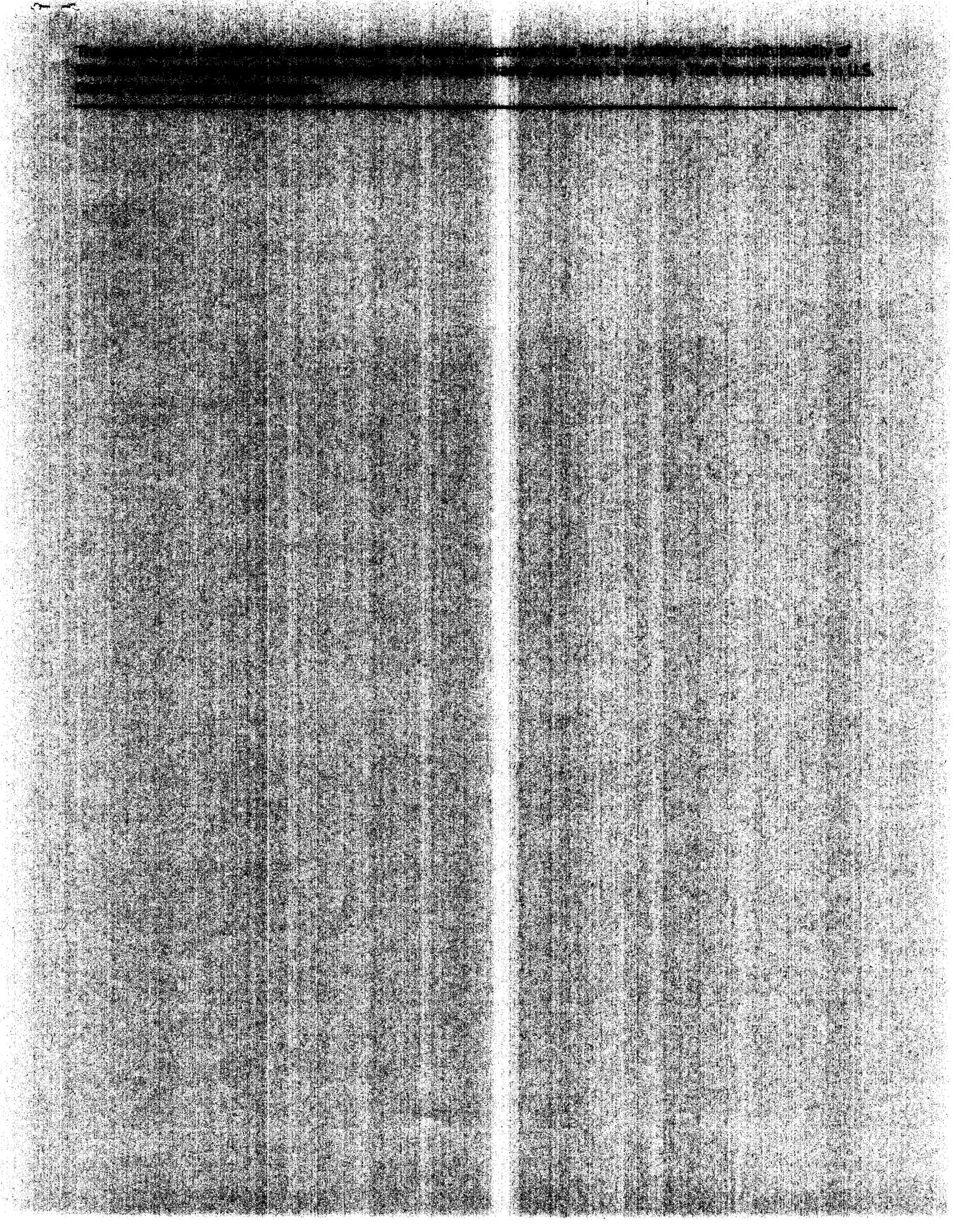
A judge issued a preliminary injunction barring waste shipments to the site. Then, as part of the discovery phase in that lawsuit last year, the Energy Department discovered that the current document was based on inconsistent data about the impact of waste disposal on groundwater.

At the time, the department did not immediately withdraw the document but delayed any plans for shipping waste to Hanford.

Under the agreement, the Energy Department will prepare a new, expanded document that includes updated, site-wide groundwater analysis. Until it is completed, no low-level, mixed low-level, transuranic or mixed transuranic waste will be shipped to the site.

Low-level waste is considered mildly radioactive, and mixed waste is radioactive waste laced with hazardous chemicals. Transuranic waste, which is highly radioactive, is typically debris, such as clothing, equipment or pipes left over from nuclear weapons production.

The Energy Department had planned to ship to Hanford the equivalent of about 410,000 55-gallon drums of low level and mixed low-level waste, and at least 185 drums of transuranic and mixed transuranic waste.



EY	FY 2006 Conference Mark	FY 2006 Funding (Pending Post-Rescission)	FY 2006 Amount Provided
EY601980L	14,531	0	0
VL-NV-0080			
Multi-Sites			
	191,859	0	0
Subtotal:	13,967,778	0	0

Conference \$5M (pg. 172 - list of Congressionally Directed Projects); Funds go to CBC to be placed on PR. Funds withdrawn from sites as indicated within available funds to cover this requirement (Pro-rata spread)

Nevada

Desert Research Institute's CAVE Project

Nevada	2,000,000	0	0
Subtotal:	2,000,000	0	0

Conference Mark \$2M (pg. 173 list of Congressionally Directed Projects); within available funds, funds go to Nevada (can use any Defense funds to pay earmark); Nevada to Absorb

Desert Research Institute's Yucca Mountain Environmental Monitoring Program (formerly TD)

Nevada	2,750,000	0	0
Subtotal:	2,750,000	0	0

Conference Mark \$2,750,000 (pg. 173 list of Congressionally Directed Projects); within available funds, funds go to Nevada (can use any Defense funds to pay earmark); Nevada to Absorb

Great Basin Science Sample and Records Library

Nevada	3,500,000	0	0
Subtotal:	3,500,000	0	0

Conference Mark \$3.5M (pg. 172 list of Congressionally Directed Projects); within available funds, funds go to Nevada (can use any Defense funds to pay earmark); Nevada to Absorb

Nye County Groundwater Evaluation Program

