



**DRAFT AGENDA**  
**COMMUNITY ADVISORY BOARD (CAB) FOR NEVADA TEST SITE PROGRAMS**  
**Bob Ruud Community Center, 150 S. Highway 160, Pahrump, NV**  
**February 8, 2006 6:30-9:00 p.m.**

- |           |   |  |
|-----------|---|--|
| 6:30 p.m. | “The CAB Roadshow”  | A briefing designed to describe the Community Advisory Board’s goals and objectives. |
| BREAK     |   |  |
| 7:00 p.m. | Chair’s Opening Remarks and Introductions<br>Approve/amend Agenda   | Kathleen Peterson, Chair   |
| 7:10 p.m. | Review of Ground Rules  | Carla Sanda, Facilitator   |
| 7:15 p.m. | DOE Announcements   | Stephen Mellington, Asst. Mgr.<br>DOE/Environmental Management                       |
| 7:20 p.m. | NDEP Announcements  | Tim Murphy<br>Nevada Division of<br>Environmental Protection                         |
| 7:25 p.m. | NTS Transuranic Waste Success Story   | Joni Norton, DOE/EM<br>TRU Project Manager   |
| 7:50 p.m. | Comments/Questions  | Carla Sanda, Facilitator   |
| 8:00 p.m. | BREAK   |  |
| 8:10 p.m. | CAB Committee Updates <ul style="list-style-type: none"><li>• Budget</li><li>• Diversification</li><li>• Transportation/Waste</li><li>• Underground Test Area<ul style="list-style-type: none"><li>➢ Review and Approval<br/>of Well Recommendation</li></ul></li></ul> | David Hermann<br>Jackson Ramsey<br>John Pawlak<br>Engelbrecht von Tiesenhausen       |
| 8:40 p.m. | Public comment/questions  | Carla Sanda, Facilitator   |
| 8:50 p.m. | Other CAB Business <ul style="list-style-type: none"><li>• Meeting Evaluation</li></ul>   |  |
| 9:00 p.m. | Meeting Adjourn   |  |

# DRAFT

Stephen A. Mellington  
Assistant Manager for Environmental Management

## RE: COMMUNITY ADVISORY BOARD FOR NEVADA TEST SITE PROGRAMS (CAB) RECOMMENDATION FOR FUTURE NEVADA TEST SITE WELL LOCATIONS

As you are aware, over the last four years the CAB's Underground Test Area (UGTA) Committee has conducted an in-depth review and study of the UGTA project with the ultimate goal of providing a recommendation for future well locations at the Nevada Test Site. We have worked closely with programmatic technical staff, U.S. Geological Survey experts, and Nye County representatives; conferred with the Nevada Division of Environmental Protection; and met with stakeholders to ensure that they were both aware of our work and could also participate in the process with their feedback and concerns.

Although our work is not completely finished at this point, we are submitting the attached recommendation which details proposed sites for two additional wells at the Nevada Test Site. We believe, however, that a network of at least three wells in the western Pahute Mesa region should be considered; therefore, we are continuing to evaluate the geophysical conditions and will provide you with specific coordinates for a third well in a follow-up recommendation. In addition, DOE has invited us to continue our work and provide additional recommendations for well locations that we believe may further enhance data collection or may provide opportunities to serve as early sentinel wells. Therefore, we will continue to work with your representatives and share our thoughts as we move through our investigative process.

We sincerely appreciate the opportunity to work with you to address stakeholder concerns related to groundwater. Both your federal and contractor technical staff members have met with us on numerous occasions to pore over maps and technical reports, share their scientific expertise, address our questions, and provide whatever resources we needed to accomplish our work. This has been a tremendously valuable learning experience for all of us, and has provided an opportunity for a true partnership between the community and DOE. Thank you once again for this opportunity, and we look forward to our ongoing work with you on the UGTA project.

Sincerely,

Kathleen Peterson, Chairperson  
Community Advisory Board for Nevada Test Site Programs

CC:

U.S. Senator John Ensign  
U.S. Senator Harry Reid  
U.S. Congresswoman Shelly Berkley  
U.S. Congressman Jim Gibbons  
U.S. Congressman Jon Porter  
M. Nielson, DOE/HQ, (EM-30.1) FORS

F. DiSanza, WMD, NNSA/NSO, Las Vegas  
K. Snyder, TD, NNSA/NSO, Las Vegas  
T. Murphy, NDEP  
C. Sanda, Consensus By Design, LLC  
CAB Members

# COMMUNITY ADVISORY BOARD FOR NEVADA TEST SITE PROGRAMS UNDERGROUND TEST AREA PROJECT WELL LOCATION RECOMMENDATIONS

## INTRODUCTION

# DRAFT

Established in 1994, the Community Advisory Board for Nevada Test Site Programs (CAB) is a formal group of volunteer citizens organized to provide stakeholder feedback to the U.S. Department of Energy's (DOE's) Nevada Site Office Environmental Management Program.

From 1951 to 1992, the United States government conducted 828 underground nuclear tests at the Nevada Test Site (NTS) at depths ranging from ~90 to 4,800 feet beneath the desert's surface. About one-third of those tests occurred near or below the water table, which resulted in some radioactive contamination of the groundwater at the NTS. Therefore, shortly after its formation, the CAB organized the Underground Test Area (UGTA) Committee to focus on issues related to groundwater. Committee members kicked off their work with an intensive multi-year learning process. Members pored over lengthy technical documents, listened to numerous briefings by DOE scientists, conferred with expert hydrologists, geologists, academia, and regulators, and reviewed and provided feedback to an independent peer review of the project. Throughout the years, the CAB also scheduled regular public meetings to discuss its findings and invite feedback from stakeholders.

Because of the clearly defined recommendations of the CAB and related stakeholder concerns, in August

2002 Carl Gertz (DOE's Assistant Manager for Environmental Management at that time) invited the CAB to further research the issue and provide specific recommendations for a future well location.

As a result of its ensuing in-depth study, combined with feedback from potentially affected stakeholders and the Peer Review Report findings, the CAB is focusing its efforts on western Pahute Mesa. This region sits relatively close to the NTS boundary and is directly up gradient of the residents of Oasis Valley, Beatty, and Amargosa Valley. Because the groundwater flows west and south from the NTS, contaminated groundwater could migrate beyond the NTS boundary in this region.

Ultimately the CAB concluded that, given the lack of data in the critical focus area, a network consisting of a minimum of three wells would provide a more comprehensive approach. Therefore, the CAB recommends that a series of at least three (3) wells be drilled to determine the depth to ground water, provide a clearer understanding of groundwater geochemistry, identify rock units, and provide results from single well pump tests. The primary objectives for each of the wells are as follows:

1. Intersect a contaminant plume which can be tied to the source test

2. Sample geochemistry, measure elevation of the water, and test for potential contamination
3. Improve the understanding of the effect of the structure known as the Thirsty Canyon Lineament on groundwater flow

The CAB further believes that these three strategically placed wells will decrease computer model uncertainties in the region of concern and will likely improve overall understanding of contaminant transport.

## **RECOMMENDATIONS**

### **CAB WELL #1**

#### *Objective*

The objective of CAB Well #1 is to intersect a contaminant plume. Therefore, the CAB selected a site down gradient from the Benham Test and Well #ER-20-5#1, which intersected Benham contamination in 1996. It would be beneficial to detect radionuclides other than tritium so that contaminants may be linked to a specific historical test.

#### *Background*

The existing Well #ER-20-5#1 is located ~4,290 feet south/southwest of the Benham test, which was conducted in 1968. Since groundwater migration is controlled by a variety of subsurface factors, it is not possible to know precisely how much farther contamination may have traveled since that time. However, the distance could be in excess of 1,000 feet. To increase the chance of encountering radionuclides, the CAB recommends a more conservative distance for the well site. Furthermore, the potential for detecting a greater array of radionuclides may be increased by focusing on a location behind the leading edge of the plume. If contamination is found at this well site, the information may aid in determining rate of migration.

Plotting a straight line from Benham through ER-20-5#1 provides a general direction of migration, even though it may not be the primary direction of groundwater flow. This alignment does, however, parallel faults mapped at surface to the west of the Benham and Tybo shots, so the CAB believes that this is a reasonable direction to use for well site selection.

#### *Specific Location / Rationale*

Siting CAB Well #1 down gradient of ER-20-5#1 seems to be a reasonable approach to intercept contamination. Therefore, the CAB recommends that the well be drilled 800 ft. south of ER-20-5#1 along a line from Benham through well

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ER-20-5#1, and deep enough to penetrate the Calico Hills Confining Unit, at or near the following coordinates:

**N 4, 118,950 / E546,310 / UTM**

Recognizing the limitation of siting a well location solely from a topographic map, the CAB believes an arc of five degrees on either side of the reference line, and apexed on ER-20-5#1 should provide sufficient area to locate an acceptable drill site along the ridge. Since containment ponds already exist within this area, well site elevation may make reuse of these ponds possible; however, this cannot be determined from the topographic maps used by the CAB for siting. As long as the adjustment of the well location does not compromise the objective of the well, the CAB is fully supportive of any cost-saving measures, which can be implemented. In the event that no contamination is found at this site, this well would make an effective monitoring well for contamination and would still provide important data; e.g., some indication of rate of flow in the area of concern.

## **CAB WELL #2**

### *Objective:*

The objective of CAB Well #2 is to sample geochemistry and elevation of water and test for potential contamination. This well location is targeted to be down gradient of, and in an approximate line with, ER-20-5#1 and CAB Well #1 within the transition zone between the caldera and the Timber Mountain Bench (Tannenbaum Hills Area).

### *Background*

This well site is problematic due to its proximity to the topographic edge of Pahute Mesa. To identify the initial location, a line was extended from Benham through ER-20-5#1 down to the bench area. The most favorable site to avoid intersecting the Timber Mountain bench is within the blue zone of the attached gravity inversion map (red tones are shallower, progressing to purple which are the deepest zones to bedrock); however, much of this area lies in cliffs and drainages. Two possible locations were identified where topography may allow access to the blue zone, labeled site B and site C. Site C is targeted at N4,116,850 and E545,785 and is the furthest south (7874' from Well ER-20-5#1), but it runs the highest risk that it might still be above the bench since it is close to the green zone. Well ER-EC-1 was drilled in the green zone, and lithology indicates it was above the bench. Site B is targeted at N4,117,345 and E545,910 which may be a better location (6,233' from well ER-20-5#1) according to the geophysics. However, it is located in the bottom of a wash, which may not be topographically accessible. On the other hand, Site A is within the purple zone at N4,118,110 and E546,100, which will definitely still be in the caldera (3,609' from well ER-20-5#1) -- but may be north of the transition zone. However, this location could still provide valuable information about water level changes

between CAB Well #1 to the north and ER-EC-6 to the south on the bench, which may provide some information on water flow direction. Furthermore, when considering the possible rate of ground-water migration, this location would be favorable for a sentinel well, since contamination could reach this area by 2020.

#### *Specific Location / Rationale*

In light of all considerations - particularly the sentinel well characteristics of this site, the CAB recommends that CAB Well #2 be drilled at site A, ~3,600 feet south of the ER-20-5 well cluster, in line with CAB Well #1, at the following coordinates:

**N 4,118,110 m / E 546,100 m / UTM**

In order to allow optimization of the drill site, the five-degree arc extending from either side of the reference line and apexed on ER-20-5#1 will also apply at this site. However, due to the greater distance from the apex well, the CAB recommends that preference be given to the eastern side of the reference line as this is more in line with the probable direction of groundwater flow, given the orientation of mapped faults and the surface cracks mapped in USGS Open File Report 01-272: *GIS Surface Effects Archive of Underground Nuclear Detonations Conducted at Yucca Flat and Pahute Mesa, Nevada Test Site, Nevada*, 2001, Dennis N Grasso.

CAB Well #2 should also be drilled to a target depth to intersect at least the Calico Hills Confining Unit, which underlies all tests in the Tybo and Benham fault-bounded block. An additional 1,000 - 2,000 feet of depth could provide valuable information for unit correlation if CAB Wells #1 and #2 were drilled to the underlying Bullfrog Confining Unit. However, the sampling integrity of the well and protection of the deeper aquifers (if contaminants are discovered in CAB Wells #1 or #2) could be placed at risk. The CAB believes that such a risk is unwarranted, considering the information gained, and that the first two CAB wells should not be advanced below the Calico Hills Confining Unit.

### **CAB WELL #3**

#### *Objective*

The objective of CAB Well #3 is to improve the understanding of the effect of the Thirsty Canyon structure on ground water flow along the west end of the Timber Mountain Bench.

#### *Background*

Early hydrologic work in the western Pahute Mesa area delineated a subsurface structure, but its effect on ground-water flow could not be determined. However, groundwater levels seemed to indicate that it could be a flow path from Pahute Mesa to Oasis Valley. Similarity of groundwater geochemistry suggests that the water beneath Pahute Mesa flows into the Oasis Valley area. During the drilling

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of the UGTA wells down gradient of Pahute Mesa, three pairs of wells [ER-EC-4 and 2A, ER-EC-6 and 8, and ER-EC-1 and PM-3] were drilled on either side of the structure. However, no attempt was made to actually intersect it. The CAB recognizes that it is extremely difficult to construct a well in a structure of this type. However, the CAB does not believe that the hydrologic character of this structure has been adequately identified and believes that more work should be done in this area.

Well site #3 was selected based on the inverse gravity map created for the Pahute Mesa area. In general, the CAB recommends targeting the blue spot on the gravity inversion map (within the green trough), which lies along the alignment of the Thirsty Canyon structure at the west end of the Timber Mountain Bench. If the bench forms a barrier to southward groundwater flow, this location could provide information related to the direction in which the diverted water could flow. The Thirsty Canyon structure is very deep; therefore, wherever possible, some geophysical method should be employed to refine the well location to increase the probability of intersecting the structure.

Although the scale of the map referenced for this target area is not very detailed, by making a rough approximation of the location of the blue spot, it appears that the target site is in the cliff-enshrouded east fork of the Thirsty Canyon. Topography makes drilling access problematic and potentially very expensive. There is one plateau located to the east that may provide an accessible drill site, but topography could be problematic for this site as well. The CAB Well #3 site is in an area with minimal subsurface information nearby. To ensure that a well is not sited too close to one of the existing ER-EC wells, the CAB plotted the location of the three closest: 1, 2A, and 4. Proposed CAB Well site #3, when shifted east to place it on the plateau, would be located ~9,000 feet west/southwest of ER-EC-1, ~19,000 ft north/northeast of ER-EC-2A, and ~27,000 ft northeast of ER-EC-4, which is drilled on the west side of the Thirsty Canyon structure. To relocate the site north of Thirsty Canyon to avoid the topographic difficulties may place it upgradient of potential groundwater flow around the bench area. The CAB concluded that further study was needed to determine a practicable drill site for the objective of this well.

In June 2005, the DOE offered to include air photographs of the potential site for CAB Well #3 during a planned air reconnaissance flight in the area. The CAB reviewed copies of these photos in October 2005 and discovered that the terrain - even on the plateau - was too steep to afford reasonable access for a drilling operation. The preferred target area along the intersection of the bench and the Thirsty Canyon structure is located entirely in the extremely rugged east fork of Thirsty Canyon. In the lower reaches of the canyon where access is feasible, some wells have already been drilled.

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### *Specific Location / Rationale*

With these considerations in mind, it was originally recommended that CAB Well #3 be drilled at the west end of the Timber Mountain Bench, aligned with the Thirsty Canyon Lineament, on the plateau east of the topographic canyon, with the following specific coordinates:

**N 4, 116, 950 m / E 539,220 m / UTM**

This was an idealized target site. As explained in the discussion above, further study and refinement was needed to locate the exact position for this well. Considering the new topographic information provided, the CAB wishes to withdraw this proposed site and will reevaluate whether the Thirsty Canyon structure can be targeted upgradient of the original plan and still answer the questions which remain.

### **CONCLUSIONS**

The process of siting a well for the UGTA Project has been an educational and enlightening experience. Technical experts working on the UGTA project have been extremely helpful in providing detailed programmatic information to the CAB for review and have patiently answered even the most simplistic questions. As an example, in November 2005, CAB members were invited to view graphical representations from the UGTA model with technical experts working on the program to address questions generated during the siting study. The CAB has also received briefings on EarthVision, a sophisticated computer mapping tool, and a wide array of maps generated by that program. The CAB would like to continue working with the UGTA technical working group to "fine tune" final site selection for the proposed wells. It is the CAB's desire to see wells sited where they will provide the best information possible but in a cost-effective manner. A great deal of study went into these recommendations and a complete report on the background,

process and sources will be forthcoming as an appendix to this initial transmittal.

In a recent meeting to discuss the current proposed well sites, the CAB was encouraged to include other well sites it believes would be beneficial to the UGTA program. In light of this new request, the CAB will make additional recommendations to include "early warning" of potential contaminant migration upgradient of residential communities down stream of the NTS. However, since Well sites #1 and 2 are the highest priorities, there will be no change in those recommendations. Designating a specific location for CAB Well #3 should be deferred at this time to permit additional investigation of geophysical information and to better determine accessibility to the area of interest for purposes of drilling a cost-effective well. We appreciate the cooperative working relationship between the CAB and the UGTA program staff and we are looking forward to this new challenge of recommending additional well sites.

**DRAFT**



# Community Advisory Board for Nevada Test Site Programs

July 29, 2005

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**Marian Lawrence, CAB Vice-Chair**

**Kaye Allisen-Medlin, Chair**  
*Budget Committee*

**Pauline Esteves**  
**Robert Gatliff**  
**David Hermann**  
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**Ex Officio Members**  
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*U.S. Department of Energy,  
Nevada Site Office*

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**im Murphy, Chief**  
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State of Nevada Division of  
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*Nevada Alliance for Defense,  
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*Nye County*

**Administrative Support Staff**  
**Kay Planamento**

**Melissa Nielson, Director**  
**Internal/External Coordination**  
**EM-301**  
**U.S. Department of Energy**  
**1000 Independence Avenue, SW**  
**EM-30.1 Forrestal**  
**Washington, DC 20585**

**RE: Review and comments to "Draft – Low Level Waste and Mixed Low Level Waste National Business Strategy – Phase I"**

**Dear Ms. Nielson:**

Thank you for the opportunity to review and comment on the referenced report. After carefully reviewing and reading the draft document, our Board members got together for a two-hour work session to discuss the report and prepare the attached comprehensive list of questions and recommendations for your consideration.

When completed, the National Disposition Strategy document should be an invaluable reference that will provide a clear picture of the current status of radioactive waste disposition throughout the Department of Energy complex, as well as provide a framework for future issues to be addressed.

We sincerely appreciate the opportunity to be involved very early in this process and look forward to working with you throughout the next phases of document development.

Sincerely,

A handwritten signature in cursive script that reads "Charles A. Phillips".

**Charles Phillips, Chair**  
**Community Advisory Board**  
**for Nevada Test Site Programs**

**Encl.**

**cc: S. Mellington, DOE/NSO**  
**R. Betteridge, DOE/NSO**  
**F. DiSanza, DOE/NSO**  
**K. Snyder, DOE/NSO**  
**C. Sanda, Stoller-Navarro JV**  
**CAB Members**

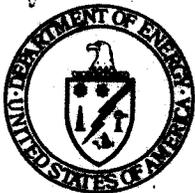


## Community Advisory Board for Nevada Test Site Programs

### Comments To Draft Low Level Waste and Mixed Low Level Waste National Business Strategy – Phase I

- General Observations
  - Who is the intended audience? We strongly recommend that this document be written to be clearly understood by the typical Site Specific Advisory Board member and interested stakeholders.
  - Please review the title – is it a “Business Strategy” as stated in the current title, or is it the National Disposition Strategy, as noted in paragraph 1, page 1?
  - The report doesn’t flow – in other words, it doesn’t give context to the facts.
  - What does “Phase I” imply – is this a precursor to a Phase II document – or does it mean that Phase I addresses the most pressing issues?
  - Please provide an Executive Summary at the beginning of the document that provides easy-to-understand bottom line information.
  - SSABs should be provided copies of all future drafts for review and comment
  - The report should have a more global perspective on waste issues; i.e., overall approach to waste reclassification and ultimate ramifications to treatment technologies, disposal volumes, shipping, etc.
- Please include a map depicting the location of both generator and disposal facility locations and transportation routes to disposal site.
- The report should include a table reflecting disposal costs for each disposal facility
- The report should include a comprehensive glossary.
  - Terms included in the glossary should be italicized in the text for easy reference
  - Please explain the 3 classes of low level waste; i.e., Class A, B, C. The explanation should provide details and definitions from both the DOE and NRC perspective.
  - Identify, explain all acronyms
  - In addition to being included in the glossary, because low level waste and mixed low level waste are the basic subjects for this report, a brief definition should be provided of each within the introductory section of the report – perhaps in a side bar or call-out box adjacent to text
- Waste volumes should be stated with conventional quantity notations and be consistent throughout the report; e.g., if “cubic meters” is used, include an explanation comparing it to cubic yards – or, at the very least, be consistent throughout the report and use either cubic meters or cubic yards so that there is a clear understanding of volumes. Do not use scientific notations; e.g., on page 2 of the report, a volume is listed as  $1.7 \times 10^6 \text{m}^3$ .
- The report refers to contact handled and remote handled waste. How does this apply to low level / mixed low level waste?

- Please provide a discussion of the potential outcomes to the report's proposed recommendations; e.g., if a specific path is chosen, will it mean early site closure, increased waste on the highways for a given period, etc.?
- Waste Consolidation
- Some tables include zeros – is this meant to imply a quantity of zero, or does it mean that information is not yet available?
- Future drafts of the report should address ramifications of proposed efficiencies – both positive and negative from a national perspective
  - The report mentions proposed alternate sites for waste consolidation but does not discuss potential locations. Please identify which sites are under consideration for waste consolidation activities.
  - Please describe what factors will be considered when planning for a central facility for consolidation and risk; i.e., will decision-makers weigh risk factors related to transportation, worker safety, and environmental impacts?
- The report briefly mentions Class A, B, and C wastes – are other sites pursuing permits to dispose of B and C wastes? This should be discussed.
  - Will risk factors be assessed and clearly explained for >Class C wastes?
- Information in tables should be clearly discussed within the body of the report. One cannot assume that because data is in a table it is clearly understood by the reader.
- Database Information
  - The report mentions several databases. We recommend that consideration be given to developing or reinitiating a national database (which would include existing IPABS data) that summarizes key LLW, MLLW volumes, disposal costs, disposition paths, etc.
  - A statement on page 16 of the report reads, "It may be feasible to develop a system of fewer waste streams..." Please explain this approach further; e.g., is this achieved by categorizing similar wastes into a single stream? Or, are you suggesting a smaller database by eliminating some waste streams?
  - Why revamp an old database, as opposed to using MIMS? What is the relationship between these information sources?
- Please explain the term "annual escalation factor", as noted in Table 3.
- State of Washington Legal Issues
  - Washington State, as well as Proposition 297, impact plans for Hanford's receipt of the waste volumes noted in Table D-4?
  - Are the delays in construction of the IDF solely related to ongoing litigation, or are there issues related to geologic fault zones?
- Waste Classification Issues
  - Now that DOE is going into reclassification of wastes, clear information must be provided related to volumes, current location of the waste being declassified, and ultimate plans for disposal alternatives.
  - Are wastes governed by general classification schedules, or can they remain classified for indefinite periods?
  - Will waste classification designation impact potential waste disposition plans?
  - Please describe potential impacts related to waste classification issues.



**Department of Energy**  
Washington, DC 20585

**JAN 3 1 2006**

Ms. Kathleen Peterson  
Nevada Test Site Community Advisory Board  
2721 Losee Road  
North Las Vegas, NV 89130

Dear Ms. Peterson:

This letter provides you with the resolution to your comments on the "Preliminary Draft of the Low Level Waste, Mixed Low Level Waste National Disposition Strategy – Phase I." I do appreciate the time and effort that you and your Citizens Advisory Board have provided. We received an extensive number of comments on the preliminary draft and, as a consequence, the document has been extensively revised. Enclosed are the responses to your specific comments.

The current revision of the Phase I Low Level Waste/Mixed Low Level Waste Disposition Strategy is currently undergoing internal review. We plan to invite public comment on the document in March. We look forward to your continued input to this document.

If you have any questions, please contact Ms. Melissa A. Nielson, Director, Office of Internal/External Coordination, at (202) 586-0356. We look forward to working with you as we finalize this document.

A handwritten signature in black ink, appearing to read "Christine M. Gelles", with a long horizontal line extending to the right.

Christine M. Gelles  
Director  
Office of Commercial Disposition Options  
Office of Environmental Management

Enclosure

cc:  
Melissa Nielson, EM-30.1

## Enclosure

### Phase I Low Level Waste/Mixed Low Level Waste National Disposition Strategy (Rev. 0)

#### NTS Citizen's Advisory Board Comment Resolution

Comment	Resolution
Database Information	See below.
o The report mentions several databases. We recommend that consideration be given to developing or reinitiating a national database (which would include existing IPABS data) that summarizes key LLW, MLLW volumes, disposal costs, disposition paths, etc.	Comment adopted. A national LLW/MLLW database has been implemented.
o A statement on page 16 of the report reads, "It may be feasible to develop a system of fewer waste streams..." Please explain this approach further; e.g., is this achieved by categorizing similar wastes into a single stream? Or, are you suggesting a smaller database by eliminating some waste streams?	Comment adopted. The fewer waste streams are a consequence of the data being rolled up to a higher level. The document has been revised to clarify this point.
o Why revamp an old database, as opposed to using MIMS? What is the relationship between these information sources?	Comment not incorporated. MIMS has commercial LLW data. DOE data is excluded from MIMS by design so there will be no redundancy.
Who is the intended audience? We strongly recommend that this document be written to be clearly understood by the typical Site Specific Advisory Board member and interested stakeholders.	The intended purpose of the strategy is to document current DOE programs and summarize opportunities for improvement. Therefore, the audience includes both Departmental personnel and external stakeholders. The next draft has been revised to emphasize clarity. For example, a glossary and list of acronyms has been added.
Please review the title--is it a "Business Strategy" as stated in the current title, or is it the National Disposition Strategy, as noted in paragraph 1, page 1?	Comment adopted. The document is a National Disposition Strategy. The title has been changed to reflect that.
The report doesn't flow -- in other words, it doesn't give context to the facts.	The next draft has been revised to emphasize clarity. For example, a glossary and list of acronyms has been added.
What does "Phase I" imply -- is this a precursor to a Phase II document -- or does it mean that Phase I addresses the most pressing issues?	Phase I considers those EM sites with significant inventories of LLW/MLLW. Phase II will consider other (non-EM) sites.
Please provide an Executive Summary at the beginning of the document that provides easy-to-understand bottom line information.	Comment adopted. An executive summary has been added.
SSABs should be provided copies of all future drafts for review and comment.	Agreed.
The report should have a more global perspective on waste issues; i.e., overall approach to waste reclassification and ultimate ramifications to treatment technologies, disposal volumes, shipping, etc.	Agreed. The National Disposition Strategy is intended to address the Department's management of LLW/MLLW disposition at a corporate level. Waste reclassification, as applicable to LLW, is addressed in a discussion of the radiological release of waste. Disposal volumes, on an annual basis, are presented in the appendices. An in-depth discussion of treatment technologies was considered beyond the scope of the current document.
Please include a map depicting the location of both generator and disposal facility locations and transportation routes to disposal site.	We will have maps identifying generator and disposal sites. However, we will not show transportation routes as transportation planning is a well organized program supported through the four regional stakeholder groups and other forums.
The report should include a table reflecting disposal costs for each disposal facility.	After consideration, it was concluded that including disposal cost information in a tabular format could prove confusing because of the wide variability of LLW/MLLW characteristics and composition. Such a table may not be reflective of relevant waste streams for a particular site.

NTS Citizen's Advisory Board Comment Resolution (Continued)

Comment	Resolution
<p>The report should include a comprehensive glossary. o Terms included in the glossary should be italicized in the text for easy reference. o Please explain the 3 classes of low level waste; i.e., Class A, B, C. The explanation should provide details and definitions from both the DOE and NRC perspective. o Identify, explain all acronyms. o In addition to being included in the glossary, because low level waste and mixed low level waste are the basic subjects for this report, a brief definition should be provided of each within the introductory section of the report -- perhaps in a side bar or call-out box adjacent to text.</p>	<p>The next draft contains a list of acronyms and a glossary.</p>
<p>Waste volumes should be stated with conventional quantity notations and be consistent throughout the report; e.g., if "cubic meters" is used, include an explanation comparing it to cubic yards -- or, at the very least, be consistent throughout the report and use either cubic meters or cubic yards so that there is a clear understanding of volumes. Do not use scientific notations; e.g., on page 2 of the report, a volume is listed as <math>1.7 \times 10^5 \text{m}^3</math>.</p>	<p>The document will consistently use cubic meters.</p>
<p>The report refers to contact handled and remote handled waste. How does this apply to low level/mixed low level waste?</p>	<p>An explanation of contact handled and remote handled waste has been added plus these terms have been defined in the glossary.</p>
<p>Please provide a discussion of the potential outcomes to the report's proposed recommendations; e.g., if a specific path is chosen, will it mean early site closure, increased waste on the highways for a given period, etc.?</p>	<p>The potential beneficial effects of each recommendation are discussed.</p>
<p>The report briefly mentions Class A, B, and C wastes -- are other sites pursuing permits to dispose of B and C wastes? This should be discussed. o Will risk factors be assessed and clearly explained for &gt;Class C wastes?</p>	<p>It is important to note that the NRC waste classifications (A, B, C and GTCC) apply to commercially, i.e. NRC, regulated waste. DOE manages its waste and facilities under its Atomic Energy Act authorities. DOE disposal sites are designed and operated per DOE Order 435.1, Radioactive Waste Management. DOE LLW disposal sites have facility-specific performance assessments, which define the specific types of LLW that can safely be disposed there. Some DOE sites are disposing of what would be the equivalent to Class B &amp; C LLW on-site. While some DOE LLW with activity levels &gt; Class C definitions can currently be disposed, some cannot and therefore may be included in DOE's effort to identify a disposal facility for commercial GTCC waste. A discussion of Class A, B&amp;C and GTCC waste has been added. Also Class A, B &amp; C and GTCC wastes have been defined in the glossary. A discussion of these GTCC efforts has been included.</p>
<p>Information in tables should be clearly discussed within the body of the report. One cannot assume that because data is in a table it is clearly understood by the reader.</p>	<p>Comment adopted. Discussions of the information contained in the tables have been added throughout the document.</p>
<p>State of Washington Legal issues:</p>	<p>See below.</p>
<p>o Washington State, as well as Proposition 297, impact plans for Hanford's receipt of the waste volumes noted in Table D-4?</p>	<p>Yes. Depending on the outcome and timing of on-going litigation and I-297 the off-site volumes will be delayed or reduced. These were upper bound numbers from the HSW EIS. Note for example, that the waste indicated for 2005 was not received.</p>
<p>o Are the delays in construction of the IDF solely related to ongoing litigation, or are there issues related to geologic fault zones?</p>	<p>There are no issues related to the geology of the IDF site. This statement has been added to the document.</p>
<p>Waste Classification Issues</p>	<p>See below.</p>
<p>o Now that DOE is going into reclassification of wastes, clear information must be provided related to volumes, current location of the waste being declassified, and ultimate plans for disposal alternatives.</p>	<p>The strategy will clearly explain the volumes included. If the ongoing waste determination efforts result in volume or disposal path uncertainty, these will be noted.</p>

## NTS Citizen's Advisory Board Comment Resolution (Continued)

Comment	Resolution
<p>o Are wastes governed by general classification schedules, or can they remain classified for indefinite periods?</p>	<p>The waste type designation of a particular waste stream is generally static (whether it is within the DOE categories, e.g., LLW, TRU, or the NRC categories, e.g. Class A, B, C). However, there are situations where the categorization may change: the required treatment for a specific waste stream could result in either increasing or decreasing the concentration of radionuclides; wastes containing high percentages of very short lived radionuclides will have decreasing radioactivity due to radioactive decay; wastes that are "characteristic hazardous" RCRA mixed wastes may become non-hazardous, non-mixed waste upon treatment; and lastly "listed hazardous" RCRA mixed waste can be "delisted" through a rigorous EPA regulatory petition process.</p>
<p>o Will waste classification designation impact potential waste disposition plans?</p>	<p>The NRC waste designations are only relevant to DOE wastes in the context of meeting the WAC at commercial treatment or disposal facilities.</p>
<p>o Please describe potential impacts related to waste classification issues.</p>	<p>The NRC waste designations are only relevant to DOE wastes in the context of meeting the WAC at commercial treatment or disposal facilities. However, to the extent that uncertainty exists in the disposition path of a waste stream, this will be identified in the strategy.</p>
<p><b>Waste Consolidation.</b></p>	<p>See below.</p>
<p>Some tables include zeros – is this meant to imply a quantity of zero, or does it mean that information is not yet available?</p>	<p>It means that the quantity is zero.</p>
<p>Future drafts of the report should address ramifications of proposed efficiencies – both positive and negative from a national perspective. o The report mentions proposed alternate sites for waste consolidation but does not discuss potential locations. Please identify which sites are under consideration for waste consolidation activities. o Please describe what factors will be considered when planning for a central facility for consolidation and risk; i.e., will decision-makers weigh risk factors related to transportation, worker safety, and environmental impacts?</p>	<p>The section on consolidation and a centralized storage area has been deleted.</p>
<p>Please explain the term "annual escalation factor", as noted in Table 3.</p>	<p>In the subsequent revision this table, and hence this term, has been eliminated.</p>



## **The Community Advisory Board (CAB) for Nevada Test Site Environmental Management Programs**

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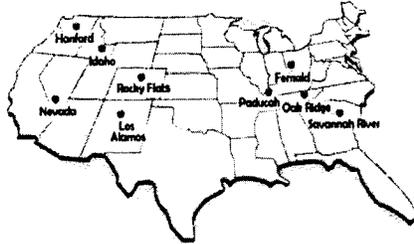
### **What is the CAB?**

- Group of 10-15 volunteer members from local and rural communities
- Focus on environmental management activities at the Nevada Test Site (NTS)
- Represent Nevada stakeholders with a broad array of perspectives



## Background

- CAB formed in 1994:  
Currently 1 of 9 Site  
Specific Advisory Boards

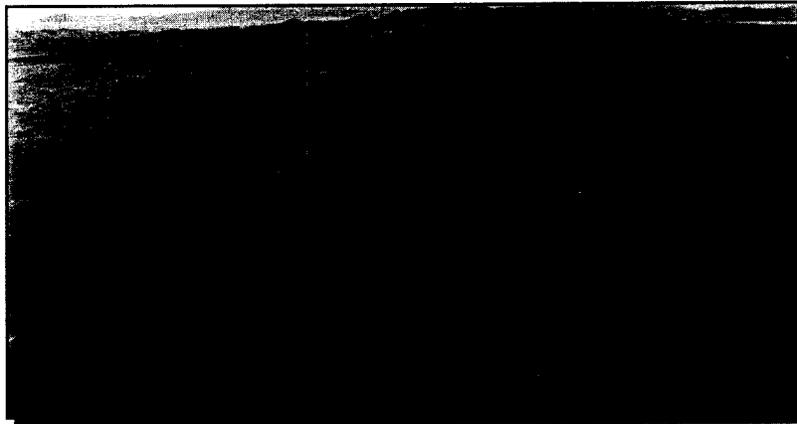


### •Why the NTS?

- Historical nuclear testing activities
- Waste management
- Site cleanup



## Historical Nuclear Testing Site



828 subsurface detonations occurred between 1951-1992 at the Nevada Test Site



## CAB Mission Statement

The CAB will review Nevada Test Site environmental management plans and provide citizen recommendations and advice for environmental restoration, waste management, and technology development in all the areas of responsibility covered by the U.S. Department of Energy Nevada Site Office Environmental Management program within the state of Nevada.



## How does the CAB work?

- Studies / discusses Environmental Management issues
- Meets with NTS representatives and state regulators; identifies issues for review, discussion and feedback
- Develops work plans
- Organizes subcommittees
- Provides feedback on the Environmental Management program





## **Environmental Management Activities Within the CAB's Purview**

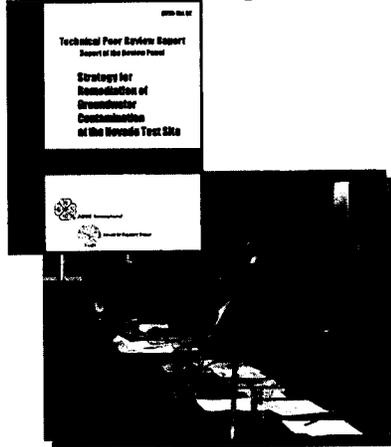
- Underground Test Area (UGTA)
- Soils
- Industrial Sites
- Offsites – within the state of Nevada
- Waste Management



## **What is the CAB's Current Focus?**



## UGTA Committee: Independent Peer Review Report



- CAB expressed concern with strategy being used to address underground contamination
- The Department of Energy (DOE) funded independent peer review
- DOE and CAB reviewed findings
- CAB invited to provide additional recommendation for future well placement



## Transportation / Waste Management Committee

- Emergency preparedness and response
- Plans to accept radioactive mixed waste from offsite locations
- Transuranic waste shipments to New Mexico





## Budget Committee

- Provide feedback and recommendations to the environmental management annual budget review and prioritization
  - Assign committee members to review each of seven projects
  - Meet with each project manager to gather details; prepare project summaries
  - Committee confers; prioritizes projects
  - Submits recommendations to CAB for consensus approval and submission to DOE



## Public Involvement

- Identify ways to inform and involve our communities in CAB activities
  - Quarterly public meetings – two in Las Vegas; two in rural Nevada
  - *The CAB News* – quarterly newsletter
  - Web page – [www.ntscab.com](http://www.ntscab.com)
  - Community briefings: “*CAB Roadshow*”



## Other ways the CAB gets involved...



**CAB Semi-Annual Retreat**



**Facility Tours**



**National Site-Specific  
Advisory Board Workshops**



## To learn more. . . . .

- Attend quarterly public meetings
- Participate in committee meetings
- Check out our website: [www.ntscab.com](http://www.ntscab.com)
- Add your name to the mailing list: receive a Newsletter and Annual Report
- Apply for membership – members are recruited on an as-needed basis through public advertising



## Who can I contact for more information?

- **CAB Office**  
Kay Planamento, Administrative Assistant  
2721 Losee Road – Suite D  
North Las Vegas, NV 89193-8578  
(702) 657-9088 / Email: [ntscab@aol.com](mailto:ntscab@aol.com)



[www.ntscab.com](http://www.ntscab.com)



## What is Transuranic (TRU) Waste?

- TRU waste contains man-made radioactive elements heavier than uranium
- Examples of TRU waste are contaminated worker clothing, tools, debris, etc.
- TRU waste is packaged in approved containers such as 55 gallon drums, 85 gallon overpacks, and oversized boxes



## Where Did TRU Waste Originate?

- Most TRU waste stored at the Nevada Test Site (NTS) was generated at Lawrence Livermore National Laboratory in the 1970s to 1980s
- The TRU Pad Cover Building was constructed in Area 5 at the NTS to temporarily store TRU waste



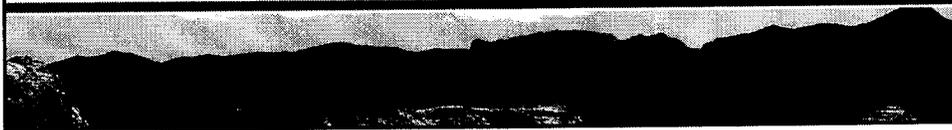
## Where is TRU Waste Disposed?

- TRU waste generated by U.S. Department of Energy activities is disposed at the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico
- TRU waste that is currently in storage at the NTS cannot be disposed at the NTS



## Preparing the Drums for Shipment

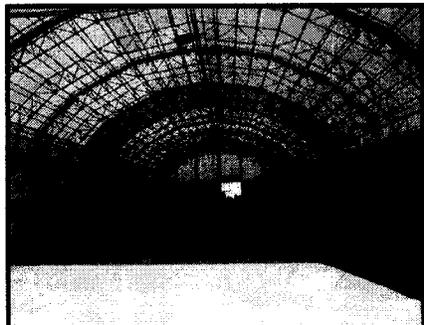
- Before waste can be sent to WIPP it must be characterized and certified to ensure it meets disposal requirements
- Prohibited items (i.e. liquids, aerosol cans, etc.) discovered during the characterization process are removed in a glovebox in the Visual Examination and Repackaging Building at the NTS



## Shipping to WIPP

- Waste drums are shipped inside a specially designed and tested container called a TRUPACT-II
- Shipments of TRU waste drums began in January 2004 and concluded in November 2005
  - 1,860 drums (48 shipments)





TRU Pad October 2000



TRU Pad September 2005



## What TRU Waste Activities Remain?

- Disposal of prohibited items collected during repackaging operations
- Drums originally thought to be TRU waste but were characterized as low-level and mixed low-level waste will be disposed at the NTS
- Decontaminate and decommission the glovebox inside portion of the Visual Examination and Repackaging Building



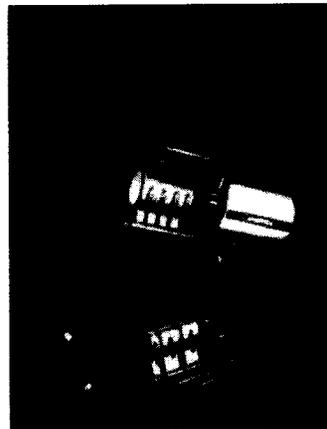
## What TRU Waste Activities Remain? (continued)

- Some TRU waste remains stored at the NTS
  - Approximately 200 drums and 58 oversized boxes did not meet WIPP's disposal requirements



## Path Forward for the Remaining Drums

- Non-destructive assay to determine isotopic concentration
  - In-Situ Object Counting System (ISOCs)
  - Low-level vs. TRU waste



## Path Forward for the Remaining Drums (continued)

- Non-destructive examination
  - Real-Time Radiography
  - Verifies the physical form of the waste in each container using x-ray technology
  - Identifies prohibited items



## Path Forward for the Oversized Boxes

- 58 non-standard boxes from Lawrence Livermore National Laboratory
- Seeking commercial companies to size reduce and repackage boxes to meet shipping requirements
- Dispose approved TRU waste at WIPP and low-level and mixed low-level waste at NTS



## Project Closure

- TRU project currently scheduled to end in fiscal year 2007
- When TRU activities are completed, the management of facilities will be conducted by the Low-Level Waste Project
  - Visual Examination and Repackaging Building
  - TRU Pad Cover Building





# Community Advisory Board for Nevada Test Site Programs

*Kathleen Peterson, CAB Chair  
Marian Lawrence, CAB Vice-Chair*

January 25, 2006

Kaye Allisen-Medlin  
Pauline Esteves  
Robert Gatliff  
David Hermann, Chair  
*Budget Committee*  
Steve Hopkins  
Genne Nelson  
Richard Nocilla  
John Pawlak, Chair

*Transportation /Waste Committee*  
Charles Phillips  
Jackson Ramsey, Chair  
*Diversification Committee*  
Engelbrecht von Tiesenhausen, Chair  
*UGTA Committee*

#### **Ex Officio Members**

Steve Mellington  
*U.S. Department of Energy,  
Nevada Site Office*  
Tiffany Lantow  
*Defense Threat Reduction Agency*  
Tim Murphy, Chief  
*Bureau of Federal Facilities,  
State of Nevada Division of  
Environmental Protection*  
Frank Tussing  
*Nevada Alliance for Defense,  
Energy, and Business*  
Susan Moore  
*Nye County*

#### **Administrative Support Staff**

Kay Planamento

Mr. Stephen A. Mellington  
Assistant Manager for Environmental Management  
U.S. Department of Energy – Nevada Site Office  
PO Box 98518  
Las Vegas, NV 89193-8518

Dear Mr. Mellington:

At its most recent meeting, the Community Advisory Board was briefed on the drastic reduction to the U.S. Department of Energy's Nevada Site Office (DOE-NSO) Environmental Management (EM) budget. Although the federal budget as a whole is understandably impacted this year due to the ongoing war effort and the devastating effects of Hurricane Katrina, additional non-EM related earmarks to the budget have resulted in an unacceptable level of funding for the EM program.

As you are aware, the FY 2006 allocation had been set at ~\$86.6 million; however, the ~\$16.25 million in earmarks has resulted in a net DOE-NSO EM funding level of only \$70.4 million. Needless to say, this drastic cut will not only result in serious impacts to planned cleanup activities, but will also jeopardize the working relationship that has been established with Nevada's stakeholders and regulators.

Throughout the years, the DOE has made firm commitments with the State of Nevada to ensure that the Nevada Test Site (NTS) could support environmental restoration activities at the NTS as well as DOE sites throughout the country, as follows:

- In 1998 DOE negotiated an agreement with the State of Nevada that averted potential litigation challenging the Waste Management Programmatic Environmental Impact Statement Record of Decision, which named the Nevada Test Site as a key facility for disposal of low-level radioactive waste. In return for not pursuing the lawsuit, DOE committed to maintain an EM funding level of \$90 million per year and to prohibit shipment of low-level waste throughout the Las Vegas Valley and across the Hoover Dam.
- After much negotiation, in FY 2005, the State of Nevada agreed to allow disposal of offsite-generated mixed low-level waste at the Nevada Test Site. Once again, this agreement was based upon the understanding that DOE will continue to meet its commitments to the State of Nevada.

In addition, the Federal Facility Agreement and Consent Order specifically details the approach to cleanup, along with timelines and required regulatory milestones. The ability to reach those milestones and abide with the terms of the FFACO is

Stephen A. Mellington

Page 2

January 25, 2006

directly linked to maintaining a budget that is adequate to complete the work. This cut will seriously impact EM's ability to honor the FFACO and will likely result in a violation of the FFACO as well as provisions of the Federal Facilities Compliance Act (FFCAAct).

These commitments to your stakeholders cannot be taken lightly. The Community Advisory Board has worked closely with the DOE EM program throughout the years and considers the State of Nevada to be a fellow stakeholder in this issue. We believe that it is essential to the State of Nevada and all stakeholders that funding be restored to the \$90 million level to ensure that all activities are managed safely and effectively, that DOE's commitments to the State of Nevada and all of Nevada's stakeholders are honored, and that the schedules established for cleanup at the NTS and other sites are maintained.

We would like the immediate support of those copied here to ensure that (1) the non-EM earmarks (~\$16 million) are removed from the DOE/NSO EM budget responsibility, and (2) the DOE/NSO EM budget is restored to the \$90 million level as committed to Nevada's stakeholders.

Sincerely,



Kathleen Peterson, Chairperson  
Community Advisory Board for Nevada Test Site Programs

cc: U.S. Senator John Ensign  
U.S. Senator Harry Reid  
U.S. Congresswoman Shelly Berkley  
U.S. Congressman Jim Gibbons  
U.S. Congressman Jon Porter  
J. R. Rispoli, DOE/HQ, (EM-1) FORS  
M. Nielson, DOE/HQ, (EM-30.1) FORS  
F. DiSanza, WMD, NNSA/NSO, Las Vegas  
K. Snyder, TD, NNSA/NSO, Las Vegas  
T. Murphy, NDEP  
C. Sanda, Consensus By Design, LLC  
CAB Members

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**CAB Monthly Update**  
**February 2006**

**Transuranic Waste (TRU):**

**Accomplishments (January)**

- The Acting TRU Project Manager attended 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.

**Expectations (February)**

- 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. The Real Time Radiography unit in Area 5 will be used to determine if any prohibited items exist in the boxes. This work is scheduled to begin in February 2006.

**Low-Level Waste (LLW):**

**Accomplishments (January)**

- Conducted three LLW Generators Facility Surveys (Foster-Wheeler, Brookhaven, and Paducah).
- The LLW Project is expected to receive 999,979 cubic feet in FY 2006. As of February 5, 2006, the NTS received 327,080 cubic feet of LLW in 300 shipments.
- LLW Operations has worked 241,332 hours since last lost time accident (Sept 2003).

**Expectations (February and March)**

- Will conduct three Facility Evaluations (Bechtel-Nevada at the NTS, Permafix, and West Valley) in February.
- Will conduct two LLW Generators Facility Surveys (Nuclear Fuel Services and LRR1) in March
- Expecting to receive an additional ~84,000 ft<sup>3</sup> of LLW by the end of the February.

**Mixed Low-Level Waste (MLLW):**

**Accomplishments (January)**

- Nevada Site Office submitted the Closure Plan for the Mixed Waste Disposal Unit (MWDU). NDEP will review it and provide comments. The permit required the Nevada Site Office to submit the Closure Plan within 180 days of receiving the MLLW Permit.
- On January 5, 2006, Nevada Site Office 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.

**Expectations**

- NDEP will conduct inspections of the active landfills at the Nevada Test Site beginning March 8, 2006. The inactive landfills will be inspected during the week of March 29<sup>th</sup>.
- The TSCA Incinerator (located in Oak Ridge, TN) burn plan has been submitted and approved by the State of Tennessee for FY 2006. Nevada Site Office will dispose of approximately 8,600 lbs of PCB contaminated material through this program in FY 2006.
- The final MLLW forecast expected in FY 2006 is 32,035 cubic feet.
- Expecting first off-site MLLW to be received at the NTS in late February or early March.

### **Underground Test Area Project:**

#### **Accomplishments (December)**

##### Frenchman Flat

- Completed Draft Phase II Flow Model

##### Yucca Flat

- Completed Phase I Geologic Model

#### **Expectations (February)**

##### Pahute Mesa

- No deliverables, continuing flow model analysis

### **Industrial Sites:**

#### **Accomplishments (December and January)**

- Completed characterization fieldwork at Corrective Action Unit (CAU) 274: Septic Systems
- Received 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

#### **Expectations (February)**

- Begin characterization fieldwork at CAU 118: Area 27 Super Kukla Facility, CAU 137: Waste Disposal Sites,
- Complete corrective action fieldwork at CAU 219: Septic Systems and Injection Wells and CAU 489: WWII UXO Sites (TTR)
- Complete post-closure site repair work at CAU 424: Area 3 Landfill Complex, CAU 453: Area 9 Landfill, and CAU487: Thunderwell Site

### **Nevada Offsites**

#### **Accomplishments (January)**

##### Central Nevada Test Area (CNTA)

- Concluded well development. Aquifer testing on the three newly installed monitoring/validation wells (total depths of 4,100', 3,660', and 4220' below ground surface) continues.

##### Project Shoal

- A meeting with NDEP was conducted with resolution reached on comment responses associated with Revision 2 of the final Corrective Action Decision Document/Corrective Action Plan for the subsurface.

- Pre-field planning activities for drilling continue. 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.

Expectations: (February)

Central Nevada Test Area

- Work with the EPA on sampling the newly installed wells.

Project Shoal

- Pre-field planning for drilling will continue.
- Revision 2 of the final Corrective Action Decision Document/Corrective Action Plan for the subsurface will be approved by NDEP.

Soils

Accomplishments (January):

- Completed the detailed evaluation of alternatives for the Clean Slate II site (Corrective Action Unit [CAU] 413).
- Finished the Remediation Strategy Document for Clean Slate III (CAU 414) and provided the document to DOE/NNSA.
- Finished Preliminary Assessment-type packages for the high likelihood additional Soils Sites similar to the Neptune Crater Site (25 highest potential additional Soils Sites) and prepared a summary including recommendations for each site.

Expectations (February):

- Refine estimated costs in Rev.7 of the Baseline for the 25 highest potential additional Soils Sites to reflect differences in the areas of the sites and complexity of the planned work.
- Modify the cost estimates in Rev. 7 of the Baseline to better reflect expected remediation costs for CAU 413 (Clean Slate II) and CAU 414 (Clean Slate III). Revised costs will include required Documented Safety Analysis and unexploded ordnance work.
- Develop groups of Soils Sites for the evaluation of available remediation options.
- Begin Revision of the Corrective Action Decision Document for CAU 413 (Clean Slate II).

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