



**DRAFT AGENDA
FULL BOARD MEETING
Bob Rudd Community Center
150 North Highway 160, Pahrump, NV 89041
January 10, 2008 - 6:00 p.m.**

No Call-In Number Available

- | | | |
|------|--|--|
| I. | Chair's Opening Remarks: <ul style="list-style-type: none">• Agenda Approval | Dave Hermann, Chair |
| II. | Public Comment | |
| III. | Presentation: <i>Desert Research Institute</i> <ul style="list-style-type: none">• <i>Low-Level Radioactive Waste Transportation Study</i> | David Shafer |
| IV. | Committee Updates: <ul style="list-style-type: none">• Budget• EMPIRE<ul style="list-style-type: none">○ Approval of 11/27/07 Recommendation Letter• Membership• Outreach• Transportation/Waste<ul style="list-style-type: none">○ Approval of 12/10/07 Recommendation Letter• UGTA<ul style="list-style-type: none">○ Update on 12/5/07 and 1/9/08 Pahute Mesa CAIP Addendum Meeting | Jack Ramsey
Walt Wegst

Jack Ramsey
Hal Sullivan
Ted Oom

Bob Gatliff |
| V. | Other CAB Business: <ul style="list-style-type: none">• Approval of November 6, 2007 Minutes• March Board meeting location, and committee meetings• SSAB Chairs Meeting – Hanford, April 23-24, 2008<ul style="list-style-type: none">○ Determine attendees• DOE Update<ul style="list-style-type: none">○ Revised FFACO Public Involvement Plan | Dave Hermann, Chair

Rosemary Rehfeldt
Rosemary Rehfeldt

Kelly Snyder, DOE |
| VI. | December and January State of Nevada Notification <ul style="list-style-type: none">• Closure Report for CAU 543, submittal 1/31/08 | Rosemary Rehfeldt |
| VII. | Meeting Wrap-Up / Assessment | Rosemary Rehfeldt |

Assessing Potential Exposure to the Public from Low-Level Radioactive (LLW) Waste Truck Transportation to the Nevada Test Site

David S. Shafer
 Julianne J. Miller
 Bruce W. Church
 Jeffrey J. Tappan
 Scott A. Campbell
 Karen J. Gray
 Barbara A. Holt



January 2005

Study Sponsored by the
 DOE National Nuclear Security Administration
 Nevada Site Office



The Role of the Nevada Test Site (NTS) in Low-Level Radioactive Waste (LLW) Disposal

- US Department of Energy (DOE), National Nuclear Security Administration Nevada Site Office
- One of two regional sites for shallow land disposal of LLW in the US from federal agencies
- Volumes of Waste Disposed:
 - +25 million ft³ since 1980
 - +3 million ft³ in FY 2003 & 2004 were peak years.
- Projected as major LLW disposal site until at least 2020, although volumes will be smaller—about 500,000 ft³



Shallow land disposal of waste containers at the Nevada Test Site

What is Low Level Radioactive (LLW) Waste?

- Most LLW contains small amounts of radioactive material.
- The material can include contaminated trash, soil, equipment, and debris from decontamination or demolition of buildings.
 - Most LLW is dominated by radionuclides with short half lives.
- Some things that LLW is not
 - Not spent nuclear fuel or high level waste from reprocessing spent fuel.
 - Not high concentrations of "transuranic" elements (e.g., plutonium).
 - TRU waste from the NTS and other DOE sites is being shipped to the Waste Isolation Pilot Plant (WIPP) in New Mexico.
- What is the "radiation exposure" risk from truck transportation?
 - From gamma radiation.
 - The walls of trucks and containers would shield alpha and most beta emissions.
- What is a common misconception about LLW? That it is liquid.
 - Waste generators must demonstrate that their waste contains a very low amount of liquids before it can come to the NTS.

Where Does LLW Waste Come from that is Disposed at the Nevada Test Site?



Location of "Waste Generators" in the US who have or who are sending LLW to the Nevada Test Site for disposal.

Transport of LLW to the NTS: What are Major Public Concerns?



Two major categories of concerns:

1. Risk of accidents on public highways
 2. Cumulative exposure from LLW shipments—should it be of concern to the public?
 - The second issue is especially of concern to citizens in small towns where the highway is "Main Street"
 - LLW trucks use primary rural highway routes in states of Nevada and western Utah to reach the NTS
- Most potential exposure information that is presented to the public based on calculated exposures from models.
- Question: *What is the exposure from the trucks if you directly measure it?*
- Data collected in 2003 and published as a DOE report in 2005. Additional analysis and data were incorporated into an article for the Health Physics Journal, published December 2007.

Collection of Potential Exposure Data from Trucks Traveling to the NTS

- Stationary and automated array of 4 Pressurized Ion Chambers (PICs)
- Position of PICs
 - 1 m from truck
 - 2 on each side of array
 - 1.5 m height
- Acoustic sensors were a second means of detecting a truck.
- Array designed to simulate condition of a person standing on side of road next to truck.



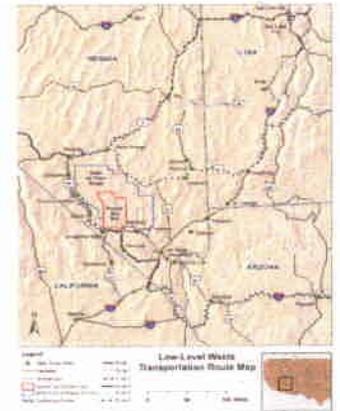
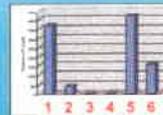
Why were Four PICs used to Measure the Trucks?

- Amount of radioactivity can vary between waste containers.
- Waste containers come in different shapes and sizes.
- Highest of the four PIC measurements was used as the value for the truck.



Routes Used to Transport LLW to the NTS

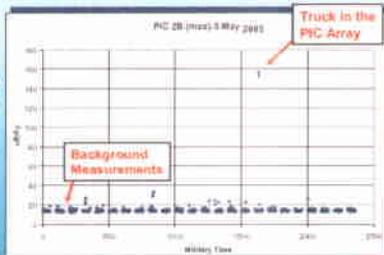
- In Nevada, western Utah, and eastern California, mostly rural routes are used to reach the NTS.
- LLW shipments no longer allowed through Las Vegas.
- The number of trucks that used each route was collected to calculate cumulative exposures.
- Pahrump is on Route 1; Amargosa Valley is on Route 2.



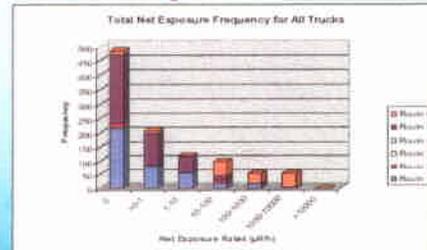
Representative Graphical Data Output During PIC Array Operations

Units: Micro-Roentgens per hour ($\mu\text{R/hr}$)

- To determine the radiation from just the truck, background had to be subtracted from each reading.
- Background radiation at the truck measurement sites was usually between 10-15 $\mu\text{R/hr}$.
- However, for each truck that went through the PIC array, the background at that time was used.

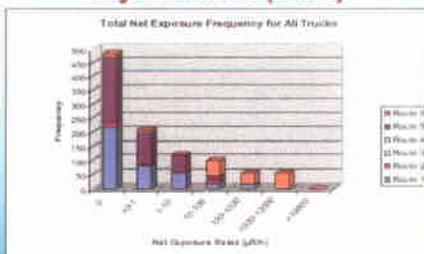


Major Results



- Of 1,012 trucks measured, 483 (47.7%) of trucks could not be distinguished from background. Another 256 trucks (25.4%) were less than 1 $\mu\text{R/hr}$.
- Only 54 trucks (5.3%) exceeded 1000 $\mu\text{R/hr}$ (or 1 mR/hr). These contribute the most to cumulative exposure calculations.
- The DOT standard for radioactive waste shipments is 10 mrem/hr at 2 m. It was assumed that 1R = 1 rem for purposes of determining exposure.

Major Results (cont.)



- Some traditional measures do **not** make much sense for this data.
 - Example:** The average truck reading was 207 $\mu\text{R/hr}$.
- However, most trucks measured were well **below** the average. The average is skewed by a few comparatively high readings.
- The median is a better measure: 11.27 $\mu\text{R/hr}$.

From What Trucks Were Measurements Collected?

- DOE could **not** require generators to participate; therefore, the participants were voluntary.
- Remote nature of site and 24-hour arrival of trucks made having person on-site infeasible.
- Size of the data set:
 - Measurements collected on 1,012 shipments between February and December 2003.
 - Represented 47% of shipments to the NTS during the study period.
 - 18 generators shipped waste to the NTS during the study period. All the major generators shipping waste to the NTS at that time participated in the study.
 - No indication that any shipment purposely did not use the transportation PIC array.

Cumulative Exposure Scenarios

How much radiation could a person receive if they were exposed to a large number of trucks?

"Pedestrian scenario"
In which person walks at distance of 1 m from truck for 15 seconds.



"Goldfield scenario"
Where buildings are within 5 m of the highway and truck stops for 1 minute. This scenario was developed at the request of the journal.

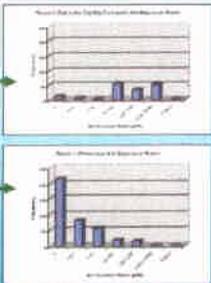


Cumulative Exposure is Definitely Not Simply a Function of the Number of Trucks

Scenario assumes 1 hr @ 1 m:

- Route 5 through Salt Lake City, Utah, and Ely, Nevada
 - 162 Trucks
 - 193 mR Total Net Exposure
- Route 1 through Pahrump, Nevada
 - 384 Trucks
 - 3.8 mR Total Net Exposure

Even though many more trucks traveled on Route 1, the total radiation exposure was much lower than Route 5!



Cumulative Measurements Are a Worst Case Scenario. It assumes the same individual is exposed to every truck that goes through a particular town.

Cumulative exposures can also be strongly influenced by a small percentage of the trucks. An example:

- Cumulative exposure for the Amargosa Valley route "pedestrian" exposure scenario. Assumes the same person is exposed to all 42 trucks for a period of 15 seconds.

Total Exposure all Trucks: 3.04 μ R
 Subtract highest exposure from a single truck results in revised total exposure: 1.98 μ R
 Result: 35% reduction in total exposure!



-Truck with the "highest rate" was 259.20 μ R/hr.
 -Without this one truck, the cumulative exposure significantly drops.

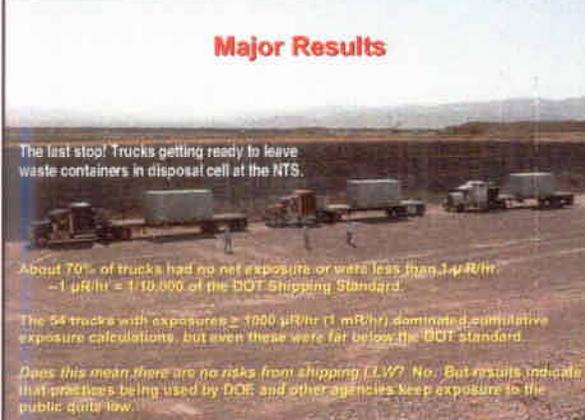
Major Results

The last stop! Trucks getting ready to leave waste containers in disposal cell at the NTS.

About 70% of trucks had no net exposure or were less than 1 μ R/hr. -1 μ R/hr = 1/10,000 of the DOT Shipping Standard.

The 54 trucks with exposures \geq 1000 μ R/hr (1 mR/hr) dominated cumulative exposure calculations, but even these were far below the DOT standard.

Does this mean there are no risks from shipping LLW? No. But results indicate that practices being used by DOE and other agencies keep exposure to the public quite low.



Closing



Study was the largest ever conducted of potential exposure from trucks during transit.

Thanks to EM Waste Management Project and Program Integration at DOE NNSA Nevada Site Office for funding the research.

Thanks to Waste Management Operations for assistance with waste shipment data.

Study would not have been possible without the cooperation of the waste generators.





Community Advisory Board for Nevada Test Site Programs

Members

David Hermann, CAB Chair
Walter Wegst, Ph.D., CAB Vice-Chair
Chair, EMPIRE Committee

Paul Adras
Robert Gatliff, Chair
Underground Test Area (UGTA) Committee
Robert Johnson
Vernell McNeal
Theodore Oom, Chair
Transportation/Waste Committee
Jackson Ramsey, Ph.D., Chair
Budget Committee
Membership Committee
Stacy Standley
Harold Sullivan
James Weeks

Liaisons

David EK
U.S. National Park Service
Stephen Mellington
U.S. Department of Energy,
Nevada Site Office
Tim Murphy, Chief
Bureau of Federal Facilities,
State of Nevada Division of
Environmental Protection
David Swanson
Nye County Nuclear Waste
Repository Office

Administration

Rosemary Rehfeldt
Navarro Research & Engineering, Inc.
Kelly Snyder
U.S. Department of Energy,
Nevada Site Office

November 27, 2007

DRAFT

Ms. Kelly Snyder, DDFO
U.S. Department of Energy, Nevada Site Office
P.O. Box 98510
Las Vegas, NV 89193-8518

SUBJECT: Community Advisory Board for Nevada Test Site Programs (CAB) -
Recommendations for Revisions to fact sheets: Transporting Low-Level and Mixed Low-Level Waste to the Nevada Test Site, Mixed Low-Level Waste at the Nevada Test Site, and Mixed Low-Level Waste Acceptance Guidelines at the Nevada Test Site.

Following are recommendations for revision to the fact sheet mentioned in the Subject of this letter. The CAB suggests the same general revisions and additions for all of the fact sheets:

1. Define unfamiliar terms and acronyms before they are used in a sentence.
2. Bold the definitions so that they are easily referenced.
3. When doing several definitions together, bullet the definitions, rather than listing them in the sentence.
4. Include a key and/or glossary on each fact sheet for unfamiliar terms and acronyms.
5. Reference on each fact sheet that other fact sheets are available.
6. In general, increase font point size for easier reading.
7. Try to keep fact sheets at an eighth grade reading level.
8. Update all references to off-site locations to comply with current transition status.
9. Distribute fact sheets to libraries, city halls, Nuclear Testing Archive, Legislator offices, environmental groups, UNLV, and senior centers.

Specific suggestions for the above-mentioned fact sheets are:

Transporting Low-Level and Mixed Low-Level Waste to the Nevada Test Site

- The first paragraph with bullet points should be changed to read:
Safety is the first priority of the Nevada Test Site (NTS) when transporting waste to the NTS. The NTS is committed to considering the concerns of neighboring areas, which are impacted by the transport of low-level and mixed low-level waste shipments to the site. These concerns include:
 - Avoiding heavily populated/congested areas in the State of Nevada
 - Avoiding Hoover Dam (I-40, US-93) and Davis Dam (AZ-68, NV-163)
 - Using the Nevada Site Office identified preferred routes (see map on reverse side)
 - Completing the driver routing questionnaire
 - Avoiding the Las Vegas Beltway (I-215)

- The second paragraph should read as follows:
The NTS recognizes that although generators cannot direct the specific routes taken by carriers, they can suggest preferred routes. The Nevada Site Office may consider suspension of a generator's shipments if waste is transported through the above-mentioned sensitive areas.
- There are no changes to the third paragraph.
- With regard to the fourth paragraph, the Committee agreed that a legend would be created for the map with symbols that designate the different routes, for those who will not be viewing a colored copy of the fact sheet. The symbols will be a triangle, a square, and a circle. The verbiage in this paragraph should read as follows:
During summer months (May-October) carriers are directed to use the northern routes. See map on the reverse side for Interstate-80 highlighted in blue, symbol is a circle. The required alternative during winter months (November-April) is to divide shipments between CA-127 (symbol is a triangle), and NV-160 (symbol is a square). See map on the reverse side for these routes; both are depicted in pink colors.
- The second sentence of the fifth paragraph should read as follows:
The required shipping permits are obtained through the Department of Transportation for these states (not the Highway Patrol).

It was also noted that the background was too busy and the fact sheet was difficult to read.

Mixed Low-Level Waste at the Nevada Test Site - and - Mixed Low-Level Waste Acceptance Guidelines at the Nevada Test Site

The Committee agreed, and it was approved by Kelly Snyder, that the two above-named fact sheets can be combined. Therefore, verbiage was taken from the second fact sheet and inserted into the first. First, we will outline changes to the first fact sheet: *Mixed Low-Level Waste at the Nevada Test Site*:

- Under Mixed Low-Level Waste Composition:
 - Take the first sentence of the second paragraph and move up to become the second sentence of the first paragraph, which reads: "*hazardous wastes are materials that are toxic, corrosive, reactive, ignitable, or are specifically identified by the U.S. Environmental Protection Agency (EPA) as "hazardous."* "
 - Change the last sentence in the first paragraph to read, "*Because of its hazardous non-radioactive component, mixed-low-level waste is managed separately from low-level waste.*"
- Under Disposal at the Nevada Test Site:
 - On the second page, first paragraph, take "*and*" out of the last sentence and add "*and x-ray,*" to read: "*Compliance is ensured through extensive document review and x-ray verification of a minimum of five percent of all mixed low-level waste disposed.*"
- Under Summary:
 - Write the first sentence in present tense and add the word "*remediation,*" to read, "*Mixed low-level waste is managed at the Nevada Test Site in support of environmental management remediation and other activities.*"

The verbiage taken from the second Fact Sheet, *Mixed Low-Level Waste Acceptance Guidelines at the Nevada Test Site*," should be inserted into the first Fact Sheet as follows:

- On page 1, Mixed Low-Level Waste Composition should read as follows:

Mixed low-level waste is a "mix" of low-level, radioactive materials and hazardous constituents. These constituents are toxic, corrosive, reactive, ignitable, or are specifically identified by the U.S. Environmental Protection Agency (EPA) as "hazardous."

The low-level portion of mixed waste contains small amounts of radioactive material and can generally be handled without personal protective equipment. Mixed low-level waste is managed separately from low-level waste because of its non-radioactive, hazardous component. Examples of waste forms that *will not be accepted* are free liquids, biodegradable sorbents, and etiologic and chelating agents.

The EPA regulates generation, transportation, treatment, storage, and disposal of hazardous waste (often referred to as “cradle-to-grave” management) as set forth in the *Resource Conservation and Recovery Act (RCRA)*. In Nevada, the EPA has delegated authority to the State of Nevada to ensure compliance with RCRA.

- On page 1, Disposal at the Nevada Test Site, the first sentence should read:

The DOE National Nuclear Security Administration Nevada Site Office operates a Mixed Waste Disposal Unit under the Nevada Test Site Part B RCRA permit reissued by the State of Nevada Division of Environmental Protection (NDEP) in December 2005.

- Page 2 has been restructured to read as follows:

It is important to note that all mixed low-level waste disposed at the Nevada Test Site must comply with strict waste acceptance criteria which includes conformance to RCRA Land Disposal Restrictions. Compliance is ensured through extensive document review and verification of a minimum of five percent of all mixed low-level waste disposal. Any waste that does not meet the acceptance criteria after undergoing verification will not be accepted.

How does a generator get approval to dispose waste at the NTS?

Each mixed low-level waste generator must complete a series of steps prior to the first waste shipment. A key element is the development of a waste certification program to comply with waste acceptance criteria. Once the program is approved, waste stream profiles can be submitted for review and approval on a waste stream-specific basis. The approval process includes a comprehensive review of program documents, generator and treatment facility evaluations, (i.e., audits, surveillances, and program reviews) and waste verification.

What are the packaging requirements?

Typical U.S. Department of Transportation packaging to be accepted for disposal includes boxes measuring 4' x 4' x 7' or 4' x 2' x 7', 55-gallon drums, and cargo containers. Alternate packaging will be considered, but Nevada Test Site Disposal Operations personnel must be consulted prior to shipment to ensure the appropriate resources are available.

Storage of mixed low-level waste

In addition to disposal capabilities, a mixed low-level waste storage facility (for on-site generated waste only) is operated at the Nevada Test Site. Legacy and newly identified mixed low-level waste is managed at this facility prior to off-site treatment and/or disposal. The waste handled at this facility must be managed in accordance with strict treatment/disposal schedules established by the NDEP.

Summary

Mixed low-level waste is managed at the Nevada Test Site in support of environmental cleanup and other activities. In addition, the Nevada Site Office will continue to work diligently towards accelerating closure of the Nevada Test Site Mixed Waste Disposal Unit while meeting its objective to provide crucial disposal capability for other DOE sites throughout the United States engaged in accelerated cleanup. The priority of the Nevada Site Office is to conduct these and other activities while protecting the public, the workers, and the environment.

It is also suggested that pertinent photographs be included in the new fact sheet. Additionally, the black box with reverse type on page 2 of the *Acceptance Guidelines* fact sheet should be included in the new, combined fact sheet. The information in the box begins with: The Nevada Test Site plans to accept mixed low-level waste with the following EPA Hazardous Waste Numbers, etc.

We appreciate the opportunity to review and comment on changes, revisions, and updates of the fact sheets, and will continue working to help improve Environmental Management's efforts to communicate with the public.

Sincerely,

David Hermann, Chair
Community Advisory Board
for Nevada Test Site Programs



Community Advisory Board for Nevada Test Site Programs

Members

David Hermann, CAB Chair
Walter Wegst, Ph.D., CAB Vice-Chair
Chair, EMPIRE Committee

Paul Adras
Robert Gatliff, Chair
UGTA Committee
Robert Johnson
Vernell McNeal
Theodore Oom, Chair
Transportation/Waste Committee
Jackson Ramsey, Ph.D., Chair
Budget Committee
Membership Committee
Stacy Standley
Harold Sullivan, Chair
Outreach Committee
James Weeks

Liaisons

Steve Mellington
U.S. Department of Energy,
Nevada Site Office
Tim Murphy, Chief
Bureau of Federal Facilities,
State of Nevada Division of
Environmental Protection
David EK
U.S. National Park Service
David Swanson
Nye County Nuclear Waste
Repository Office

Administration

Rosemary Rehfeldt
Navarro Research & Engineering, Inc.
Kelly Snyder
U.S. Department of Energy,
Nevada Site Office

December 10, 2007

DRAFT

Mr. Frank DiSanza
U.S. Department of Energy, Nevada Site Office
P.O. Box 98510
Las Vegas, NV 89193-8518

SUBJECT: COMMUNITY ADVISORY BOARD FOR NEVADA TEST SITE PROGRAMS (CAB) - RECOMMENDATION FOR AN UPDATED 2008 WASTE TRANSPORTATION STUDY

The Community Advisory Board for Nevada Test Site Programs (CAB) is requesting the following recommendation be considered.

In reference to waste transportation routes to the Nevada Test Site (NTS), the CAB requests that the U.S. Department of Energy Nevada Site Office Environmental Management Program (DOE) conduct computer model runs to determine the best waste transportation route(s) going to the NTS from Interstate 40 and driving off the NTS toward Interstate 40, using current factors in its calculations.

Factors that have changed considerably along the current plan of using Route 160 are: increased population, increased traffic, additional schools, additional hospitals, and growth in retail businesses. The CAB also requests that DOE consider a near-term future period of five to ten years in the study, and project changes with respect to the above-mentioned population growth factors.

The CAB appreciates the opportunity to provide recommendations to the DOE Nevada Site Office. We look forward to your formal response to our concerns and recommendations.

Sincerely,

David Hermann, Chair
Community Advisory Board
for Nevada Test Site Programs

CC: S. Mellington, NNAS/NSO AMEM
K. Snyder, NNSA/NSO DDFO
L. Stevens, NREI, Senior Transportation Specialist
R. Rehfeldt, NREI, CAB Facilitator
M. Nielson, DOE/HQ (EM-13) FORS
D. Frost, DOE/HQ (EM-13) FORS



DRAFT FULL BOARD MEETING MINUTES

November 6, 2007

Location: Amargosa Community Center, Amargosa Valley, NV

CAB Members Present: David Hermann, Chair; Walter Wegst, Vice Chair; Bob Gatliff, Robert Johnson, Genne Nelson, Ted Oom, Hal Sullivan, Engelbrecht von Tiesenhausen, James Weeks

CAB Members Not Present: Paul Adras, Vernell McNeal, Charles Phillips, Jack Ramsey, Stacy Standley

Public Present: Darrell Lacy, Nye County, NV; Albert Verrilli, Beatty, NV; Jennifer Viereck, Tecopa, CA

Liaisons Present: David Swanson, Nye County Nuclear Waste Repository Office, Chris Andres, Nevada Division of Environmental Protection

Liaisons Not Present: David Ek, U.S. National Park Service; Steve Mellington, NNSA

Technical Support Staff Not Present: Helen Neill, Ph.D., UNLV, Department of Environmental Studies; Jennifer Ward, UNLV graduate student

U.S. Department of Energy (DOE): Bill Wilborn, DOE Underground Test Area (UGTA) Sub-Project Director; Kelly Snyder, DOE Deputy Designated Federal Officer

CAB Facilitator: Rosemary Rehfeldt, Navarro Research and Engineering, Inc.

Agenda

- Chair's Opening Remarks Dave Hermann
 - Explanation of the DOE Nevada Site Office Environmental Management Program and the Community Advisory Board for Nevada Test Site Programs
 - Approval of Agenda
 - Member Resignation: Jan Spinato

- Public Comment

- Briefing: *UGTA Committee Reports – NTS Well Recommendations* Genne Nelson

- Committee Updates
 - ♦ Budget Bob Gatliff
 - ♦ EMPIRE Walt Wegst
 - *Approval of June 2007 and September 2007 Recommendation Letters*
 - ♦ Membership Bob Gatliff
 - *Update on Membership Recruitment*
 - ♦ Outreach Hal Sullivan
 - ♦ Transportation/Waste Ted Oom
 - ♦ UGTA Bob Gatliff

- Other CAB Business
 - ♦ Approval of September 12, 2007 Minutes Dave Hermann
 - ♦ Update on Site-Specific Advisory Board (SSAB) Chairs Meeting – Paducah, KY Dave Hermann
 - *Review and approve SSAB Chairs' Recommendation Letters*
 - ♦ Update and approve new Ground Rules Rosemary Rehfeldt
 - ♦ CAB member certificates Rosemary Rehfeldt
 - ♦ FY 2008 Full Board and Committee Rosters Rosemary Rehfeldt
 - ♦ January Board Meeting location and Committee Meetings Rosemary Rehfeldt
 - ♦ DOE Update Kelly Snyder
- October and November State of Nevada Notification Rosemary Rehfeldt
 - ♦ Closure Report for Corrective Action Unit 224, Submittal 10/31/07
- Meeting Wrap-Up / Assessment Rosemary Rehfeldt

Approval of Agenda

Walt Wegst asked to add one item to the meeting agenda: Discussion on whether or not to send hard copies of meeting packet material to members prior to the meeting. Ted Oom moved, seconded by Hal Sullivan, to approve the meeting agenda with additions. Motion passed unanimously.

Public Comment

No comment.

Briefing: “UGTA Committee Reports – NTS Well Recommendations”

Ms. Genne Nelson, Board Member, gave a presentation on the CAB UGTA Committee's Well Recommendations to the DOE. The presentation included:

- ♦ Brief history of nuclear testing from 1951 to 1992
- ♦ Federal Facility Agreement and Consent Order (FFACO) requirements
- ♦ Explanation of the Underground Test Area Corrective Action Units (CAUs)
- ♦ Response to the independent Peer Review
- ♦ Well location strategy
- ♦ Narrowing the focus – to Pahute Mesa
- ♦ Explanation for CAB's well recommendations, complete with topographic, geographic, geophysical, geologic, and groundwater maps
- ♦ UGTA Committee's Path Forward
 - ♦ August 2007 CAB UGTA Committee presentation to the UGTA project's Technical Working Group (TWG)
 - ♦ UGTA project is funded to drill additional wells during 2009-2010; two seats on the TWG are available for CAB members during planning
 - ♦ CAB UGTA Committee will consider additional well site recommendations
 - ♦ Continued review and input to the stages of the UGTA program as it proceeds toward ultimate installation of long-term monitoring wells

Ms. Nelson thanked the residents of Amargosa, Beatty and Pahrump, Nevada, who provided comments and suggestions to the CAB.

Budget Committee:

Due to the Committee Chair's absence, Bob Gatliff served as spokesperson for the Committee. Mr. Gatliff explained that the Budget Committee met prior to the Full Board meeting to review the general, overall FY 2008 NSO EM budget information. Additionally, Mr. Gatliff informed the Board that the Budget Committee will meet in January, pending availability of the DOE Sub-Project Directors, to review the FY 2010 budget in greater detail, prioritize the sub-projects and present the information to the Full Board at the March meeting.

Environmental Management Public Information Review Effort (EMPIRE) Committee:

Walt Wegst, Committee Chair, told the Board that the EMPIRE Committee met prior to the Full Board meeting to review and revise the following fact sheets:

- ♦ ***Transporting Low-Level and Mixed Low-Level Waste to the Nevada Test Site***
Walt Wegst and Stacy Standley spoke over the telephone prior to the Committee meeting and made changes to the fact sheet. Mr. Wegst brought those suggested changes to the meeting to discuss with the committee. The committee agreed to the changes. A recommendation letter to DOE, outlining the changes, will be created.

- ♦ ***Mixed Low-Level Waste...at the Nevada Test Site***
The Committee agreed to combine information from two fact sheets into one. Therefore, information from the *Mixed Low-Level Waste...Acceptance Guidelines at the Nevada Test Site*, was inserted into the fact sheet entitled *Mixed Low-Level Waste...at the Nevada Test Site*. The Committee then agreed to amend the recommendation letter dated October 4, 2007, pertaining to *Mixed Low-Level Waste...Acceptance Guidelines at the Nevada Test Site*, and this fact sheet will be removed from the letter. Another recommendation letter will be created specifying that the two fact sheets will be combined into one, with specific changes notated.

Hal Sullivan moved, seconded by Robert Johnson, to approve the recommendation letter outlining changes to the *Low-Level Waste* and *Transuranic Waste* fact sheets. Motion passed unanimously.

Robert Johnson moved, seconded by Hal Sullivan, to approve the recommendation letter, with changes noted above, to the *Mixed Low-Level Waste* and *Radioactive Waste Acceptance Program* fact sheets. Motion passed unanimously.

Mr. Wegst suggested that the fact sheet number be inserted into the document spreadsheet. Committee members will also receive a list of all Public Involvement outreach products. The following fact sheets will be reviewed at the next EMPIRE Committee meeting: *Soils Project* and *Groundwater at the Nevada Test Site*. Copies will be e-mailed to Committee members.

Pending Committee member's availability, a Committee meeting will be set prior to the Full Board meeting on January 9, 2008, from 2:15 to 3:15, location to be determined.

Membership Committee:

Due to the Chair's absence, Bob Gatliff served as spokesperson for the Committee. Per Jack Ramsey, the FY 2008 Recruitment Marketing Plan was included in the meeting packet for Full Board review and approval. Everyone was satisfied with the new member recruitment marketing plan, however all members agreed that some minor changes may be made to remove some of the newspapers from the "Ads and Press Release" section to the "Press Release Only" section. The process includes:

- advertising for the CAB positions
- accepting applications
- Committee review of applications
- setting up and conducting interviews
- making recommendations to the Full Board
- Full Board recommendations are forwarded to DOE for final approval
- new members will be identified by February 2008

Hal Sullivan moved, seconded by Engelbrecht von Tiesenhausen, to approve the FY 2008 Recruitment Marketing Plan with minor changes. Motion passed unanimously.

Outreach Committee:

Hal Sullivan, Committee Chair, distributed handouts for the Board members to review, which details the Grade Five Science expectations for students in Nevada public schools. Mr. Sullivan's idea is for the CAB to provide school children and teachers with science workshops/presentations and work with school board members to tailor the CAB's outreach program to school district education requirements so that students and teachers received credit for time spent in these workshops. This handout, along with other outreach information, will be discussed in greater detail by the Outreach Committee in January 2008 at their Committee meeting. Pending Committee member's availability, the meeting is scheduled prior to the Full Board meeting on January 9, 2008, from 3:30 to 4:30 p.m., location to be determined.

Underground Test Area (UGTA) Committee:

Bob Gatliff, Committee Chair, thanked Genne Nelson for her informative presentation on the Committee's well recommendations, and reiterated the Committee's path forward on this issue:

- ♦ The UGTA project is funded to drill additional wells during 2009-2010; two seats on the TWG are available for CAB members during planning
- ♦ CAB UGTA Committee will consider additional well site recommendations

Mr. Gatliff informed the Board that two CAB UGTA Committee members will be attending the all-day TWG sub-committee meeting for Pahute Mesa Corrective Action Investigation Plan (CAIP) meeting on December 5, 2007, at the DOE Nevada Support Facility. Committee member's availability will be sent to Rosemary Rehfeldt. An update will be presented at the next Full Board meeting in January 2008.

Other CAB Business

- **Approval of September 12, 2007 Minutes**

Walt Wegst moved, seconded by Hal Sullivan, to approve the minutes as written. Motion passed unanimously.

- **Update on Site-Specific Advisory Board (SSAB) Chairs Meeting in Paducah, KY**

Dave Hermann gave a brief update on the SSAB Chairs Meeting and his "Top Three Issues" update to the SSAB and EM Assistant Secretary James Rispoli. The presentation was well-received.

Additionally, two letters were created by the SSAB Chairs for approval by all of the SSABs. Copies of these letters were e-mailed to the NTS Board for their review prior to the Full Board meeting. The subjects of the letters are as follows:

- ♦ **Recommendation for Long Term Stewardship Incorporation Into New EM Projects and Legacy Waste Decisions**
 - Basically recommends that EM project management consider complete life-cycle analysis that includes long-term stewardship, final disposition, clean-up methods, and costs to meet end-state goals
- ♦ **Recommendation for EM SSAB Participation in the EM Budget Process**
 - Basically recommends that DOE provide the SSAB's with a more detailed, validated Baseline for each site, and that budgets are compliant with existing regulatory agreements and commitments.

Ted Oom moved, seconded by Walter Wegst, to approve the two SSAB Recommendation Letters. Motion passed unanimously.

With reference to CAB member's meeting packets and concern that all members receive information prior to the Board meetings for review, Walt Wegst suggested that the Board discuss whether or not the CAB Office should send out hard copies of the meeting packet before each Board meeting. The Board discussed this and unanimously decided that, because the information is already received via e-mail prior to meetings, there is no need to receive a hard copy. Additionally, this would save time and resources.

- **Update and approve new CAB Ground Rules**
The CAB meeting Ground Rules were initially established in 2000. CAB support staff agreed that there is a need for updated Ground Rules. Updated Ground Rules were presented as follows:
 - ♦ Meetings start on time
 - ♦ Respect each speaker and the facilitator
 - ♦ Everyone participates...no one dominates
 - ♦ Speak only when recognized
 - ♦ Respect time limits
 - ♦ Avoid side conversations
 - ♦ Follow agenda and stay on topic
 - ♦ Focus on Environmental Management only
 - ♦ Prepare in advance
 - ♦ Build consensus
 - ♦ Turn off all electronics

Genne Nelson moved, seconded by Engelbrecht von Tiesenhausen, to approve the updated Ground Rules. Motion passed unanimously.

- **CAB Member Certificates:**
As was approved at the September 12, 2007 Full Board meeting, Kelly Snyder presented each CAB member with a Certificate of Participation for service on the CAB. Particular attention and sincere thanks were given to Genne Nelson, Engelbrecht von Tiesenhausen, and Charley Phillips (absent), because this was their last official meeting as voting members. All three have served for six years and their terms expire in November 2007.
- **FY 2008 Full Board and Committee Rosters**
Due to FY 2008 work plan development at the September 12, 2007 Full Board meeting, updated Full Board and Committee rosters were included in the meeting packets.

- **January Board Meeting Location:**
Board discussion ensued regarding the location of the next Full Board meeting. Members agree that rural meetings are needed. However, members also agree that the presentation topic will change depending on where the meeting is held. If the meeting is held in Pahrump, the topic will be Waste Disposal Transportation Routes with an invitation to Desert Research Institute to present their transportation study results. If the meeting is held in Beatty, the topic will be on the UGTA Committee's well recommendations. The CAB support staff will check on meeting room availability at each location for January 9, 2008, and will inform the Board, via e-mail, on the outcome.
- **DOE Update:**
Kelly Snyder referenced the EM Monthly Report to the CAB for November 2007 and asked the Board if they had any questions on the report. There were no questions.

Two letters were included in the meeting packets regarding the appointment of a Clark County Liaison for the CAB. The first letter, dated October 23, 2007, is from the CAB to DOE requesting the Liaison position. The second letter is from DOE to Clark County, offering a liaison position to Clark County.. DOE is awaiting response from Clark County.

The updated, redesigned fact sheet, *Transuranic Radioactive Waste*, was included in the meeting packets.

Kelly Snyder announced that Tiffany Lantow, CAB Liaison from the Defense Threat Reduction Agency (DTRA), will no longer serve on the CAB. The DTRA's future work will not include EM, therefore a liaison position is no longer needed.

- **October and November State of Nevada Notification:**
A Notification for Corrective Actions, dated October 18, 2007, was included in the Board meeting packets. The DOE will submit a Closure Report (CR) to the Nevada Division of Environmental Protection (NDEP) for the following Corrective Action Units (CAUs):
 - CAU 224 Decon Pad and Septic Systems

The approximate submittal date is October 31, 2007. Comments regarding these decision documents are to be submitted to Tim Murphy (NDEP) within 30 days of the document's release. If needed, Rosemary Rehfeldt will provide the Board with additional information on the Closure Report.

Meeting adjourned at 8:30 P.M.

CAB MEETING ATTENDANCE (January 2007 through December 2007)

NAME	1/10/07 Full Board	2/07 No Meeting	3/14/07 Meeting Can- celled	4/07 Full Board	5/9/07 Full Board	6/007 No Meetin g	7/11/07 Full Board	8/07 No Meeting	9/12/07 Full Board	10/07 No Meeting	11/06/07 Full Board	12/07 No Meeting
Adras	√			√					√			
Aldrich	√			√					Resigned			
Gatliff	√			√	√		√		√		√	
Hermann	√			√	√		√		√		√	
Hopkins									Removed			
Johnson	√						√		√		√	
McNeal	√			√	√		√		√			
Lawrence	√			No longer a member – met 6-year obligation								
Nelson				√			√		√		√	
Oom	√			√	√		√		√		√	
Pawliuk	√								Resigned			
Peterson	√			No longer a member – met 6-year obligation								
Phillips	√						√		√			
Ramsey	√			√			√		√			
Rosin	√								Resigned			
Spinato	√				√						Resigned	
Standley	√			√			√		√			
Sullivan					√				√			
von Tiesenhausen	√				√				√		√	
Weeks	√			√	√		√		√		√	
Wegst	√			√	√				√		√	

KEY: √ - Present

Red Filled-in Square – Absent

**Environmental Management's Monthly Report to the CAB
January 2008**

Low-Level Waste (LLW):

Completed Activities (December)

- The Nevada Site Office (NSO) conducted two (1) Facility Evaluation. The facility evaluated was PermaFix Northwest. Also the Radioactive Waste Acceptance Program (RWAP) participated in the 7th Annual Mixed and Low Level Waste Management Forum in Nashville, TN during the week of December 11, 2007.
- Received 219,064 ft³ of LLW in 294 shipments for disposal at the Nevada Test Site (NTS), as of December 21, 2007.
- LLW Operations has worked 353,627 hours since last lost-time accident (September 2003).

Expectations (January)

- Expect to receive 80,000 ft³ of LLW and MLLW for disposal.
- Expect to conduct one (1) unannounced RWAP Facility Inspection of the generator sites and one Mixed Waste Verification.

Mixed Low-Level Waste (MLLW):

Completed Activities (December)

- Received 4,927 ft³ in 10 shipments for disposal at the NTS, as of December 21, 2007.
- The Nevada Division of Environmental Protection (NDEP) Cease order has been lifted for Foster-Wheeler MLLW program. The Nevada Division of Environmental Protection (NDEP) Cease order is still in effect for Portsmouth's MLLW program. This is a result of the NDEP issuing a Cease Order to Mixed Low-Level Waste (MLLW) generators from Foster Wheeler Environmental Corporation (TN), Portsmouth Gaseous Diffusion Plant (Ohio) and M&EC Permafix (TN). This is a result of NDEP's concerns that some MLLW generators that ship to the Nevada Test Site (NTS) are not demonstrating enough rigor and vigilance in implementing their waste certification programs.
- Secretary of Energy Bodman received a letter dated Dec. 20, 2007, from the Nevada Attorney General (AG). In this letter, the AG informs the Secretary that a proposal to accept a mixed low-level waste from the Savannah River Site constitutes a violation of law. The AG's concern date back to a 1997 Settlement Agreement between the State of Nevada and Department of Energy. A copy of the Dec. 20th letter and similar letters sent in 2007 from the State of Nevada are contained in your monthly packet.

MLLW Expectations (January)

- MLLW disposal is included in the LLW section for January.
- Planned facility evaluations are included in the LLW portion of this report.

Transuranic Waste (TRU)

Completed Activities (December)

- Modifications to the Visual Examination and Repackaging Building (VERB) for the oversized box size-reduction and segregation continued and are planned to be completed in March 2008.
- Assessments were conducted on the technology to be used to vent the 12 remaining oversized boxes to ensure worker safety issues have been adequately addressed prior to the start of operations.

- Radioactive sources that were found in waste drums during repackaging in the glovebox have been kept in holding containers. These sources require special packaging, shipment and disposal through the Off-Site Source Recovery Program (OSRP) based out of Los Alamos, New Mexico. Representatives from the OSRP were at the NTS in early December but were unable to package the remaining sources for off-site shipment. A return visit is required but is not scheduled.
- Final characterization data for the remaining TRU drums that do not require repackaging in the VERB was submitted to the Carlsbad Field Office (CBFO) for review and concurrence that all activities that can be done by the Nevada Site Office have been completed. The CBFO identified some minor data needed in addition to what was submitted. The data will be collected with completion expected in March 2008.

Expectations (January)

- Modification activities on the VERB for oversized box size-reduction and waste segregation will continue with completion scheduled for March 2008.
- Many items that were procured for the VERB modification are scheduled to arrive in January 2008.
- The remaining 12 oversized boxes will be vented.
- Collect information to complete data packages for the remaining TRU waste drums to ship off-site for characterization and shipment to Waste Isolation Pilot Plant.

Industrial Sites:

Completed Activities (December)

- Continued corrective action fieldwork for Corrective Action Unit (CAU) 127, Areas 25 and 26 Storage Tanks.
- Completed corrective action fieldwork for CAU 190, Contaminated Waste Sites.
- Completed investigation fieldwork for CAU 565, Stored Samples.
- Continued Decontamination & Decommissioning (D&D) fieldwork for CAU 116, Area 25 Test Cell C Facility.
- Continued corrective action fieldwork for CAU 151, Septic Systems and Discharge Area.
- Submitted and received Nevada Division of Environmental Protection (NDEP) approval for Final Corrective Action Decision Document (CADD)/Closure Report (CR) and the Errata for CAU 565, Stored Samples.

Planned (January)

- Complete corrective action fieldwork for CAU 151, Septic Systems and Discharge Area.
- Continue D&D fieldwork for CAU 116, Area 25 Test Cell C Facility.
- Continue corrective action fieldwork for CAU 127, Areas 25 and 26 Storage Tanks.
- Submit Final Closure Report for CAU 124, Storage Tanks, to NDEP for approval.
- Submit Final Closure Report for CAU 543, Liquid Disposal Units, to NDEP for approval.
- Submit Final Post Closure Inspection and Monitoring Report for CAU 112, Area 23 Hazardous Waste Trenches, to NDEP for approval.

Underground Test Area (UGTA)

Completed Activities (December)

- Work continued on the UGTA Data Management Work (DMS) Package

Frenchman Flat

- Continued Phase II Transport Model Draft report development. The report underwent internal reviews and revisions.

Pahute Mesa

- Continued Phase I Transport Model Draft report development. Draft sections were developed.
- The preemptive review committee held a meeting to discuss development of the Phase II CAIP. A schedule for completion of the Plan is being prepared.
- Continued support of CAIP Addendum efforts.

Yucca Flat

- Completed demobilization from the BILBY Site, U-3cn PS #2.
- Continued to prepare plans for the collection of groundwater samples at the DALHART site, U-4u PS #2A.
- The ER-8-1 Data Report Addendum underwent internal review and revision. This document is expected to be distributed to NNSA/NSO and project participants in early January.
- Continued Phase I Flow Model Analysis and Evaluation.
- Continued Phase I Source Term Analysis and Evaluation.
- Continued Phase I Transport Model Analysis and Evaluation.

Rainier Mesa/Shoshone Mountain

- Completed Phase I Transport Parameter Data document development. Report submitted to NNSA/NSO on December 20, 2007.
- Completed Phase I Hydrology Data Document development. Report distributed to NNSA/NSO on December 13, 2007.
- Continued Phase I Model Approach and Strategy Analysis and Evaluation.
- Continued Phase I Flow Model Analysis and Evaluation.
- Continued Phase I Source Term Analysis and Evaluation.
- Continued Phase I Transport Model Analysis and Evaluation.

Expectations (January)

Frenchman Flat

- Continue Phase II Transport Model Draft report development.

Pahute Mesa

- Continue Phase I Transport Model Draft report development.

Yucca Flat

- Complete groundwater sampling activities at the DALHART site, U-4u PS #2A.
- Continue Phase I Flow Model Analysis and Evaluation.
- Continue Phase I Source Term Analysis and Evaluation.
- Continue Phase I Transport Model Analysis and Evaluation.

Rainier Mesa/Shoshone Mountain

- Complete Phase I Model Approach and Strategy Analysis and Evaluation.
- Begin review of the Phase I Hydrology Draft Data document.
- Continue Phase I Flow Model Analysis and Evaluation.
- Continue Phase I Source Term Analysis and Evaluation.
- Continue Phase I Transport Model Analysis and Evaluation.

Soils

Completed Activities (December)

- Continued the development of the Streamlined Approach for Environmental Restoration (SAFER) and Corrective Action Investigation Plan (CAIP) documents for selected Soils sites.
- Conducted two Data Quality Objectives meetings with Nevada Division of Environmental Protection (NDEP) in support of the SAFER Plan and CAIP.
- Continued conducting preliminary assessments for remaining Soil sites.
- Toured a Soils site in Area 18 with Nevada Site Office and NDEP personnel.

- Provided NDEP with a map of the soils sites and aerial radiological survey data.

Expectations (January)

- Continue the development of the SAFER Plan for low impact Soils sites.
- Continue the development CAIP for selected Soils sites.
- Continue the preliminary assessments of remaining Soils sites.

Public Involvement:

Completed Activities (December)

- Held Environmental Management EM Student Forum meeting with participating students from Advanced Technologies Academy (Las Vegas, NV); project concept was outlined and discussed. Group will meet weekly when school schedule resumes in January 2008.
- Mailed one Operation Clean Desert interactive game CD to an individual in response to a phone inquiry.

Expectations (January)

- Community Advisory Board for Nevada Test Site Programs full board meeting on January 10 in Pahrump, Nev.
- Participate in a Nevada Site Office emergency exercise.

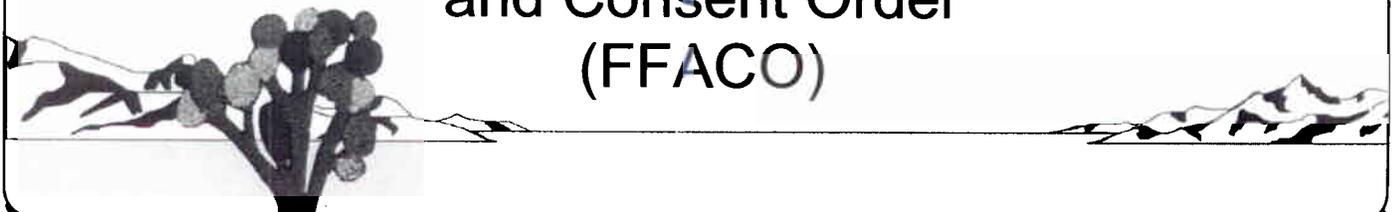
Appendix V

Public Involvement Plan

Revision No.: 6

January 2008

Federal Facility Agreement
and Consent Order
(FFACO)



FFACO Public Involvement Plan

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Las Vegas, Nevada

U.S. Department of Defense
Defense Threat Reduction Agency
Detachment 1, Nevada Operations
Mercury, Nevada

U.S. Department of Energy
Office of Legacy Management
Grand Junction, Colorado

Preface

The Public Involvement Plan serves two purposes: it provides a broad public involvement strategy, and fulfills requirements contained in the *Federal Facility Agreement and Consent Order* (FFACO) relating to public awareness and participation. Under the FFACO, agreed to by the State of Nevada, U.S. Department of Energy, Environmental Management (DOE/EM), the U.S. Department of Defense (DoD), and the U.S. Department of Energy, Legacy Management (DOE/LM), sites and facilities potentially contaminated by past DOE and DoD activities must be effectively investigated and corrective actions established to protect public health, safety, and the environment. The Plan, which is incorporated into the FFACO as Appendix V, is a key resource for gaining information on public participation options that relate to DOE and DoD environmental restoration and waste management activities.

Table of Contents

Preface.....	ii
List of Figures.....	v
List of Acronyms and Abbreviations.....	vi
1.0 FFACO Overview.....	1
2.0 U.S. Department of Energy Environmental Management.....	2
2.1 Environmental Management Overview.....	2
2.1.1 Environmental Restoration Project.....	4
2.1.2 Waste Management Project.....	9
2.2 Public Involvement Strategy.....	12
2.2.1 Strategic Overview.....	12
2.2.2 Participation Levels.....	12
2.2.3 Opportunities to Become Aware and Informed.....	14
2.2.4 Opportunities to Become Involved.....	15
2.2.5 Opportunities to Become Highly Involved.....	15
2.3 Regulatory Drivers and Agreements.....	16
2.3.1 Federal Facility Agreement and Consent Order.....	16
2.3.2 Federal Facility Compliance Act-Consent Order.....	19
2.3.3 Agreement in Principle/Joint Low-Level Waste Oversight Agreement.....	19
2.3.4 Other Regulatory Drivers.....	19
3.0 U.S. Department of Energy Legacy Management.....	22
3.1 Legacy Management Overview.....	22
3.2 Nevada Offsites.....	22
3.3 Public Involvement Strategy.....	23
4.0 Defense Threat Reduction Agency.....	24
4.1 DTRA Overview.....	24
4.1.1 DTRA Environmental Restoration.....	24
4.2 Public Involvement Strategy.....	24
5.0 Conclusion.....	26
6.0 References.....	27
7.0 Contacts.....	28

Table of Contents (continued)

Attachment 1: Overview of the Nevada Test Site 29

Attachment 2: Environmental Management Information Request Form 31

Attachment 3: Environmental Management Product Listing 32

Attachment 4: Legacy Management Product Listing 33

List of Figures

Number	Title	Page
Figure 1	– Nevada Test Site and Surrounding Areas.....	3
Figure 2	– Underground Test Area (UGTA) Corrective Action Sites (CAS) and Corrective Action Unit Boundaries	5
Figure 3	– Areas of Surface Soil Contamination.....	6
Figure 4	– Industrial Sites Corrective Action Sites at the NTS	7
Figure 5	– Industrial Sites Corrective Action Sites at the TTR	8
Figure 6	– Area 5 at the NTS.....	11
Figure 7	– Levels of Public Involvement.....	13
Figure 8	– FFACO Corrective Action Process	18
Figure 9	– Nevada Offsites Locations	22
Figure 10	– Shoal Site and Central Nevada Test Area Locations.....	22

List of Acronyms and Abbreviations

The Federal government commonly uses acronyms in its publications and operations. Acronyms are words formed from the first letter of each major part of a compound term. For example, the National Nuclear Security Administration is typically shortened to NNSA. Acronyms are an effective means of communication, but only when readers are familiar with the representative terms. Below is a list of acronyms used in this document:

CAB	Community Advisory Board
CADD	Corrective Action Decision Document
CAP	Corrective Action Plan
CNTA	Central Nevada Test Area
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DTRA	Defense Threat Reduction Agency
EA	Environmental Assessment
EIS	Environmental Impact Statement
EM	Environmental Management
FFACO	<i>Federal Facility Agreement and Consent Order</i>
FFCAct	<i>Federal Facility Compliance Act of 1992</i>
FFCAct-CO	<i>Federal Facility Compliance Act-Consent Order</i>
LM	Legacy Management
NEPA	<i>National Environmental Policy Act of 1969</i>
NSO	Nevada Site Office
NTS	Nevada Test Site
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
SAFER	Streamlined Approach for Environmental Restoration
TRU	Transuranic
TTR	Tonopah Test Range

1.0 FFACO Overview

The *Federal Facility Agreement and Consent Order* (FFACO) is a legally binding document that was agreed to by: the State of Nevada; the U.S. Department of Energy, Environmental Management (DOE/EM); the U.S. Department of Defense (DoD); and the U.S. Department of Energy, Legacy Management (DOE/LM). In summary, the agreement outlines a process to ensure that the DOE and/or the DoD, under the regulatory authority and oversight of the Nevada Division of Environmental Protection (NDEP), thoroughly investigate and take corrective actions concerning the release of hazardous pollutants at certain federal facilities owned or operated by DOE and/or DoD.

Signed in 1996, the FFACO:

- Formalizes relationships among the State of Nevada, DOE, and the DoD;
- Identifies sites of potential historic contamination and prioritizes them for cleanup;
- Defines the regulations the State of Nevada will use to direct and enforce corrective action activities;
- Establishes a corrective action strategy for cleanup activities; and
- Provides public involvement opportunities.

The FFACO is regulated for the State of Nevada by the Nevada Division of Environmental Protection. The requirements of the FFACO are managed for the DOE by DOE/EM and DOE/LM, and for the DoD by the Defense Threat Reduction Agency. Descriptions of public involvement opportunities for each organization's environmental restoration and FFACO activities are provided in the following chapters.

2.0 U.S. Department of Energy Environmental Management

2.1 Environmental Management Overview

In 1989, the U.S. Department of Energy (DOE) in Washington, DC. created the Office of Environmental Restoration and Waste Management, now called the Office of Environmental Management (EM). The EM Program was instituted at DOE field offices around the country to address the environmental liabilities of 50 years of nuclear weapons production in the United States. The EM Program at the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NSO), formerly known as the U.S. Department of Energy, Nevada Operations Office (DOE/NV), is part of that effort. It is the responsibility of EM to determine the risk and future cleanup costs associated with environmental contamination, hazardous and radioactive materials and wastes, and contaminated buildings and facilities that are the result of past testing and research activities.

Most NSO EM projects are carried out at the Nevada Test Site (NTS) and the Tonopah Test Range (TTR) which is part of the Nevada Test and Training Range (formerly known as the Nellis Air Force Range). Located in Nye County, the NTS is a unique national resource (see Figure 1). The approximately 1,375-square mile site is located about 65 miles northwest of Las Vegas. It is larger than the state of Rhode Island, making it one of the largest restricted access areas in the United States. This remote, arid, and restricted site is predominantly surrounded by tightly controlled federal lands and facilities. The Nevada Test and Training Range provides a buffer zone on the east, north, and most of the west border of the NTS, and the Bureau of Land Management land provides a buffer zone on the south and southwest border (see Attachment 1 for an overview of the NTS).

The NSO EM Program elements under the purview of the FFACO are the Environmental Restoration and Waste Management Projects. These projects have separate yet interrelated roles and responsibilities which are detailed in Section 2.1.1 and 2.1.2 of this Plan. Under the NSO EM Program, the projects operate with the common goals of soliciting and incorporating public comments into the decision-making process, protecting human health and safety, emphasizing environmental responsibility for NSO activities, and complying with all applicable laws and regulations affecting program activities.

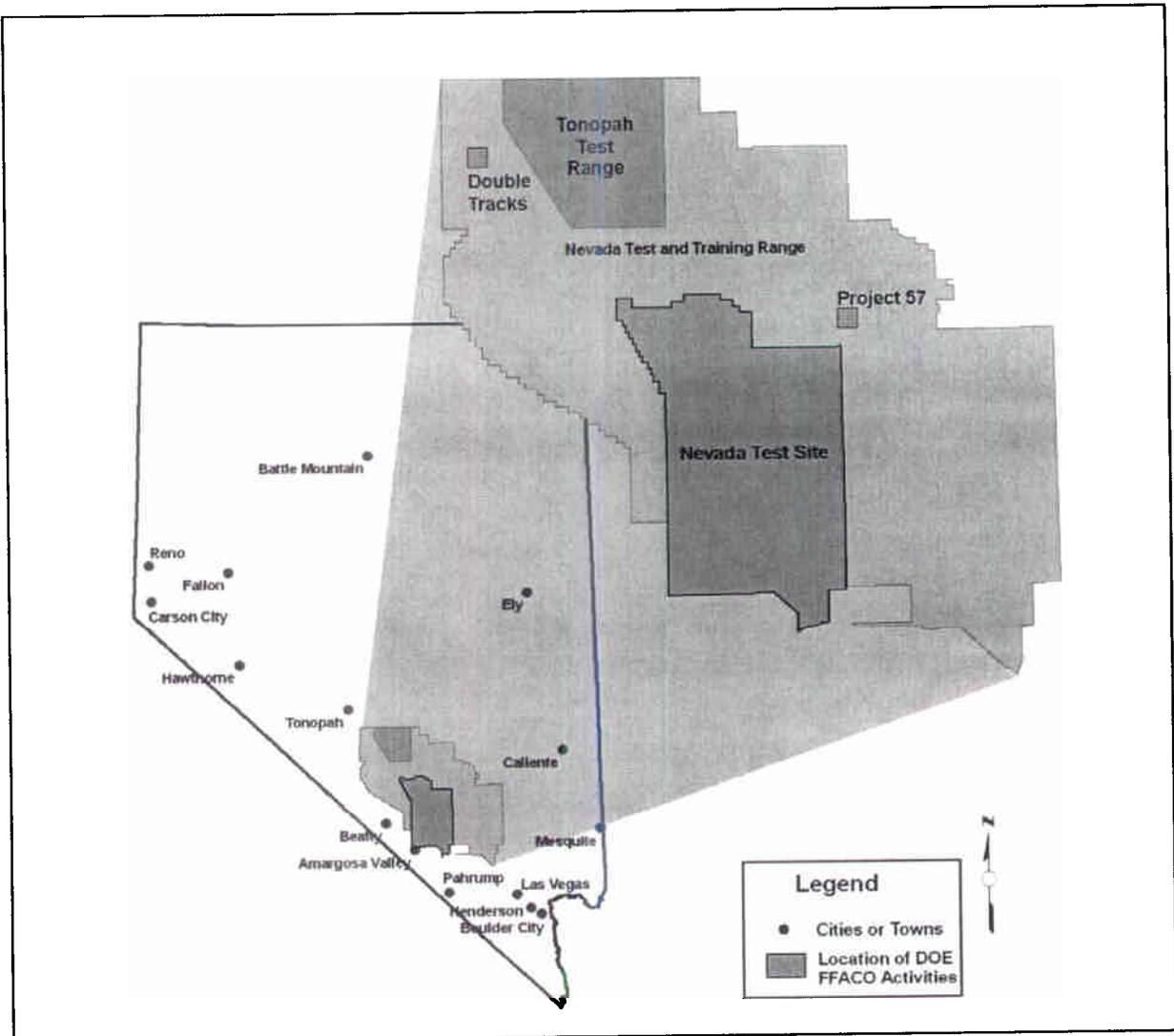


Figure 1 – Nevada Test Site and Surrounding Areas

The laws, regulations, and NSO/State of Nevada agreements with specific requirements for public interactions include the following:

- *National Environmental Policy Act (NEPA)*
- *Resource Conservation and Recovery Act (RCRA)*
- *Federal Facility Compliance Act (FFCAct)*
- *Federal Facility Agreement and Consent Order (FFACO)*

A more detailed description of environmental regulations is provided in Section 2.3.

2.1.1 Environmental Restoration Project

The NSO EM Environmental Restoration Project addresses contamination from historical nuclear weapons programs at NSO facilities and sites. The contamination resulted from nuclear testing and related support operations, nuclear rocket experiments, and non-nuclear experiments. Contaminants include radioactive materials, unexploded ordnance, gasoline, oils, solvents, and heavy metals such as lead.

Environmental Restoration Project objectives are to identify the nature and extent of the contamination and assess the potential risk the contamination poses to the public and the environment. About 2,500 potential environmental restoration sites have been identified to date and range from locations where car batteries have been discarded to craters formed by underground nuclear tests. Major environmental restoration activities include:

- **Groundwater studies** – This sub-project characterizes the effects of historic underground nuclear detonations at the NTS to produce groundwater flow and radionuclide transport models. The models will be used to determine contaminant boundaries and a future groundwater monitoring network (see Figure 2).
- **Soils remediation studies** – This sub-project characterizes contaminated surface and shallow subsurface soils on the Nevada Test Site and the Nevada Test and Training Range, including the Tonopah Test Range. Depending on the results of the characterization, an appropriate remediation activity is then conducted (see Figure 3).
- **Industrial Sites** – This sub-project characterizes and remediates historic nuclear testing support sites including disposal wells, inactive tanks, contaminated waste sites, inactive ponds, muck piles, spill sites, drains and sumps, and ordnance sites (see Figure 4 and Figure 5). Industrial Sites activities also include the deactivation and decommissioning of NTS facilities that are no longer used, will not be used in the future, and are known or suspected to be contaminated. After contamination levels have been identified and contaminants stabilized, contained, or removed, the facilities are sealed, dismantled, or converted for non-nuclear uses. Industrial Sites are located on the NTS and TTR.

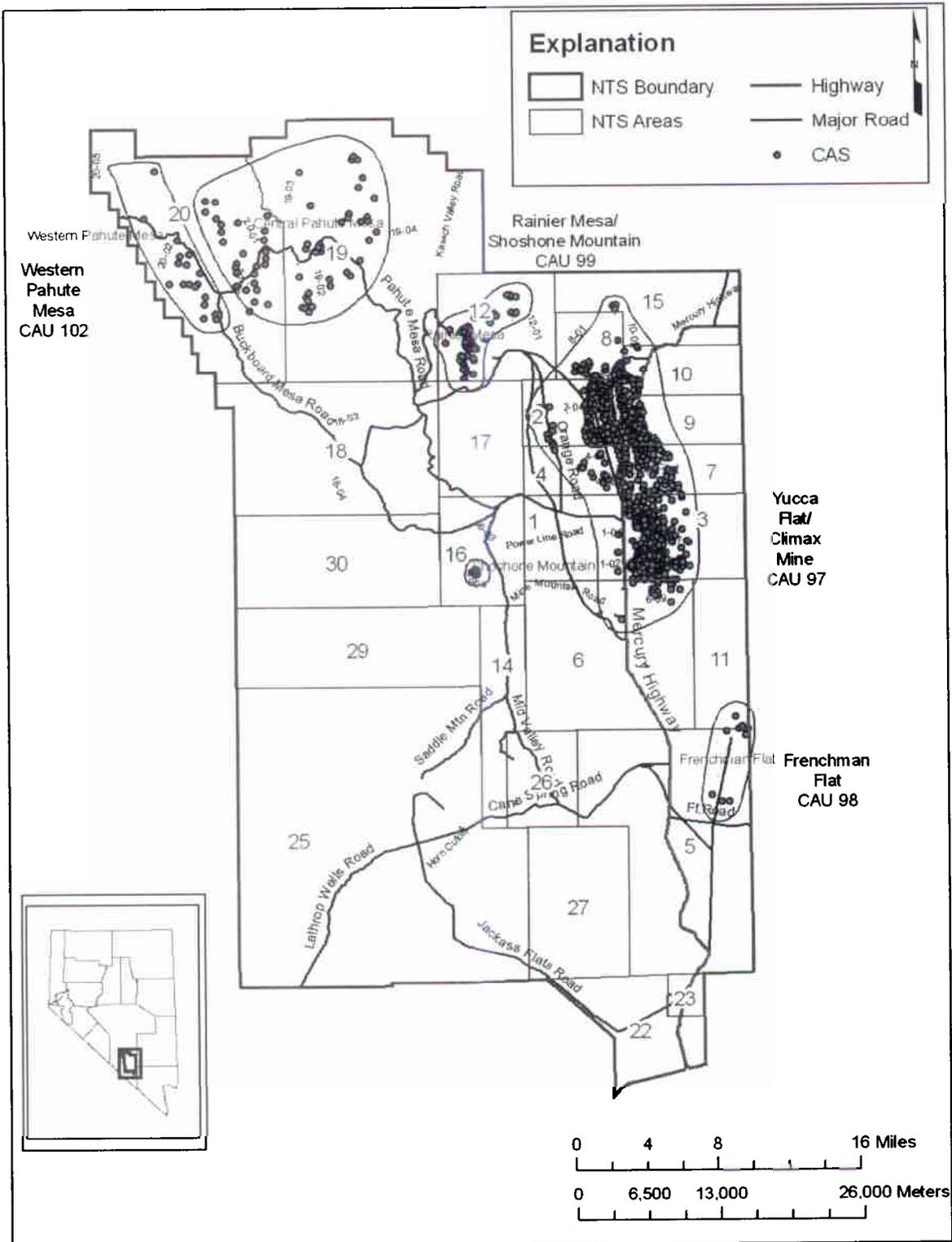


Figure 2 – Underground Test Area (UGTA) Corrective Action Sites (CAS) and Corrective Action Unit Boundaries

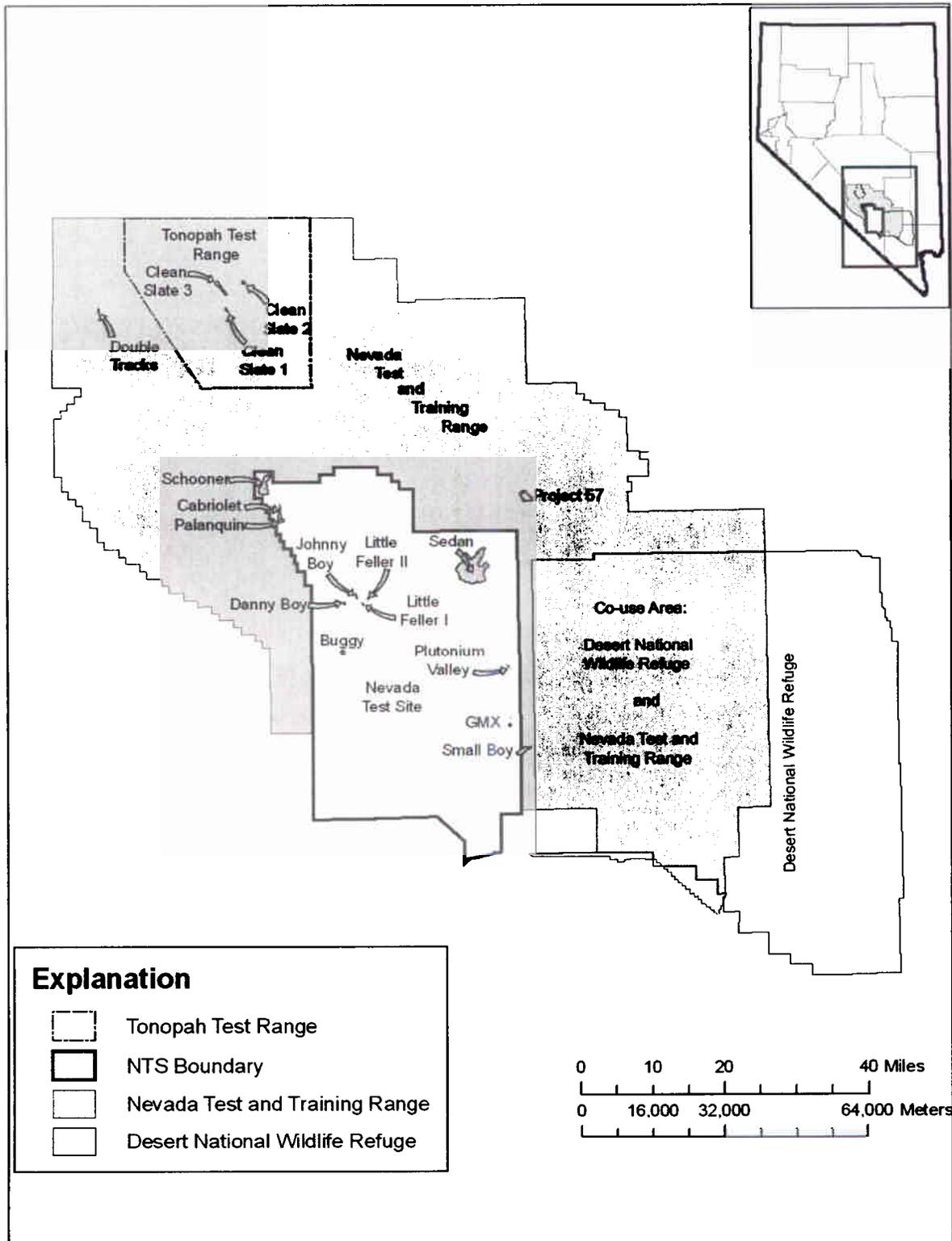


Figure 3 – Areas of Surface Soil Contamination

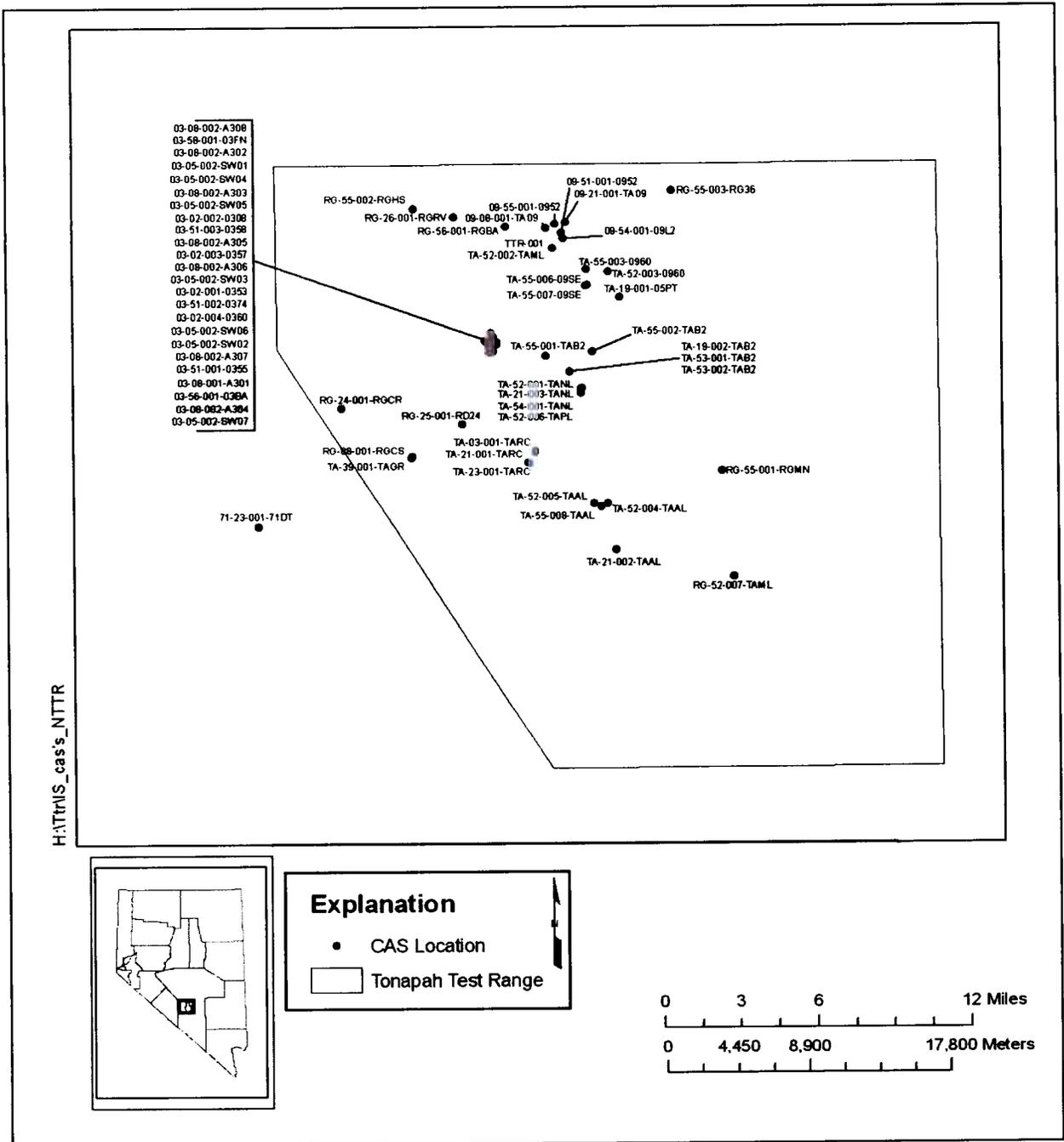


Figure 5 – Industrial Sites Corrective Action Sites at the TTR

2.1.2 Waste Management Project

The Waste Management Project is responsible for the management and disposal of low-level and mixed low-level radioactive waste from the NTS and other approved DOE and DoD facilities. The Waste Management Project also temporarily stores hazardous and transuranic waste prior to treatment and/or disposal. The objective is to protect the environment and the public's health while minimizing, treating, storing, and disposing of waste generated at DOE sites.

The above mentioned waste types are currently managed at the Area 5 Radioactive Waste Management Site located on the NTS. Engineered and excavated cells are currently used for the disposal of low-level and mixed low-level radioactive waste. Under an agreement with the State of Nevada, transuranic waste is also stored at the Area 5 Radioactive Waste Management Site until it is shipped off-site. The ultimate disposal destination for the transuranic waste is the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Hazardous waste is accumulated at the NTS and shipped off-site to a permitted treatment, storage, and disposal facility.

Related waste management activities include the following:

- **Radioactive Waste Acceptance Program** – This program ensures that approved generators sending low-level and mixed low-level radioactive waste for disposal at the NTS are capable of characterizing, managing, and transporting radioactive waste in a compliant manner.
- **Performance Assessment** – An assessment and characterization program determines the suitability of NTS sites for waste management activities. NTS waste management sites are closely monitored to make sure that wastes are properly contained within the disposal cells and that contamination is not released or spread beyond disposal site boundaries.
- **Emergency Response Training** – Highway accident response training for radiological emergencies is conducted through specially designed courses for federal, state, and local emergency personnel.
- **Transportation** – The Waste Management Project is responsible for the safe, efficient, and cost-effective packaging and transportation of NSO materials, such as radioactive and hazardous materials and wastes. Other responsibilities associated with transportation include preparing and analyzing transportation data in support of local transportation and stakeholder outreach efforts. The NSO is not responsible for the transportation of waste to the NTS from off-site generators. In turn, NSO EM encourage approved low-level and mixed low-level radioactive waste generators and their contractors to use transportation alternatives that would further minimize radioactive risk, enhance safety, and address public concerns. Other national decisions outside the scope of NSO are not covered by this Plan.

Specific waste types include the following:

- **Low-level radioactive waste** is the most common type of radioactive waste disposed at the NTS, typically consists of soil, rags, papers, equipment, solidified sludge, concrete, building materials, and discarded protective clothing contaminated with low levels of radiation. Low-level radioactive waste is currently disposed at the Area 5 Radioactive Waste Management Site located within the boundaries of the NTS (see Figure 6). The total amount of low-level waste disposed at the NTS through September 2007 is approximately 35 million cubic feet.
- **Hazardous waste** consists of toxic, reactive, or ignitable substances. Hazardous waste is not radioactive and includes materials such as waste chemicals, fuels, and paints. Hazardous waste stored at the NTS is sent off-site to licensed, commercial facilities for recycling, incineration, or disposal. If the waste contains explosive materials, it is treated on-site at the Explosive Ordnance Disposal Unit.
- **Mixed low-level radioactive waste** contains both radioactive and hazardous components. NSO EM currently operates a Mixed Waste Disposal Unit at the Area 5 Radioactive Waste Management Site which is regulated by the State of Nevada Division of Environmental Protection under interim status. Conditions set forth in the December 2005 NTS Resource Conservation and Recovery Act Part B Permit require that this Unit be limited to the disposal of 20,000 cubic meters and close within five years, whichever comes first.
- **Transuranic waste** contains radioactive isotopes heavier than uranium, thus the term “trans” (or “beyond”) uranium. This type of waste is produced during reactor fuel assembly, nuclear weapons production, and fuel reprocessing operations. Transuranic (TRU) waste radioactivity decays very slowly and requires long-term isolation. The NTS temporarily stores legacy transuranic waste in the TRU Pad cover building. DOE disposes transuranic waste at the Waste Isolation Pilot Plant near Carlsbad, New Mexico. Through calendar year 2007, the NTS shipped 1,860 drums of transuranic waste, in 48 shipments, to the Waste Isolation Pilot Plant for permanent disposal.
- **Sanitary waste** contains no hazardous or radioactive components. The NTS handles its own solid and liquid wastes using landfills and water treatment facilities similar to those found in metropolitan areas.

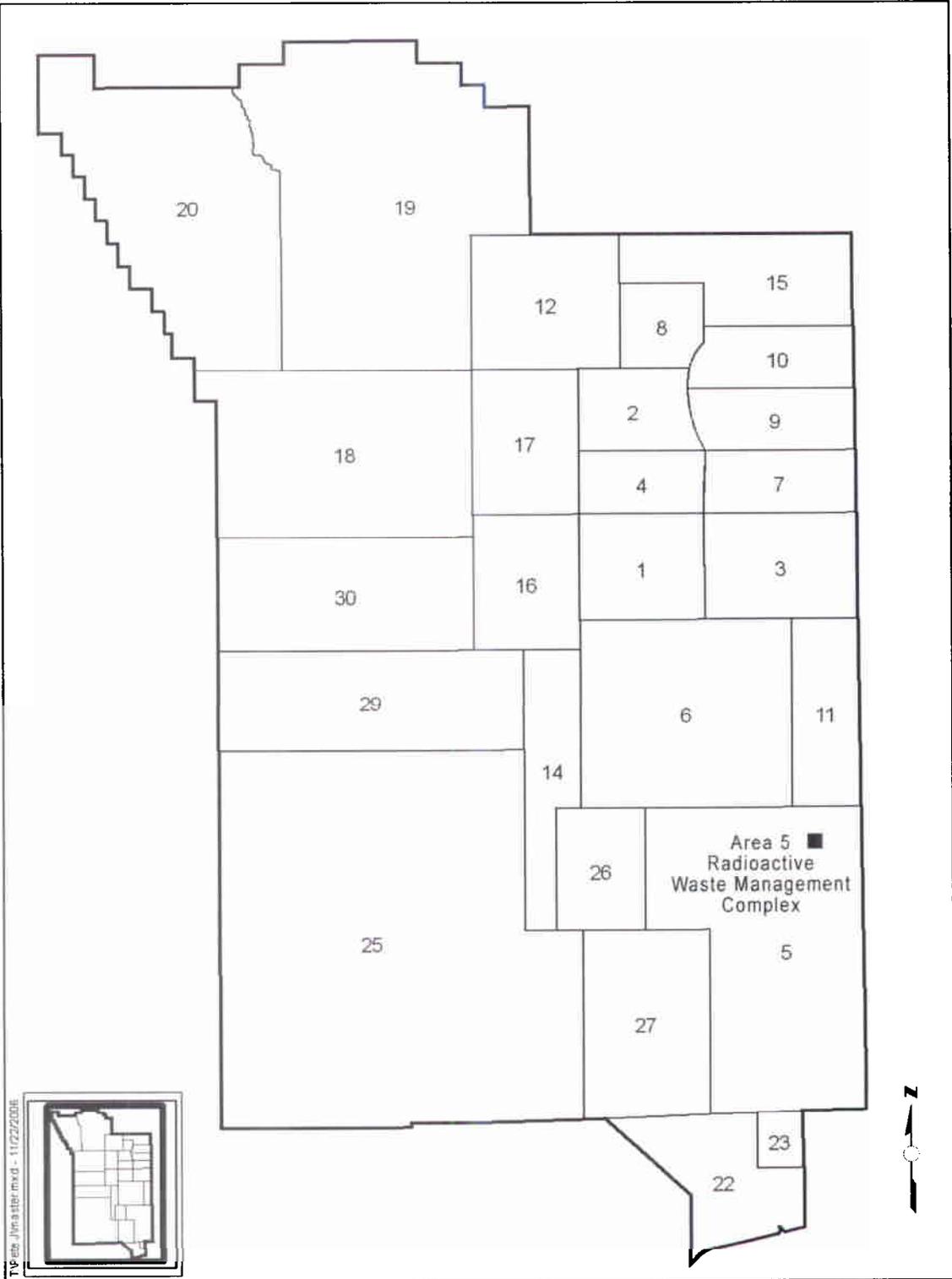


Figure 6 – Area 5 at the NTS

2.2 Public Involvement Strategy

2.2.1 Strategic Overview

Public involvement has taken many forms since testing began at the NTS. From the publicity surrounding the atmospheric tests in the 1950s, to the protests that have occurred since, the public has expressed an ongoing interest in activities at the NTS. At a national level, the Openness Policy, enacted by the former Secretary of Energy, Hazel O'Leary, in December 1993, paved the way for the declassification and availability of information and materials. The policy inspired further changes at the local levels. In 1994, DOE/NV (now NSO) conducted formal community relations' interviews to establish a dialogue with the public. The interviews helped identify participants' key concerns, attitudes, knowledge, and understanding of the EM Program at DOE/NV (now the NSO). The addition of the Community Advisory Board (CAB) for Nevada Test Site Programs and regular CAB meetings provided additional opportunities for public input. This information was candid and helpful, setting in motion a number of programs that would appeal to diverse audiences with different informational needs and interests.

2.2.2 Participation Levels

People have demonstrated varying levels of interest in NSO activities. Some individuals have specific interests and attend meetings or request materials only when the related topics address those interests. Others are satisfied to receive information through television coverage and newspaper articles. Still, there are others who take on a more active approach by joining an outreach effort and/or volunteering to serve on the CAB or on one of the Board's committees.

This public interest and involvement has been categorized at four basic levels (see Figure 7). These levels are divided as aware, informed, involved, and highly involved, and are defined as follows:

- **Aware** - Broadcast and print media are usually the first place people turn to get current, issue-oriented information. This helps increase awareness of events and activities taking place at the NTS. To facilitate this flow of information, personnel prepare news releases, schedule news conferences, conduct media interviews, and place advertisements in local newspapers. The CAB public outreach effort makes additional information available to the general public concerning topics that are covered at CAB meetings relating to various NSO EM Programs

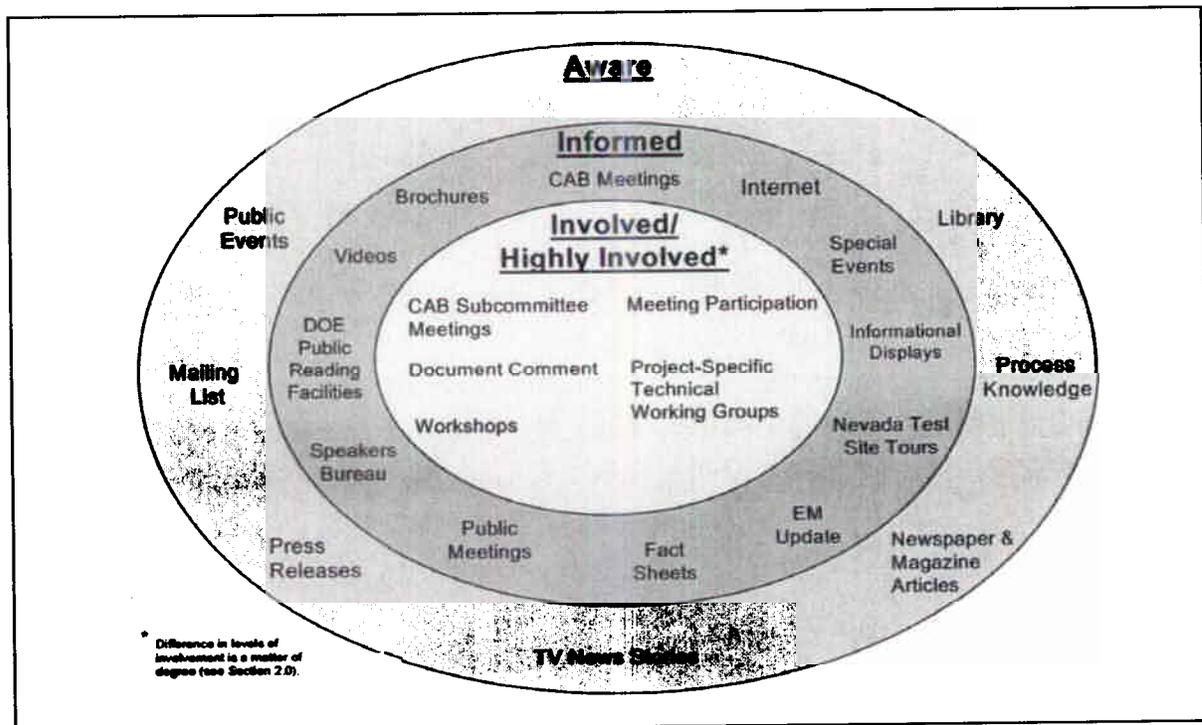


Figure 7 – Levels of Public Involvement

- Informed*** – Those individuals who actively seek out information on a particular topic, subject, or program fall into the category of wanting to become informed. Information can be attained by attending a public meeting; requesting to be added to the mailing list to receive notices of upcoming meetings or events, or to receive specific informational materials such as the EM Update publication; reading topical fact sheets, publications, and brochures; browsing NSO EM Internet sites; requesting displays for special events; touring the NTS; and requesting guest speakers for meetings, conferences, and luncheons.
- Involved*** – When attending meetings or reviewing written materials, a person is inspired to dig deeper or find answers to questions; he/she has entered the involvement phase of public participation. The search for more specific answers might result in people voicing their opinions at public meetings, participating in workshops, or serving on committees such as those offered by the CAB. Involvement requires a personal commitment and the willingness to devote free time to participate in meetings and read background materials.
- Highly Involved*** – When a stakeholder or organization invests the time and effort to attend public meetings and research projects in order to contribute to the decision-making process, this person or group is highly involved. This level of involvement typically requires researching, reviewing, and formally commenting on public documents; requesting more information or a briefing from key managers; and participating in public meetings to stay current with a project and its potential impact to the environment or public health and safety. People who are highly involved become conversant with the topic, time line, and the “language” of the program and are likely to interact frequently with NSO decision makers.

2.1.3 Opportunities to Become Aware and Informed

Those who are seeking general information regarding NSO EM can utilize a variety of resources. Some public awareness opportunities are available on an ongoing basis, while others are developed in response to a specific project or public demand. The activities are outlined below:

- Request to be added to the **NSO Environmental Management Mailing List**. NSO EM maintains a comprehensive mailing list to disseminate meeting notices and information on EM projects and activities. Names may be added or deleted to the list by contacting the NSO EM Public Involvement Task Manager at (702) 295-2836. Individuals can also be placed on the CAB's mailing list for information on upcoming CAB meetings and/or events. Names may be added or deleted to the CAB's mailing list by contacting the CAB office at (702) 657-9088.
- Browse local and national EM **Internet sites** provided by the DOE. Visit the local NSO site at <http://www.nv.doe.gov/emprograms/environment/default.htm> or the national EM site at <http://www.em.doe.gov/>. Additional information may be found on the Nevada Division of Environmental Protection (NDEP) site at <http://ndep.nv.gov/>.
- Read **fact sheets** and **other materials** that provide information about specific projects and overviews of general NSO EM activities. Copies of these products are available on the Internet at <http://www.nv.doe.gov/library/default.htm>, at the Nuclear Testing Archive public reading facility, at select Nevada public libraries, or by contacting the NSO EM Public Involvement Task Manager at (702) 295-2836.
- Read the publication, **EM Update**, which describes NSO EM activities, programs, personnel changes, CAB recommendations, and other related information. The **EM Update** is available on the NSO Internet site at <http://www.nv.doe.gov/emprograms/environment/public/emupdate.aspx>. A notice of new publications is distributed to those on the NSO EM mailing list.
- Read and listen to **news releases** and **public service announcements** that describe achievements, events, workshops, meetings, personnel changes, and other items of interest.
- Request a speaker from the **NSO Speakers Bureau**. Community, academic, civic, and professional groups are encouraged to request a speaker from the NSO staff and/or contractors to learn more about any one of many environmental topics. To request a speaker, contact the Office of Public Affairs at (702) 295-3521.
- Attend **public outreach** events that feature NSO EM exhibits and displays. EM displays can also be requested for use at schools, libraries, conferences, and other special events.
- Take part in an **NTS tour**. Monthly public tours of the NTS are conducted and provide a historical background and information about activities at the NTS. Additional information about the tour, registration and schedules can be found by visiting the NSO Internet site at <http://www.nv.doe.gov/nts/tours.htm> or by calling (702) 295-0944.

- **Low-Level and Mixed Low-Level Waste Transportation Routing Reports** are distributed on a quarterly basis and contain a variety of information including the number of shipments and routes taken to the Nevada Test Site. The reports are available on the NSO Internet site at <http://www.nv.doe.gov/emprograms/environment/wastemanagement/quarterlyreports.aspx> or by contacting the NSO Transportation Coordinator at (702) 295-4800.

2.2.4 Opportunities to Become Involved

The following opportunities are available for people or organizations seeking to become involved in specific projects or activities:

- Visit and use the **Public Reading Facilities**. The facilities contain complete information on EM Program projects and activities. The reading room locations are provided in Section 4.4.
- Attend **CAB meetings** that highlight specific projects and subjects. Such meetings may also provide interested citizens with updates of ongoing issues, such as budget activities. Visit <http://www.ntscab.com> for meeting times and dates.
- Provide **public comment and review** of documents such as *National Environmental Policy Act* assessments and plans required by the *Federal Facility Agreement and Consent Order (FFACO)*. A list of FFACO Public Notices and information on how to review documents and submit comments is available on the NSO Internet site at <http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm>.
- Request one-on-one or small **informal meetings and briefings** by EM to receive timely and ongoing information about such topics as the budget process, cleanup activities, or waste shipments to the NTS.
- Become involved in **educational outreach programs** in which NSO participates, such as Operation Clean Desert.

2.2.5 Opportunities to Become Highly Involved

NSO EM provides various opportunities for the public to become involved in the EM decision-making process, often seeking input from the public, where appropriate and feasible to incorporate feedback. Such opportunities arise through participation in workshops, NSO EM stakeholder groups (such as the CAB) and the development of topic-specific stakeholder plans. Whenever possible, NSO EM offers feedback to the public as to the manner in which its input has been used.

- **Community Advisory Board** – In 1994, the CAB for Nevada Test Site Programs was officially approved by the U.S. Secretary of Energy. The CAB operates under a national federal charter approved by the Office of Management and Budget and the General Services Administration. As such, it falls under provisions of the *Federal Advisory Committee Act*. The CAB, which is composed of 15 to 20 individuals, was established to enhance public involvement and input-related to NSO EM activities. Membership is open to all Nevada

residents. All meetings are open to the public and the public is strongly encouraged to attend. Liaisons to the CAB include representatives from EM, the Defense Threat Reduction Agency, the State of Nevada, Nye County, and the National Park Service. Requests to be added to the CAB's mailing list should be sent to ntscab@nv.doe.gov or by calling (702) 657-9088.

The CAB provides a convenient and accessible way for individuals or organizations to explore public participation opportunities at all involvement levels. Those wishing to become aware or informed may attend without actively participating in discussions or question and answer sessions. However, those with a keen interest in specific activities or projects may take a more active role in meeting participation or volunteer to be on one of the CAB committees, which focus on such topics transportation, waste disposal, groundwater, and budget prioritization. To submit an application for membership on the CAB, please contact the CAB office at (702) 657-9088 or visit www.ntscab.com.

- **Public Workshops** provide a forum for information gathering and dialogue with key decision makers and other groups and organizations. Workshops that address specific issues, such as each fiscal year's scope of work, planning, budget, and project prioritization, provide mechanisms for the public to offer input regarding general programmatic decisions. Notification of such opportunities is sent to individuals who are included on the NSO EM and CAB mailing list.
- **Stakeholder Involvement Plans** are produced as specific sub-projects are identified and which may have more of a potential to impact the public. These plans contain a description of the sub-project, key dates for project development, and specific opportunities for stakeholders to become highly involved in the issue.

2.3 Regulatory Drivers and Agreements

An essential part of the public involvement strategy is to inform the public about laws, regulations, and agreements affecting environmental management. Whether entered into voluntarily or required by law, agreements provide the basis for much of the work conducted by the NSO.

2.3.1 Federal Facility Agreement and Consent Order

The FFACO of May 1996 is the dominant regulatory driver for NSO EM environmental restoration activities in Nevada. It sets the framework to prioritize specific restoration projects based on risk, agency regulations, and public input. A list of corrective action sites with activities currently in progress can be found in Appendix III of the FFACO. The FFACO also establishes a technical strategy for cleanup activities, maximizes the opportunity to complete multiple corrective actions, and provides for public involvement activities.

Under the FFACO, the NSO and DoD propose priorities and discuss them with State of Nevada representatives who make recommendations. These recommendations are presented to the

public and the CAB for review. Following public input, the State, NSO, and the DoD will develop a final prioritization of corrective action units for investigation and remedial action.

Throughout the corrective action process, documents are written to detail activities needed to ensure the completion of the corrective action, as illustrated in Figure 8. Figure 8 also describes the public involvement and/or information opportunities that arise during the FFACO corrective action process. The public, as shown in the figure, can learn about the availability of these FFACO documents by attending CAB meetings, by visiting the NSO EM Internet website at <http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm>, or by contacting the NSO EM. A brief description of each document is listed below:

- **Corrective Action Investigation Plan** – provides or references all specific information for planning investigation activities associated with corrective action units or sites. This document must include or reference the management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information needed to conduct the investigation.
- **Corrective Action Decision Document/Corrective Action Plan (CADD/CAP)** – a document that combines both the results of the Corrective Action Investigation (normally presented in the CADD), and the remediation plan (normally presented in the CAP). The document is developed as a time-saving method when the compliance boundary is well defined, and the remediation alternatives are limited.
- **Corrective Action Unit Work Plan** – an optional planning document that provides information for a corrective action unit or collection of units where significant commonality exists. This plan may be developed to eliminate redundant Corrective Action Unit documentation and may contain management, technical, quality assurance, health and safety, public involvement, field sampling, and waste management information. Common information will be referenced in appropriate Corrective Action Investigation Plans.
- **Corrective Action Decision Document** – provides a summary of the corrective action investigation and describes the selected remedy and the rationale for its selection, documenting remedial alternatives, ranging from no action to clean closure.
- **Corrective Action Decision Document/Closure Report** – a document developed when results from the corrective action investigation indicate that contaminant concentrations are below the level of regulatory concern. The document provides the rationale for no further corrective action and may recommend closure with or without use restrictions or long-term monitoring.

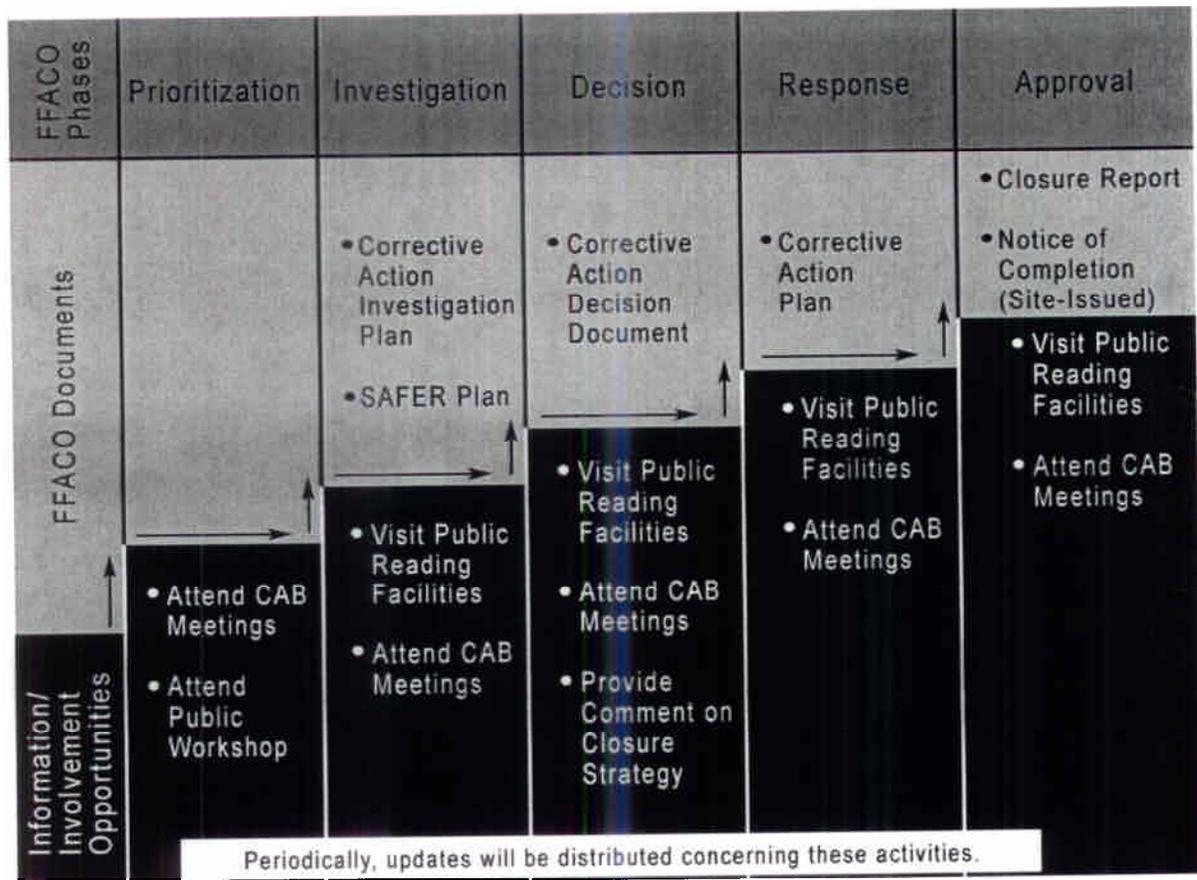


Figure 8 - FFACO Corrective Action Process

- **Corrective Action Plan** – prepared when the Corrective Action Decision Document requires a corrective action. The Corrective Action Plan outlines the method for implementing the selected corrective action alternative and explains how the action will be completed.
- **Streamlined Approach for Environmental Restoration (SAFER) Plan** – provides a process for initiating and completing corrective actions at units where enough information exists to select the appropriate remedy before completing an investigation. The plan will incorporate the essential elements of the investigation plan, the decision document, and the action plan.
- **Closure Report** – verifies that the completed corrective action was conducted in accordance with the approved action plan and provides (to the State) all necessary support data to confirm the appropriate action took place.
- **Notice of Completion** – a State-issued document (usually in the form of a letter) signifying the completion of the corrective action in accordance with approved plans.

Various documents associated with the corrective action process are made available in the public reading facilities.

2.3.2 Federal Facility Compliance Act-Consent Order

The *Federal Facility Compliance Act-Consent Order* (FFCAct-CO), an amendment to the *Resource Conservation and Recovery Act* (RCRA), requires preparation of a Site Treatment Plan for the treatment of legacy mixed-radioactive waste. Legacy mixed-radioactive waste streams are subject to the Land Disposal Restrictions standards contained in the RCRA. The State of Nevada signed the *Federal Facility Compliance Act-Consent Order* and approved the *NTS Site Treatment Plan* in March 1996. This Consent Order contains schedules derived from the Site Treatment Plan and identifies specific treatment facilities for treating the identified mixed-waste streams on the NTS. If the NTS complies with the Site Treatment Plan and Consent Order, then it is exempt from fines and penalties for mixed-waste storage prohibitions under the RCRA.

2.3.3 Agreement in Principle/Joint Low-Level Waste Oversight Agreement

The NSO and the State of Nevada entered into an *Agreement in Principle* which is intended to assure the citizens of the State of Nevada that NSO protects the public health and safety as well as the environment through existing programs and commitments. State of Nevada officials validate this effort through a program of independent monitoring and oversight of NSO daily operational activities. An appendix to the Agreement in Principle is the *DOE/NV-State of Nevada Joint Low-Level Waste Oversight Agreement*, a cooperative oversight arrangement between the NSO and the State of Nevada which allows the State an increased role in monitoring the management of low-level and mixed low-level radioactive wastes generated and disposed at the NTS. By entering into the agreement, the NSO and the State agree to share information concerning waste types and quantities in addition to any general information that allows the State to conduct detailed oversight of waste disposal operations.

2.3.4 Other Regulatory Drivers

Throughout EM processes, the NSO is bound by various federal and state laws. Three of these laws (the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act, and the National Environmental Policy Act [NEPA]) are highlighted below.

The *Resource Conservation and Recovery Act* (RCRA) of 1976 is a comprehensive program for regulating and managing hazardous wastes, nonhazardous solid wastes, underground storage tanks, and for promoting the use of recycled and recovered materials. RCRA sets a federal policy of limiting land disposal of wastes in favor of other disposal methods, and encourages solid waste management practices that promote environmentally sound disposal methods, maximizes the reuse of recoverable resources, and fosters resource conservation. Federal agencies are required to comply with all applicable federal, state, and local RCRA regulations.

The NTS RCRA Part B Permit was renewed by the State of Nevada Division of Environmental Protection in December 2005. This permit regulates the Hazardous Waste Storage Unit, Explosive Ordnance Disposal Unit, and Mixed Wasted Disposal unit, all of which are located within the boundaries of the NTS. In 2005, the Mixed Waste Disposal unit section of the permit was changed to allow acceptance of off-site Mixed Low-Level Waste.

The *Comprehensive Environmental Response, Compensation, and Liability Act*, as amended by the *Superfund Amendments and Reauthorization Act*, provides for remediation of, and emergency response for, hazardous substances released into the environment and for remediation of hazardous waste sites that present a substantial danger to public health and welfare. Title III, or the *Emergency Planning and Community Right-to-Know Act* of 1986, was added to the *Superfund Amendments and Reauthorization Act* as a free-standing law to address “extremely hazardous substances,” and reporting of Occupational Safety and Health Administration-defined “hazardous chemicals.” The *Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements* enacted in 1993 require all federal agencies to comply with certain planning and notification provisions of the *Emergency Planning and Community Right-to-Know Act*.

The *National Environmental Policy Act* (NEPA) was passed in 1969 and requires federal agencies to fully consider and document all environmental consequences before beginning new programs or constructing new facilities. This applies to any activity which affects the government and is funded or approved by a federal agency. The depth of analysis and level of documentation under NEPA are dependent upon the potential for significant environmental impacts resulting from a proposed action and may range up to an environmental impact statement (EIS). An EIS presents a very detailed consideration of a proposed action or program and its potential impacts. For an EIS, NEPA requires a significant amount of public involvement, including public input during the scoping process and public hearings associated with the Draft EIS.

Preparation of the *Environmental Impact Statement for the Nevada Test Site and Other Off-Site Locations in the State of Nevada* (NTS EIS), which examines alternatives for current and future missions at the NSO sites in Nevada, was initiated in August 1994. Approval of the final NTS EIS occurred in the fall of 1996. The Record of Decision for the NTS EIS was issued on December 9, 1996, and describes in detail the decisions reached for operation of the NSO sites and facilities in Nevada. A supplement analysis of the NTS EIS was completed in July 2002 and found that current EM activities were consistent with the 1996 NTS EIS descriptions and analyses. The NSO is currently evaluating the existing NTS EIS and other NEPA documentation

to determine future required actions. A determination and any subsequent analysis will be made in fiscal year 2007.

Generally, for proposed actions for which the severity of environmental impacts are unknown but thought to be insignificant, the agency may prepare a less rigorous level of documentation than the EIS, the environmental assessment (EA). The EA is a concise public document used to determine if a proposed action would, in fact, have significant impacts. If the analyses in the EA demonstrate that potential impacts would be insignificant, the agency may prepare a "Findings of No Significant Impact" and proceed to implement the project. If the EA identifies potentially significant environmental impacts, the agency must then prepare an EIS before implementing an action. Public review requirements for an EA are generally less stringent than for an EIS, and no public hearings are necessary. Final EAs and "Findings of No Significant Impact" are made available to the public and are placed in public reading facilities.

Proposed actions that fit within certain predefined classes of action and meet other rigorous requirements may be considered categorically excluded from further consideration under NEPA. If a project is categorically excluded, no further analyses or documentation would be required for purposes of NEPA.

Under NEPA, information must be made available to state and federal agencies, potentially affected American Indian tribes, and the public before decisions are made. The NEPA process depends on public involvement which impacts decision making more directly as people take a more hands-on interest in environmental issues.

For more detailed information regarding laws and regulations, contact the librarian at the **Nuclear Testing Archive Public Reading Facility** at (702) 295-1628. Reading rooms are currently located at Southern Nevada Public Reading Facility, c/o Nuclear Testing Archives, 755 East Flamingo Road, Las Vegas, Nevada, 89119 (telephone [702] 295-1628), and at the Northern Nevada Public Reading Facility, Nevada State Library and Archives, 100 N. Stewart Street, Carson City, Nevada, 89701-4285 (telephone [775] 684-3326). Web site information may also be obtained through the reading facilities.

3.0 U.S. Department of Energy Legacy Management

3.1 Legacy Management Overview

Activities of the U.S. Department of Energy (DOE) and predecessor agencies, particularly during the Cold War, left a legacy of environmental impact at more than 100 sites throughout the country. DOE has the responsibility to permanently and safely dispose of the radioactive waste and to protect human health and the environment.

DOE created the Office of Legacy Management (LM) in December 2003 to effectively and efficiently manage the environmental and human legacy issues related to the U.S. Government's Cold War nuclear weapons program for current and future generations. LM's responsibilities include long-term surveillance and maintenance, records management, work force restructuring and benefits continuity, property management, land use planning, stakeholder relations, and community assistance.

3.2 Nevada Offsites

Nine nuclear test sites (collectively called Nevada Offsites) in five states were transferred from the DOE Office of Environmental Management to LM in 2006 for long-term surveillance and

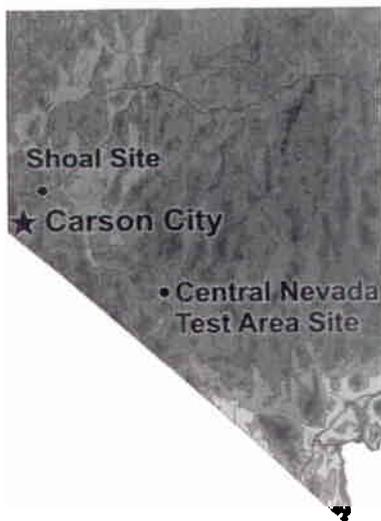


Figure 10 – Shoal Site and Central Nevada Test Area Locations



Figure 9 – Nevada Offsites Locations

maintenance. The two Offsites in the state of Nevada are the Central Nevada Test Area (CNTA) and the Shoal Site.

The Central Nevada Test Area was developed as an alternative location to the Nevada Test Site for subsurface tests of high-yield nuclear explosive devices. The CNTA is located in the Hot Creek Valley of south central Nevada, about 60 miles northeast of Tonopah. The site is at an elevation of 6,100 feet above sea level and consists of three parcels totaling 2,560 acres. The parcels are spaced about three miles apart

from each other along a roughly north-south line. The CNTA is on lands administered by the Bureau of Land Management and the Forest Service and managed by DOE.

An underground nuclear test at the Shoal Site was conducted in 1963 to evaluate granite as a test medium and to determine if seismic waves generated by the explosion could be differentiated from seismic waves generated by naturally occurring earthquakes. No further tests were conducted at the Shoal Site. The site occupies 2,560 acres in the northern part of the Sand Springs Mountain Range in southern Churchill County, western Nevada. The nearest town is Fallon, located 30 miles northwest of the site. The Shoal Site is on land administered by the Bureau of Land Management. A land withdrawal allows DOE and the U.S. Department of Defense (DoD) to manage the site.

3.3 Public Involvement Strategy

DOE continues its public involvement efforts as the focus of the cleanup mission turns to long-term operation, monitoring and maintenance of the sites. The cleanup at DOE sites and the plans for long-term management of the sites have benefited and are expected to continue to benefit from public involvement dialogue among state and federal regulators, stakeholder organizations, elected officials, and members of the general public.

The following resources are available to those who are seeking information about LM:

- Information about LM is available on the LM website at <http://www.lm.doe.gov/>. The LM website contains information about the LM organization, policies, guidance, reports, and programs. Specific information about CNTA and Shoal sites is available at <http://www.lm.doe.gov/land/sites/nv/central/central.htm> and <http://www.lm.doe.gov/land/sites/nv/shoal/shoal.htm>. Information on these web pages includes site records, fact sheets, and a link to the Geospatial Environmental Mapping System (GEMS) for each site.
- The LM Program Update is a quarterly publication that reports news about LM's activities. The LM program Update is available on the LM website at http://www.lm.doe.gov/pro_doc/updates/updates.htm. Individuals can also be added to the LM mailing list to receive the LM Program Update. To add a name to the LM Program Update mailing list, email LM@hq.doe.gov, or fax a request to (202) 586-1540.
- Fact sheets and information about the CNTA and Shoal sites are available by contacting Public Affairs at (970) 248-6363 or (970) 248-6000, or by sending an email request to jmiller@lm.doe.gov.
- To request LM documents, fill out the electronic document request form at <http://lts1.gjo.doe.gov/forms/documentrequest.cfm>.

4.0 Defense Threat Reduction Agency

4.1 DTRA Overview

The Defense Threat Reduction Agency (DTRA) is a U.S. Department of Defense organization with a mission of safeguarding America and its allies from Weapons of Mass Destruction (chemical, biological, radiological, nuclear, and high yield explosives) by providing capabilities to reduce, eliminate, and counter the threat, and mitigate its effects. As a tenant on the DOE's Nevada Test Site (NTS), DTRA and its predecessor agencies (the Defense Nuclear Agency and the Defense Special Weapons Agency) conducted nuclear weapons effects testing on the NTS from 1962 to 1992. Approximately 45 tests were conducted in six different tunnels on the NTS.

4.1.1 DTRA Environmental Restoration

The DTRA Environmental Restoration (ER) Program addresses contamination from the historical DTRA nuclear weapons effects testing at the NTS. The contamination resulted from nuclear testing and related support operations. Contaminants include radioactive materials, unexploded ordnance, gasoline, oils, solvents, and heavy metals such as lead. Major environmental restoration activities include:

- **Muckpiles** – Muckpiles were constructed at the portal of each tunnel. Muckpiles may contain:
 - Mining waste rock
 - Construction debris
 - Low-level radioactive waste (generated during re-entry)
 - Hazardous waste (primarily lead)
 - Hydrocarbons
- **Containment ponds** – Ponds at four of the tunnels controlled tunnel effluent generated during mining, construction and re-entry.

4.2 Public Involvement Strategy

Those who are seeking information regarding DTRA ER activities can utilize a variety of resources, outlined below:

- Read NSO publications, such as *EM Update*. The *EM Update* has profiled the DTRA ER program in the past and is available on the NSO Internet site at <http://www.nv.doe.gov/emprograms/environment/public/emupdate.aspx>.
- Read and listen to **news releases** and **public service announcements** that describe DTRA programs, current environmental restoration activities, and other items of interest.

- Take part in an **NTS tour**. Monthly public tours of the NTS are conducted and provide a historical background and information about activities at the NTS. Additional information about the tour, registration and schedules can be found by visiting the NSO Internet site at <http://www.nv.doe.gov/nts/tours.htm> or by calling (702) 295-0944.
- Visit and use the **Public Reading Facilities**. The facilities contain complete information on DTRA Environmental Restoration projects and activities. The reading room locations are:
 - Nuclear Testing Archives, Nevada State Library & Archives
 - 755 East Flamingo Road, Las Vegas, 100 North Stewart Street, Carson City
- Attend **CAB meetings**. Visit <http://www.ntscab.com> for meeting times and dates.
- Provide **public comment and review** of DoD/DTRA documents required by the *Federal Facility Agreement and Consent Order (FFACO)*. A list of FFACO Public Notices and information on how to review documents and submit comments is available on the NSO Internet site at <http://www.nv.doe.gov/emprograms/environment/restoration/ffaco.htm>.

5.0 Conclusion

This Plan details the various mechanisms that interested individuals, organizations, and stakeholders can use to gain knowledge about FFACO activities conducted by the NSO. Furthermore, the Plan offers communication techniques that will appeal to people with varying levels of interest. The overall goal of the Plan is to reflect the FFACO parties' commitment to involve the public as projects are developed and decisions are made.

The Plan represents a culmination of comments and suggestions that were offered by the public, and attempts to satisfy those that are most relevant. For the most part, the public is asking for clear, understandable summaries of technical data as well as general background information. Responding to this request, the Plan not only offers clear, concise descriptions of projects, but also details public involvement opportunities and communication channels that can enhance the learning process for the layperson. As FFACO parties' strives to accommodate the perspectives of both technical and non-technical audiences, further efforts are being made to include easy-to-read summaries in all documents. In keeping with public requests, the Plan also makes available crucial background data, such as historical and regulatory information, to help the audience relate to the "big picture" or overall program, project, or sub-project objectives.

Public participation, which often provides FFACO parties' with the insight needed to develop programs and prioritize work, is important at every level of the decision-making process. The Plan describes a number of opportunities for the public to become part of that process. FFACO parties update the plan as programs change and as the public identifies ways to make our programs and activities more effective. Please take the time to share your comments with us so that the Plan can continue to reflect your needs.

6.0 References

U.S. Department of Energy, Nevada Operations Office. 1996. Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada, DOE/EIS 0243, August. Las Vegas, NV.

7.0 Contacts

For more information on any of these topics, please contact:

Kelly Snyder
Public Involvement Task Manager
Environmental Management
U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
P.O. Box 98518
Las Vegas, NV 89193-8518
(702) 295-2836
snyderk@nv.doe.gov

Jack Craig
Office of Site Operations
U.S. Department of Energy Office of Legacy Management
2597 B ¾ Road
Grand Junction, CO 81503
(412) 386-4754
jcraig@lm.doe.gov

Chief, Nevada Operations
Defense Threat Reduction Agency
Nevada Operations
P.O. Box 208
Mercury, NV 89023
(702) 295-7645

Attachment 1: Overview of the Nevada Test Site

History of the Nevada Test Site

For more than 50 years, the primary mission of the Nevada Test Site was to conduct field testing using both nuclear and conventional explosives. NTS was established in 1950 when President Harry Truman authorized the designation of a continental atomic testing area. In addition to weapons tests, areas at the NTS have been utilized for various secondary missions, including neutron and gamma-ray interaction studies; open-air nuclear reactor, nuclear engine, and nuclear furnace tests; hazardous materials spill response testing; and experiments conducted by the U.S. Department of Defense involving radioactive and nonradioactive materials. In the 1950s, atmospheric tests were carried out at the NTS until the Limited Test Ban Treaty went into effect in 1963, ending testing activities in the atmosphere, the oceans, and space. After July 1962, all nuclear tests in the United States were conducted underground, most of them at the NTS. Following a Presidential mandate, nuclear weapons testing was suspended in October 1992, with a stipulation that a readiness posture must be maintained.

To date, there have been 1,054 nuclear tests conducted by the United States, 928 of which were performed at the NTS. These operations generated residual radioactive and hazardous waste that contaminated the surface and subsurface environment. DOE established the Environmental Management Program to address the issue of remediating and disposing of accumulated waste and contamination.

The primary mission of the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NSO) has shifted from nuclear testing to stockpile stewardship. Activities at the NTS also reflect NSO's changing mission. Work conducted at the NTS now focuses on subcritical and other weapons physics experiments, emergency management and test readiness activities, environmental restoration, low-level radioactive waste management, and work for national security organizations and experimental programs. In an effort to further diversify opportunities at the NTS, NSO has developed partnerships with private industry, national laboratories, and other federal, state, and local entities to develop new technologies.

The Environment at the NTS

The NTS is located approximately 65 miles northwest of Las Vegas. Located within the Great Basin, the NTS is home to a diverse and complex mosaic of plant and animal communities representative of both deserts and the transition zone between the deserts. Some 700 species of plants have been found across the NTS. Although extensive surveys over most of the NTS have been conducted, no plants have been identified as threatened or endangered.

Nearly 2,000 types of insects, birds, animals, and reptiles inhabit the NTS. Wild horses range over areas of the NTS. One bald eagle and one peregrine falcon, listed as endangered by the State of Nevada, have been seen on the NTS. The only animal species found on the NTS that is listed as threatened by the State of Nevada and the U.S. Fish and Wildlife Service is the desert tortoise. About eight percent of the NTS has been disturbed by testing and other support activities. The remaining 92 percent supports typical, regional plant, and animal life.

The Nevada Test and Training Range provides a buffer zone on the east, north, and west borders of the NTS and the Bureau of Land Management oversees the land bordering the southern and southwestern boundaries of the NTS. This unpopulated area covers some 5,470 square miles, making it one of the largest contiguous unpopulated land areas in the United States.

Attachment 2: Environmental Management Information Request Form

If you are not currently on the Environmental Management electronic mailing list and would like to receive the *EM Update* and Community Advisory Board meeting announcements, please provide the following information:

Name: _____

Company Name: _____

Street/Box/Apt. No.: _____

City: _____ **State:** _____

Zip: _____

Email: _____

**To: Kelly Snyder
Environmental Management
U.S. Department of Energy
P.O. Box 98518
Las Vegas, Nevada 89193-8518**

Attachment 3: Environmental Management Product Listing

Environmental Management

- EM Update publication/newsletter
- Environmental Management Public Outreach* brochure
- Environmental Management (Overview)*
- Environmental Management Speakers Bureau* brochure
- Environmental Management: An Overview* video

Environmental Restoration

- Environmental Restoration (Overview)* fact sheet
- Groundwater Studies & the Underground Test Area Project* video
- Groundwater...at the Nevada Test Site* fact sheet
- Industrial Sites Project...an Approach to Cleanup* fact sheet
- Industrial Sites...a Success Story* fact sheet
- Innovation, Remediation, Restoration: "All in a Day's Work for Industrial Sites Workers"* video
- Soils Project...an Approach to Cleanup* fact sheet
- Tonopah Test Range* fact sheet
- Underground Test Area Project Questions and Answers*

Waste Management

- Low-Level Waste...at the Nevada Test Site* fact sheet
- Mixed Low-Level Waste...at the Nevada Test Site* fact sheet
- Radioactive Waste Acceptance Program at the Nevada Test Site* fact sheet
- Transporting Low-Level Waste to the Nevada Test Site* brochure
- Transuranic Waste...at the Nevada Test Site* fact sheet
- Waste Management at the Nevada Test Site (11/03)* video
- Radioactive Waste Management* fact sheet
- Welcome to the Area 5 Radioactive Waste Management Complex* brochure

Miscellaneous

- Federal Facility Agreement and Consent Order* fact sheet
- Planning and Budgeting for the Future* fact sheet
- Regulatory Requirements and Agreements* fact sheet

Attachment 4: Legacy Management Product Listing

Legacy Management

- LM Program Update publication/newsletter
- LM Strategic Plan
- 2007 LM Strategic Plan Brochure
- LM Brochure
- LM Public Outreach Fact Sheet
- Central Nevada Test Area Fact Sheet
- Shoal, Nevada, Fact Sheet



STATE OF NEVADA
OFFICE OF THE ATTORNEY GENERAL

100 North Carson Street
Carson City, Nevada 89701-4717

CATHERINE CORTEZ MASTO
Attorney General

RANDAL R. MUNN
Assistant Attorney General

April 26, 2007

Samuel Bodman, Secretary
United States Department of Energy
Forrestal Building
1000 Independence Avenue S.W.
Washington, D.C. 20585

Re: Nevada's Objections to DOE's Proposal to Dispose of Depleted Uranium Oxide at the Nevada Test Site

Dear Secretary Bodman:

The Department of Energy (DOE) has recently issued a proposal¹ for the disposal of huge quantities (7.2 to 8.1 million cubic feet) of depleted uranium conversion product generated from DOE's Paducah, Kentucky, and Portsmouth, Ohio, depleted uranium hexafluoride conversion facilities. DOE has designated the Nevada Test Site (NTS) as one of two sites under consideration for such disposal, the other being a commercial facility operated by Energy Solutions LLC (formerly Envirocare) in Clive, Utah. DOE has indicated that NTS is its preferred disposal location.

As Nevada's chief legal officer, I am writing to inform you that DOE's proposal for use of NTS constitutes a plain violation of law and is contrary to DOE's long-standing agreement with Nevada. For the reasons discussed below, this office is prepared to seek immediate injunctive relief to block any such disposal at NTS.

¹ "Notice of Availability of a Draft Supplement Analysis for Disposal of Depleted Uranium Oxide Conversion Product Generated From DOE's Inventory of Depleted Uranium Hexafluoride," DOE/EIS-0359-SA1 AND DOE/EIS-0380-SA1, 72 Fed. Reg. 15963, 15969-71 (April 3, 2007).

Samuel Bodman, Secretary
April 26, 2007
Page 2

DOE's 1996 NTS site-wide Environmental Impact Statement (EIS)² did not analyze impacts from disposal at NTS of the wastes from DOE's Depleted Uranium Hexafluoride project. However, a 2002 DOE "Supplement Analysis"³ (SA) analyzed the possible need for a supplemental site-wide EIS and considered the prospect of disposal at NTS of 2.1 million cubic feet of depleted uranium oxide conversion product between the years 2002 and 2011. This quantity equates to approximately 6 to 7 years of operation for the two DOE conversion facilities. The SA concluded that disposal at NTS of 2.1 million cubic feet would not require a supplemental EIS, but that

[A]dditional site-specific NEPA analyses would be necessary to support any future DOE decision to dispose additional depleted uranium oxide conversion product in volumes beyond 60,000 cubic meters (2.1 million cubic feet). Accordingly, disposal of the total volume of depleted uranium oxide conversion product to be generated by the DUF6 conversion project will be addressed as part of the upcoming review and evaluation of the NTS site-wide EIS.

DOE's prospective decision appears to violate established land use limitations for NTS. On June 28, 1994, Nevada filed a complaint in United States District Court⁴ alleging, among other things, that the administrative land withdrawals⁵ for NTS do not include low-level radioactive waste disposal from off-site sources as an intended use of NTS land. The specified use of the withdrawn lands comprising NTS is for weapons testing only and expressly does not include disposal of radioactive waste generated off-site. On April 17, 1997, Nevada and DOE entered into a Settlement Agreement⁶ resolving the litigation. A key component of the settlement includes DOE's commitment to initiate "consultation with the United States Department of the Interior (DOI) concerning the status of the existing land withdrawals for the NTS with regard to low-level waste storage/disposal activities." In addition, DOE agreed to "convey the results of its consultation with DOI . . . to the State of Nevada Attorney General's Office."

² *Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*, DOE/EIS-0243 (1996).

³ *Supplement Analysis for the Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*, DOE/EIS/0243-SA-01, prepared by TetraTech NUS, Inc., for the National Nuclear Security Administration, Nevada Operations Office (July 2002).

⁴ United States District Court, District of Nevada, CV-S-94-00576-PMP-(RLH).

⁵ Public Land Order 805 and associated land withdrawals

⁶ *Joint Stipulation to Dismiss Second Amended Complaint Without Prejudice*

Samuel Bodman, Secretary
April 26, 2007
Page 3

To date, this office has not been advised that the agreed consultation has occurred or that the process has been concluded. Thus it appears that DOE has not fulfilled this essential condition of the court-ordered Settlement Agreement.

Further confirmation that DOE has failed to comply with applicable land withdrawal laws and the ten-year-old Settlement Agreement comes from the United States Congress. In a 2005 House Report on the Energy and Water Appropriations Bill, the following directive was given in reference to NTS:

The Committee supports the efforts of the NNSA to find expanded uses for the unique capabilities associated with the Nevada Test Site (NTS). . . . The Committee notes, however, that the original administrative land withdrawal in 1952 (Public Land Order 805) transferred land from the Bureau of Land Management to the Atomic Energy Commission for use as a 'weapons testing site.' Although the Nevada Test Site is presently being used for a number of other purposes, and is being proposed for new uses as outlined above, the Department has not updated the original land withdrawal to reflect the multitude of existing and proposed uses in addition to weapons testing. The Committee directs the Department of Energy to enter into formal consultations with the Department of the Interior regarding the multiple uses and, if necessary, revise and update the land withdrawal to reflect those additional uses.⁷
[Emphasis added.]

It is evident that Congress is aware that DOE's NTS waste disposal activities extend beyond the purpose of weapons testing and has instructed the agency to conduct the appropriate consultations with DOI to resolve the issue. Clearly, the disposal of depleted uranium hexafluoride conversion product strays far from DOE's authorized purpose at NTS and is not consistent with the requirements of law.

Despite the instructions from Congress and the court-approved Settlement Agreement, DOE continues to ship low-level radioactive waste from off-site generators for disposal at NTS without having first resolved its authority to do so. Now, in light of the latest Draft "Supplement Analysis," DOE proposes to accept at NTS immense additional quantities of depleted uranium oxide from off-site sources for disposal.

⁷ House Report 108-554, Energy and Water Development Appropriations Bill (2005), at 111.

Samuel Bodman, Secretary
April 26, 2007
Page 4

In summary, there appears to be no legal justification for DOE's present plan. We trust, therefore, that DOE's proposal will be withdrawn until the legality of the land status is resolved. I look forward to your prompt attention to this important matter.

Sincerely,

CATHERINE CORTEZ MASTO
Attorney General

c: **Governor Jim Gibbons**
Bob Loux, Executive Director, Agency for Nuclear Projects
Allen Biaggi, Director, Department of Conservation and Natural Resources
Leo Drozdoff, Administrator, Division of Environmental Protection
United States Senator Harry Reid
United States Senator John Ensign
United States Representative Shelley Berkley
United States Representative Jon Porter
United States Representative Dean Heller



OFFICE OF THE GOVERNOR
AGENCY FOR NUCLEAR PROJECTS

1761 E. College Parkway, Suite 118
Carson City, Nevada 89706
Telephone: (775) 687-3744 • Fax: (775) 687-5277
E-mail: nwpo@nuc.state.nv.us
September 11, 2007

AMEM1.070913.0002

Mr. Stephen A. Mellington
Assistant Manager for Environmental Management
U.S. Department of Energy
National Nuclear Security Administration
P.O. Box 98518
Las Vegas, Nevada 89193-8518

Dear Mr. Mellington:

In response to DOE/NNSA's August 14, 2007 "Announcement of Formal Review and Evaluation of 1996 Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada (DOE/EIS-0234)," I am writing to request that DOE prepare a new site-wide EIS for the Nevada Test Site. Since 1996 when the last formal NEPA review was conducted for the NTS, baseline conditions have changed markedly. It is difficult to see how the 1996 EIS and the subsequent cursory Supplemental Analyses can possibly represent today's known baseline conditions, or how federal officials, using this outdated information, can make informed decisions on future uses and management of the NTS at the landscape.

Another reason for undertaking a new site-wide EIS is the continuing controversy over the status of the land at NTS and the failure by DOE to implement the conditions of the 1977 Settlement Agreement with the State of Nevada that called for consultations between DOE and the Department of Interior (DOI) to attempt to clarify and resolve this matter. The Agreement also required DOE to report to the Nevada Attorney General on those negotiations, something else that has not been done. Recent correspondence from the Nevada congressional delegation and the Nevada Attorney General to the Secretary of Energy asking for clarification of the land status matter and the outcome of DOE's negotiations with DOI has not been responded to. In addition, a language in a 2005 House of Representatives committee report directs DOE to enter into formal consultations with DOI and, if necessary, revise and update the NTS land withdrawal to reflect additional uses. Some of these current and proposed uses for the NTS include:

- The T-18 relocation to the Device Assembly Facility;
- Importation of mixed hazardous and low-level radioactive waste to NTS for disposal;
- Sub-critical testing at various NTS locations;
- Proposals to dispose of Greater-Than-Class-C (GTCC) wastes at NTS;
- Potential storage and/or disposal of sealed sources at NTS;
- Potential disposal of Department of Defense depleted uranium at NTS;
- Biological and chemical releases at NTS for use in training hazardous materials and emergency response personnel;
- NTS as a potential alternative location for a modern (plutonium) pit facility;
- The use of NTS as a Radiological/Nuclear Countermeasures Test and Evaluation Complex;
- Consolidation of "special nuclear material" at NTS;
- The proposed move of a research reactor currently at Sandia to NTS;
- The proposed Yucca Mountain high-level radioactive waste repository project and it's interface with other NTS land uses;
- Various current and futures commercial ventures at NTS, including renewable energy projects;
- Potential large scale, open-air explosive detonations at locations not previously evaluated and designated for such activities (eg. Divine Strake);
- Activities associated with maintaining readiness for resumption of underground nuclear weapons testing, and the potential for resumption of such testing.

In addition, long-term surveillance and maintenance plans and costs for the area 3 and area 5 disposal sites in relation to the remaining waste shipments from the weapons complex as well as future uses of Mercury and the rest of the base camps in relation to existing and future activities conducted on NTS must be evaluated in a new site-wide EIS. By the same token, long-term plans for managing "rad contaminated" surface soils in Yucca flat require a full-blown NEPA analysis. Is a cleanup option, and at what level (i.e., cleanup standard), relevant or not? If not, what is the plan for long-term institutional control and how does this fit with the currently FLMPA land withdrawal?

There is also a need to establish new environmental baselines using, among other things, data produced by the UGTA investigations to date – i.e., groundwater contamination from testing – as well as data regarding environmental impacts from the sub-critical testing program and numerous other defense activities conducted at NTS.

A thorough analysis of all current and planned/proposed NTS activities in a new site-wide EIS, together with an evaluation of the legal framework governing the NTS, which requires congressional land withdrawal, would go a long way towards finding an acceptable path forward for resolving the land use issues. In addition, a new EIS is the only way to adequately assess the cumulative impacts of current and proposed NTS activities and establish new and accurate baseline data against which to assess present and future impacts to humans and the environment.

It appears that, given congressional language in the land withdrawal legislation governing the NTS, DOE is operating on a tenuous legal basis in expanding the range of activities to be undertaken at the NTS. The preparation of a new site-wide EIS for the Nevada Test Site would seem to be in the interests of both DOE and the State of Nevada and I would urge you to move expeditiously to initiate the NEPA process for such an EIS.

Sincerely,



Robert R. Loux
Executive Director

RRL/cs

cc Governor Gibbons
Nevada congressional delegation
Attorney General Catherine Cortez Masto
Marta Adams, Deputy Attorney General
Allen Biaggi, DCNR



STATE OF NEVADA
OFFICE OF THE ATTORNEY GENERAL

100 North Carson Street
Carson City, Nevada 89701-4717

CATHERINE CORTEZ MASTO
Attorney General

RANDAL R. MUNN
Assistant Attorney General

December 20, 2007

Via U.S. Mail

Stephen L. Johnson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Secretary Samuel Bodman
U.S. Department of Energy
Forrestal Building
1000 Independence Ave. S.W.
Washington, D.C. 20585

RE: Nevada's Objections to EPA's and DOE's Proposal to dispose of legacy Plutonium Uranium Extraction (PUREX) solvent mixed waste at the Nevada Test Site

Dear Administrator Johnson and Secretary Bodman:

The U.S. Environmental Protection Agency (EPA) in cooperation with the U.S. Department of Energy (DOE) has recently proposed that 25,000 gallons of legacy Plutonium Uranium Extraction (PUREX) solvent mixed waste generated at the Savannah River Site in the 1960's -70's be disposed of at the Nevada Test Site.

As Nevada's chief legal officer, I am writing to inform you that DOE's proposal for using NTS as the disposal site for this waste constitutes a plain violation of law and is contrary to DOE's longstanding agreement with Nevada. For the reasons discussed below, this office is prepared to seek immediate injunctive relief to block any such disposal at NTS.

DOE's 1996 NTS site-wide Environmental Impact Statement (EIS)¹ did not analyze the impacts of disposal at NTS of such wastes. In addition, EPA's and DOE's prospective decision appears to violate established land use limitations for NTS. On June 28, 1994, Nevada filed a complaint in U.S. District Court² alleging, among other things, that the administrative land withdrawals³ for NTS are for weapons testing activities only and expressly do not include disposal of radioactive and mixed waste generated off-site. On April 17, 1997, Nevada and DOE entered into a Settlement Agreement⁴ resolving the litigation. A key component of the settlement includes DOE's commitment to initiate "consultation with the United States Department of the Interior ("DOI") concerning the status of the existing land withdrawals for the NTS with regard to low-level waste storage/disposal activities." Moreover, DOE agreed to "convey the results of its consultation with DOI...to the State of Nevada Attorney General's Office."

To date, this office has not been advised that the agreed consultation has occurred or that the process has been concluded. Thus, it appears that DOE has not fulfilled this essential condition of the court-ordered Settlement Agreement.

Further confirmation that DOE has failed to comply with applicable land withdrawal laws and the ten-year-old Settlement Agreement comes from the U.S. Congress. A 2005 House of Representatives committee report on the Energy and Water Appropriations Bill contains the following directive with respect to NTS:

The Committee supports the efforts of the NNSA to find expanded uses for the unique capabilities associated with the Nevada Test Site (NTS). . . . The Committee notes, however, that the original administrative land withdrawal in 1952 (Public Land Order 805) transferred land from the Bureau of Land Management to the Atomic Energy Commission for use as a 'weapons testing site.' Although the Nevada Test Site is presently being used for a number of other purposes, and is being proposed for new uses as outlined above, *the Department has not updated the original land withdrawal to reflect the multitude of existing and proposed uses in addition to weapons testing.* The Committee directs the Department of Energy to enter into formal consultations with the Department of the Interior regarding the multiple uses and, if necessary, *revise and update the land withdrawal to reflect those additional uses.*⁵ [Emphasis added.]

¹ *Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada*, DOE/EIS-0243 (1996).

² United States District Court, District of Nevada, CV-S-94-00576-PMP-(RLH).

³ Public Land Order 805 and associated land withdrawals

⁴ "Joint Stipulation to Dismiss Second Amended Complaint without Prejudice."

⁵ House Report 108-554, Energy and Water Development Appropriations Bill (2005), at ___.

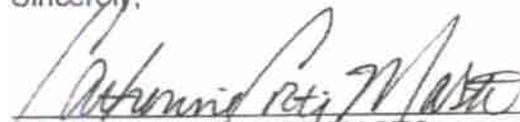
December 18, 2007

Page 3

It is evident that Congress is aware that DOE's NTS waste disposal activities extend beyond the purpose of weapons testing and has instructed the agency to conduct the appropriate consultations with the Department of the Interior to resolve the issue. Clearly, the disposal of PUREX solvent mixed waste strays far from DOE's authorized purpose at NTS and is flagrantly unlawful.

In summary, there appears to be no legal justification for EPA's and DOE's present plan. We trust, therefore, that this proposal will be withdrawn until the legality of the land status is resolved and additional National Environmental Policy Act (NEPA) documentation is prepared to assess the impacts of such disposal. I look forward to your prompt attention to this important matter.

Sincerely,



CATHERINE CORTÉZ MASTO
Nevada Attorney General

CCM:MAA:vb

cc: Allen Biaggi
Leo Drozdoff
Bob Loux
Nevada Congressional Delegation
James I. Palmer, Jr.

Public Notification for
Corrective Actions
January 2, 2008
Las Vegas, Nevada

During the next 30 days, the Department of Energy (DOE) will be submitting Closure Reports (CRs) to the Nevada Division of Environmental Protection (NDEP) for Corrective Action Units (CAUs) 543 and 127 at the Nevada Test Site (NTS). These documents will recommend that engineering and/or administrative controls be used to close the sites although contamination remains.

When submitting this document to NDEP, copies will be supplied to the Community Advisory Board and the Las Vegas and Carson City Public Reading Rooms for review. Submit comments regarding this decision document to Tim Murphy (NDEP) within 30 days of the document's release. Contact addresses are listed below.

CAU Number	CAU Description	Approximate Submittal Date
543	Liquid Disposal Units	January 31, 2008
127	Areas 25 and 26 Storage Tanks	February 29, 2009

Southern Nevada Public Reading Facility
c/o Nuclear Testing Archive
775 East Flamingo Road
Las Vegas, NV 89119

Northern Nevada Public Reading Facility
Nevada State Library and Archives
100 N. Stewart Street
Carson City, NV 89701-4285

TMurphy@ndep.nv.gov