

## TRANSPORTATION WORKING GROUP MEETING MINUTES

Thursday, October 10, 2002 – 1:30 – 4:30 p.m.  
North Las Vegas Airport Terminal  
Grand Canyon Room

### WELCOME & INTRODUCTIONS – Frank Disanza

Mr. Rex Massey of Research and Consulting Service, Inc. and Mr. Frank Disanza of NNSA/NV welcomed all attendees to the Nevada Test Site Transportation Working Group (TWG) meeting. Attendees then introduced themselves and provided their affiliation. (See enclosure 1)

Additional enclosures are listed for your convenience.

Enclosure 1	Attendance List
Enclosure 2	Final Agenda
Enclosure 3	Emergency Response Grants YTD FY 2002 and FY 2003 Forecast FY 2002 Cumulative Forecast and Cumulative Accuracy vs. Cumulative Actuals YTD Report on Dates to Avoid CA-127
Enclosure 4	Briefing: Transportation Protocols Update
Enclosure 5	Briefing: Offloading of Intermodal Containers at NTS

An agenda was provided to the attendees (See enclosure 2).

During his opening remarks Mr. Disanza discussed the following topics:  
(See enclosure 3)

Review of the Emergency Grant funds for FY 2002, \$1.2 million was transferred to Nevada, \$50,000 went to Nye County.

Based upon the preliminary FY 2003 LLW forecast, the projected funding will be \$2.01 million.

Funding (\$1 million) will be available to the state approximately December 1, 2002.

County distribution totals \$1 million.

The next Emergency Planning Working Group Meeting is scheduled for October 30, 2002 at 1:00 PM in the Sedan Conference Room in the NNSA/NV Operations Office building. Topics of discussion will include; the working group charter and guidelines for scope changes.

Preliminary numbers for FY 2003 LLW shipments indicate that 1,672 shipments were received at the NTS and 2,314,723 cubic feet of LLW was buried.

The preliminary FY 2003 forecast is 4,022,331 cubic feet (This total was revised to 4,028,072 at a later date).

The circumstances and corrective actions concerning three LLW shipments that were transported through the Las Vegas Interchange (Spaghetti Bowl) in FY 2002 were discussed.

Peak Tourist Dates for Death Valley/CA-127 area were discussed. Over the July 4<sup>th</sup> Weekend (July 3-8,2002) a total of 4 shipments traveled in this area. A new process has been put in place where the generators will be notified of upcoming peak tourist dates two weeks prior. On October 21<sup>st</sup>, generators will be notified of the upcoming Shoshone Old West Days and Death Valley 49'er Days.

#### WIPP TRANSPORTATION INCIDENTS– Michael Verranault – CAST Transportation

Mr. Michael Varrenault provided an interesting briefing on two transportation incidents that recently occurred involving WIPP shipments. Mr. Varrenault discussed the history, equipment, drivers, and safety record of the company.

A separate division of CAST has hauled over 700 shipments of low-level waste from Rocky Flats to the Nevada Test Site, to date. The two WIPP transportation incidents occurred within a week of each other. One occurred in Wyoming when a driver became ill and passed out, pulling into a field adjacent to the highway. The second incident occurred when a drunk driver rear-ended a WIPP shipment within 20 miles of the WIPP facility. In both cases there was no release and the drivers were uninjured. In the drunk driver incident, the drunk driver escaped with minor injuries while the trailer received minimal damage to the rear bumper.

#### TRU WASTE TRANSPORTATION UPDATE– Angela Colarusso – NNSA/NV

Ms. Angela Colarusso provided an update on the current status of TRU Project.

There are approximately 1,700 drums and less than 60 boxes of Transuranic Waste to be characterized and shipped for disposal at the WIPP. Per agreement with the states of Nevada and California, no shipments until will start until February 2003. However, to meet the consent order deadline imposed by the Nevada Division of Environmental Protection, shipments must start prior to September of 2003.

Characterization is ongoing and is being accomplished by mobile characterization units and at a single permanent facility on the NTS. In FY 2002, 450 drums have been characterized via non-destructive evaluation, 350 drums via non-destructive assay, and 121 drums have undergone headspace gas sampling. Nine drums have gone through visual examination, with 96 more scheduled for FY 2003.

On 9/27/2002, a Certification Audit was completed by the Carlsbad Field Office (CBFO). The audit produced 2 minor findings, both of which should be resolved. Approval from the State of New Mexico to ship should be received by the end of calendar year 2002.

Currently, the plan is for shipments to exit the NTS from the Lathrop Wells gate, and use NV-373/CA-127 route to I-15 and on to I-40. This plan is being addressed by Ralph Smith of CBFO.

**Action Item:** Mr. Richard Nocilla requested that contact names and numbers for the WIPP be forwarded to Richard and other TWG members through the meeting minutes.

## TRANSPORTATION PROTOCOLS UPDATE – Lee Stevens - Navarro Research & Engineering

Mr. Stevens provided a brief overview (See enclosure 4) and current status of the protocols (Now DOE Manual 460.2-1) The manual has been approved (September 23, 2002) and is available on the internet at <http://www.directives.doe.gov/index.htm> . Use the search function to locate “M-460.2-1”. The action item regarding hard copies of the manual has been closed as of October 10, 2002.

## OFFLOADING OF INTERMODAL CONTAINERS AT NTS – Doug Clark – Bechtel Nevada

Mr. Clark provided an overview (See enclosure 5) of the Radioactive Waste Management Site (RWMS) as it pertains to the offloading of intermodal containers at the Area 3 RWMS. British Nuclear Fuels, Limited in Oak Ridge, TN, has been shipping intermodal (rail/highway) containers completely via highway in anticipation of a true intermodal operation beginning sometime in FY 2003. The intermodal site has yet to be selected by BNFL, sites under consideration are located in Western Utah and Northern California. The offloading process is controlled by a Radioactive Work Permit and workers are currently dressed out in full Personnel Protective Equipment (PPE) which includes full face respirator, coveralls, gloves, etc. Requirements for some of this PPE are expected to be reduced or removed by the end of the calendar year. This is due to data collected by safety and health professionals that shows it is not needed. The presentation also included a pictorial overview of the offloading process.

## NEW BUSINESS

A meeting concerning the Supplemental Programmatic Environmental Impact Statement for the Modern Pit Facility will be held October 17<sup>th</sup>, 2002 from 7-10 PM in the Great Basin Room at the NNSA/NV Building 232 Energy Way, North Las Vegas, NV, 89030. For more information, please contact Kevin Rohrer at 702-295-0197 or via e-mail at [rohrer@nv.doe.gov](mailto:rohrer@nv.doe.gov).

## ADMINISTRATION AND NEXT MEETING

The date of Thursday, February 13, 2003, was selected for the next meeting. NNSA/NV will again obtain the Grand Canyon Room at the North Las Vegas Airport Terminal.

The meeting was adjourned at approximately 4:00 p.m.

## SUMMARY OF ACTION ITEMS

(From March 8, 2001) Mr. Disanza will provide Ms. Susie Snyder and Ms. Kalynda Tilges with printed copies of the protocols when they are available.

**Completed October 10, 2002.**

Mr. Richard Nocilla requested that contact names and numbers for the WIPP be forwarded to him through the meeting minutes. **Completed with issuance of these meeting minutes.**

## OCTOBER 10, 2002 SIGN IN SHEET

### Current TWG Member Information

Mike Alexander Nevada Division of Emergency Management
M. L. Baughman Intertech Services Corp.
Brad Benson
Ed Bentz E. J. Bentz & Associates
Chris Binzer Robison/Seidler, Inc.
L. W. Bradshaw Nye County Department of Natural Resources and Federal Facilities
Brian Brown South Inyo Fire Protection District
James Brown City of Mesquite Emergency Management
Barbara Byron California Energy Commission
Kamala Carmazzi Nevada Division of Emergency Management
Anne deLain W. Clark NM Energy, Mineral, and Natural Resources
George Conrad Boulder City Fire Department
Greg Copeland Greenfield Logistics
Joyce Curlee NRE/NNSA/TD
Michael Cyphers City of Henderson
Bruce Davis Fluor Fernald
Michael M. DeLee
Debbi Dauenhauer Town Board Member
E. Frank Di Sanza NNSA/NV WMD
Earle Dixon NTS CAB Technical Advisor Greenspun College of Urban Affairs and Environmental Studies
W. Scott Edwards Flour Fernald
Don Elle Nevada Division of Environmental Protection
Bryan Elkins Director Community Development
Larry M. Franks Radiological Health Section, State of Nevada
Larry Gabriel Defense Special Weapons Agency Technical Compliance Division
Michael Genge

# OCTOBER 10, 2002 SIGN IN SHEET

## Current TWG Member Information

LaTomya Glass NNSA/NV OPAI
The Honorable Sandy Green Eureka County Board of Commissioners
Stephanie Haluzak City of Caliente
Conni Hansen Department of Public Works City of North Las Vegas
Nancy R. Harkess NNSA/NV OPAI
John Hauser Logistics Coordinator Tri-State Motor Transit Co.
Bill Hillinger San Bernardino County Office of Emergency Services
Robert Hurd Environmental Health Services County Of Inyo
Abigail C. Johnson Eureka County
Fire Chief Jeff Knudtson City of West Wendover
Kelly Kozeliski NNSA/NV -EM
Clete Kus City of North Las Vegas
Josie Larson White Pine County Nuclear Waste Project Office
Marian Lawrence
Donnie Lester Safety and Compliance Director Tri-State Motor Transit Co.
Paul J. Liebendorfer Nevada Division of Environmental Protection
Patricia Lofft Emergency Management Coordinator City of North Las Vegas
Steve Mahnken Nevada Division of Emergency Management
Stanley R. Marshall Supervisor, Radiological Health Section Bureau of Health Protection Services Nevada State Health Division
Rex Massey Research and Consulting Services, Inc.
Daniel McArthur Mayor City of St. George
Dean F. Molburg Boulder City Fire Department
Calvin Meyers Moapa Band of Paiutes
Julianne Miller Desert Research Institute

## OCTOBER 10, 2002 SIGN IN SHEET

### Current TWG Member Information

Susan C. Moore Nye County Department of Natural Resources and Federal Facilities
Richard Nocilla
Joni Norton NNSA/NV-WMD
Dan Owen Greenfield Logistics
Jim Pegues Project Officer City of Las Vegas
The Honorable Kevin J. Phillips Mayor of the City of Caliente
Robert Piper
Jayson Pitts Administrative Coordinator
Max L. Powell Communications Department Senior Public Affairs Bechtel SAIC Company, LLC
Gary Provansal
Andrew Remus Senior Planner Inyo County YM Repository Assessment Office
Myrle Rice
Sue Rice Greenfield Logistics, LLC
Nathan Christiansen Western Governor's Association
Carla Sanda IT Corp.
John M. Sattler DOE Fernald Area Office
Dale Schutte
Paul Seidler Robison/Seidler, Inc.
Paul Skiermont California Office of Emergency Services
Michael G. Skougard NNSA/NV ESHD
Jan Simmons
Frank S. Siracusa Nevada Division of Emergency Management
Kenneth M. Small NNSA/NV WMD
Susi Snyder
Paul Standish E. J. Bentz & Associates
Lee J. Stevens NRE/NNSA/WMD
Carrie Stewart
Joe Strolin Administrator of Planning Nevada Agency for Nuclear Projects
Helen Stolz NRE/NNSA/EM



# Transportation Working Group Meeting

North Las Vegas Airport  
2730 Airport Drive  
North Las Vegas, NV  
Grand Canyon Room  
Thursday October 10, 2002  
1:30- 4:30 PM

## FINAL AGENDA

<b>1:30</b>	<b>Welcome and Introductions</b>	<b>Rex Massey/Frank DiSanza</b>
<b>1:50</b>	<b>WIPP Truck Incidents Briefing</b>	<b>Michael Verranault /CAST Transportation</b>
<b>2:20</b>	<b>TRU Waste Transportation Update</b>	<b>Angela Colarusso/NNSA/NV</b>
<b>2:50</b>	<b>Transportation Protocols Update</b>	<b>Lee Stevens/Navarro Research</b>
<b>3:00</b>	<b>Break</b>	
<b>3:20</b>	<b>Offloading of Intermodal Containers at NTS</b>	<b>Doug Clark/Bechtel Nevada</b>
<b>4:10</b>	<b>New Business and Next Meeting</b>	<b>Rex Massey/Frank DiSanza</b>
<b>4:30</b>	<b>Adjourn Meeting</b>	<b>Rex Massey</b>

To submit agenda items, contact the Transportation Working Group Chairman, Rex Massey at (775) 849-9701 or via e-mail at [rexmassey@aol.com](mailto:rexmassey@aol.com)

NOTE: There is NO DOE badge required for this meeting room.

**REVISED 10/9/2002**

*NEVADA TEST SITE*  
*TRANSPORTATION WORKING GROUP*  
*MEETING*

*OCTOBER 10, 2002*

# Emergency Response Grants

- **\$1,200,226 Transferred to Nevada**
- **\$50,000 Transferred to Inyo County**

# Fiscal Year 2003 Budget

- FY03 Funding Available
- Grant Process
- FY 03 Proposed Grant Distribution

# Projected FY 03 Funding

	<u>Baseline</u>	<u>FY03 Forecast</u>
Projected Volume (FT <sub>3</sub> )	2,702,749	4,022,331
Projected Funding	\$1,351,375	\$2,011,165
Available this Application	\$1,000,000	\$1,000,000
Projected Balance for 03	\$351,375	\$1,011,165

# FY03 Grant Process

Budget Briefed to EPWG	6-27-02
NNSA/NV Approved Grant	8-01-02
State Interim Finance Committee	10-15-02
Funding Available to State	12-1-02

# County Distribution

• Clark	\$ 100,000
• Elko	\$ 178,061
• Esmeralda	\$ 190,095
• Lincoln	\$ 178,036
• Nye	\$ 175,906
• White Pine	<u>\$ 177,902</u>
• Total	\$ 1,000,000

# Next EPWG Meeting

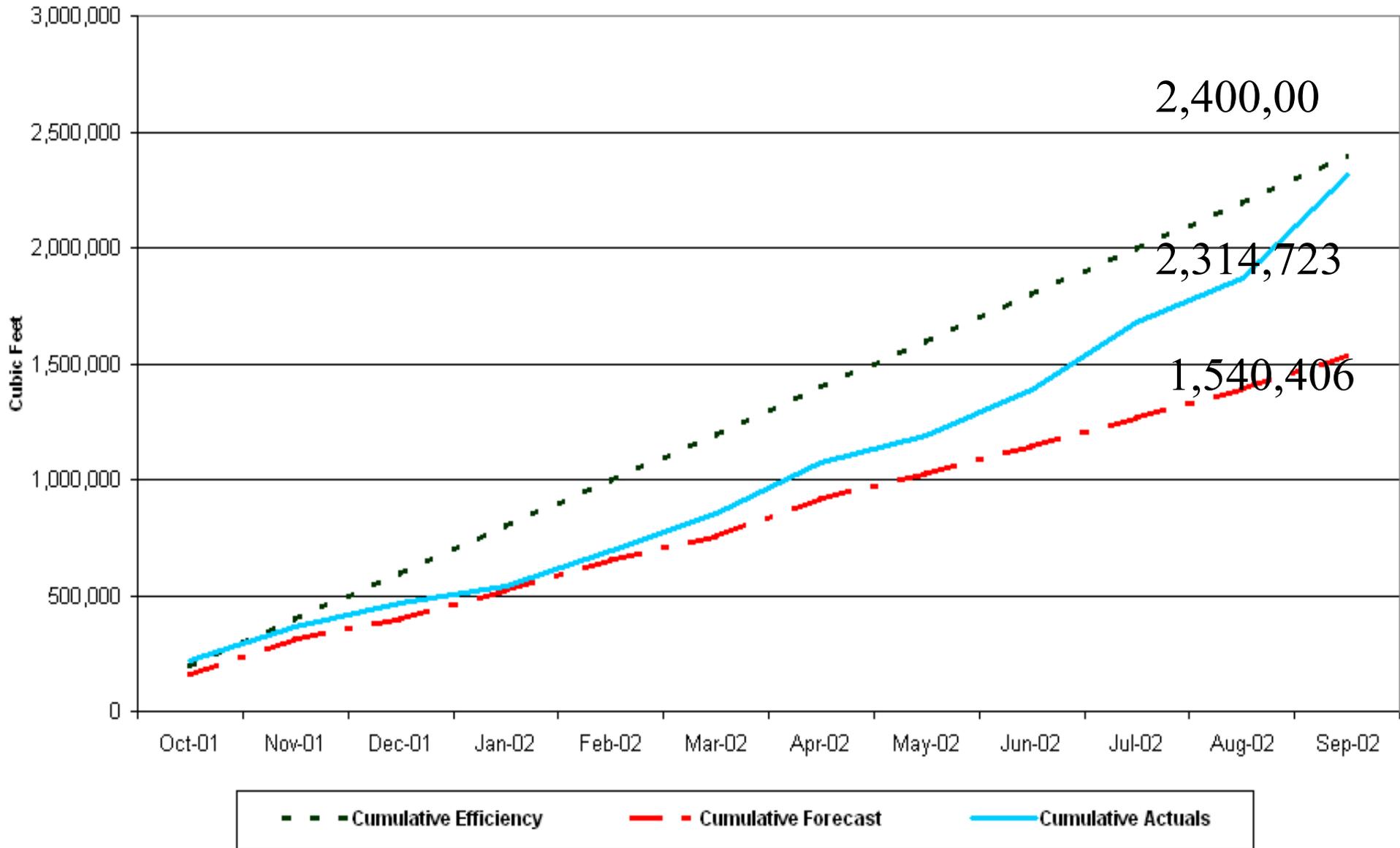
- Scheduled for October 30 at 1:00, In the Sedan Conference room at the NNSA/NV building.
- Agenda Topics to include;
  - Working Group Charter
  - Guidelines for Scope Changes.

# Preliminary FY2002 Totals

Subject to change

- 1,672 Shipments
- 2,314,723 Cubic Feet

Preliminary, subject to change  
**FY 02 Cumulative Forecast and Cumulative Efficiency  
vs. Cumulative Actuals**



## FY 2003 FORECAST

FIELD OFFICE (GENERATOR)			FORECAST
<b>ABERDEEN</b>			52,310
<b>ALBUQUERQUE (Sandia CA/NM)</b>			20,319
<b>CHICAGO (Princeton Plasma Physics)</b>			1,000
<b>IDAHO</b>			3,519
<b>NEVADA (Bechtel Nevada, IT Las Vegas)</b>			36,310
<b>OAKLAND (Boeing Rocketdyne, LLNL/CA)</b>			55,600
<b>GA CORPORATION</b>			27,400
<b>OAK RIDGE (Oak Ridge National Lab, ORNL-Y12, DOE-OR, British Nuclear Fuels, Paducah)</b>			2,078,032
<b>OHIO (Fernald, Mound, Earthline, West Valley)</b>			277,440
<b>ROCKY FLATS</b>			1,440,000
<b>SAVANNAH RIVER (Savannah River Site)</b>			30,401
<b>TOTALS</b>			<b>4,022,331</b>

# Transportation of LLW Through Spaghetti Bowl

January 2002: WML02097 from Fernald (OH);  
traveled through Las Vegas interchange

- Generator to correct problem, no recurrences
- Load was placarded

# Transportation of LLW Through Spaghetti Bowl (cont)

- July 2002: APL02003 from Aberdeen Proving Grounds (Ft. Hood, TX); traveled through the Las Vegas interchange
  - Upon review it was determined that the truck also contained another shipment for Nellis AFB
  - Driver requested routing assistance from NHP and was told to use the Las Vegas interchange route
  - State of Nevada contacted
  - Load was placarded

# Transportation of LLW Through Spaghetti Bowl (cont)

- July: PLL02046 from Princeton Plasma Physics Lab (NJ); traveled through the Las Vegas interchange
  - Load was non-placarded (per DOT) and over dimensional
  - Route was given by NDOT when over dimensional permit was obtained by driver at California state line
  - This issue was discussed with generator
  - Transportation section (6.1) of NTS WAC will state no waste shipments are to be transported through Las Vegas interchange or across Hoover Dam

# USE OF CALIFORNIA ROUTE 127 DURING

## PEAK TOURIST DATES

CHRISTMAS WEEK, 12/23-29/ 2001 : 0 Shipments

NEW YEARS WEEK, 12/30/2001 to 1/5/2002: 0 Shipments

MLK BIRTHDAY WEEKEND, 1/18-22/2002: 1 Shipment

PRESIDENT'S DAY OFF HIGHWAY EVENT, 2/15-19/2002: 0 Shipments

PRESIDENT'S DAY WEEKEND, 2/22-25/2002: 1 Shipments

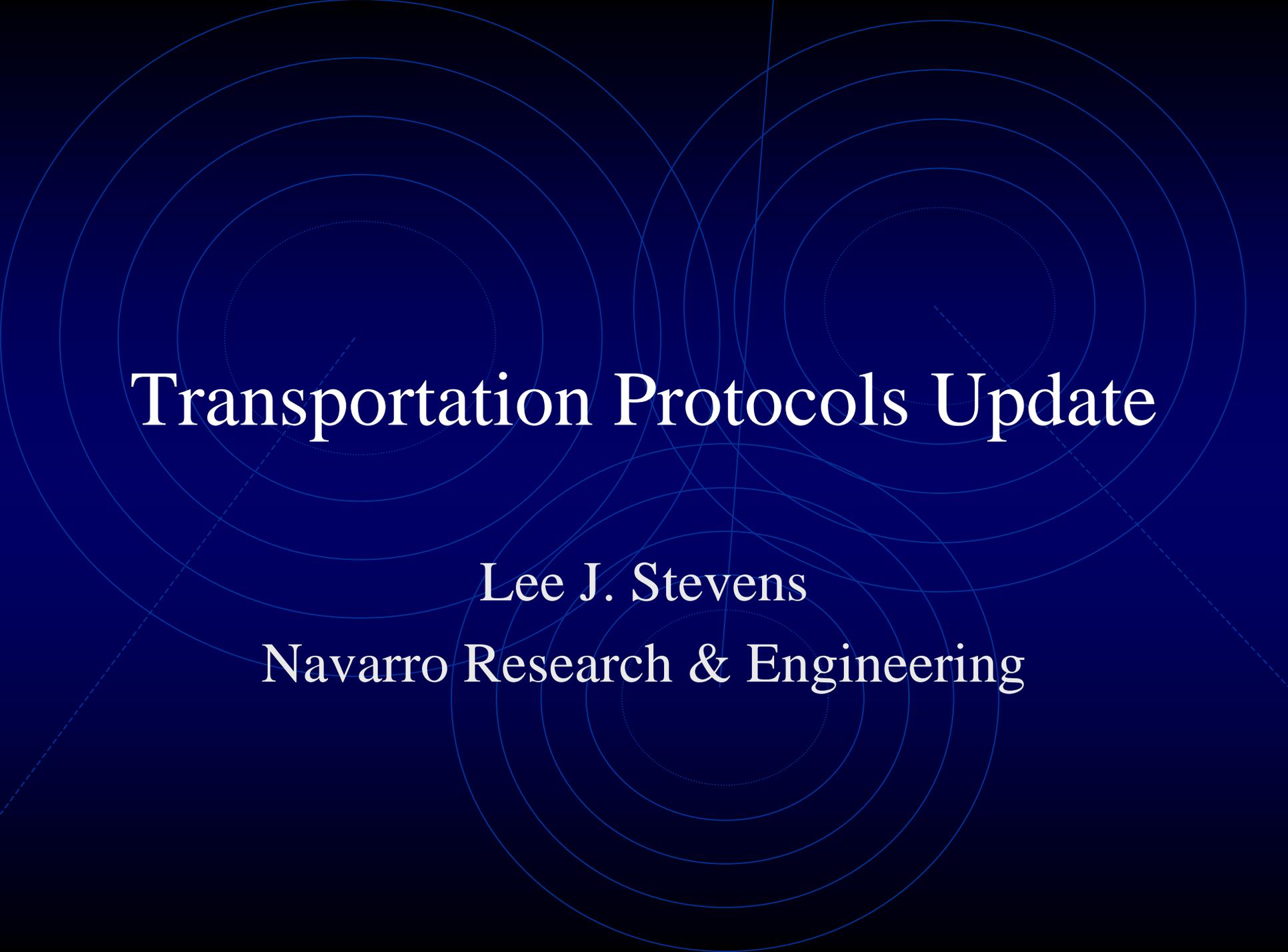
EASTER WEEKEND OFF-HIGHWAY EVENT, 3/22-31/2002: 5 Shipments

**JULY 4<sup>TH</sup> WEEKEND, 7/3-8/2002: 4 Shipments**

As part of a new practice, on October 21<sup>st</sup> NNSA/NV will notify all generators to avoid CA-127 for Shoshone Old West Days (November 3-10) and Death Valley 49'er Days (November 6-11)

# FY 2003 TOPICS

- BNFL Intermodal
- TRU Shipping Campaign



# Transportation Protocols Update

Lee J. Stevens

Navarro Research & Engineering

# Transportation Protocols

- DOE/Stakeholders through the TEC/WG
- Effort began in 1998 as “Transportation Protocols”
- DOE M 460.2-1 “Radioactive Material Transportation Practices Manual”
- 14 Chapters

# Transportation Protocols

- Establishes a standardized process and framework for interacting with State, tribal, and local authorities and transportation contractors and carriers regarding DOE offsite radioactive material shipments, including radioactive waste...

# Transportation Protocols

- Does not Include:
  - Barge
  - Air
  - TRU between DOE site (Except WIPP)
    - Currently being discussed

# DOE M 460.2-1 Chapters

- Transportation Planning
- Emergency Planning
- Projected Shipment Planning
- Routing
- Security
- Carrier/Driver Requirements
- Shipment Pre-notification

# DOE M 460.2-1 Chapters

- Transportation Operational Contingencies
- Tracking
- Inspections
- Safe Parking
- Emergency Notification
- Emergency Response
- Recovery and Cleanup

# Transportation Protocols

- Approved 9/23/2002
- Expires 9/23/2006
- Request hard copy from [stevensl@nv.doe.gov](mailto:stevensl@nv.doe.gov)
- When available on web, link will be established in TWG minutes and on TWG page.



# OFF-LOADING OF BNFL INTERMODAL CONTAINERS AT THE NTS

Presentation for  
Transportation Working Group Meeting  
10 October, 2002

- D. K. Clark

# Outline

- Waste Stream Details
- FY02 Activity
- Provisions of the Radiological Work Permit
- Area 3 site plan
- Offloading Steps
- Summary

# Waste Stream Details

- Low-Level Radioactive & CERCLA Waste
- Estimated 8850 m<sup>3</sup>/yr ( 312,500 ft<sup>3</sup>/yr)
  - Approximately 700 shipments
- Majority of waste is compacted metal
  - 50% Aluminum, 45% Carbon Steel (including Ni Plated Carbon Steel), 4% Copper, & 1% Monel
- Primary isotopes involved are U-234, U-235, U-238, Pu-238, & Pu-239.

# FY02 Activity

- The shipments to date have been direct from BNFL to the NTS via flatbed trucks.
- RWMC received 17 intermodals in FY02
- RWMC returned 10 intermodals in FY02.
- The average vol/shipment is 449 ft<sup>3</sup>
- The average weight/shipment is 32,485 lbs
- The average activity per container to date is 1.25 GBq or 0.034 Ci

# FY02 Activity (cont)

- The average time to offload each container (once the crew is suited out and the area prepared) is 35 minutes.
  - Staging and reloading comprise an additional 15 minutes per container.
  - Dress out / prep time is approximately 2 hrs (AM) & 1 hr (PM).
  - Covering the waste takes approximately 2 hours per day.
- Intermodal off-loading operations must cease when the wind speed within U3BH exceed 35 mph. Also, operations have ceased due to rain and lightning.

## RADIOLOGICAL WORK PERMIT

REQUESTER	RWP No.: <b>02-0003-03</b>	Requester Name: <b>Mark Krauss</b>	Location: (Bldg./Area) <b>Area 3 RWMS (U3BH)</b>
	Issue Date: <b>8-28-02</b>	Phone No.: <b>295-6808</b>	Work Description/Procedure No.: <b>Off-load BNFL roll-off inter-modal containers. Bury contents in pit U3BH.</b>
	Expire Date: <b>12-31-02</b>	M/S: <b>NTS-403</b>	
	<input type="checkbox"/> STANDING RWP <input checked="" type="checkbox"/> OPERATION/PROJECT RWP	USER ORGANIZATION: <b>BN</b>	(Attach Extra Sheets)

### RADIOLOGICAL INFORMATION

RADIOLOGICAL	<b>RESPIRATORY PROTECTION EQUIPMENT</b> <input checked="" type="checkbox"/> Full Face <b>3</b> <input checked="" type="checkbox"/> Particulate Filter <input type="checkbox"/> Combination Cartridge <input type="checkbox"/> Supplied Air Respirator <input type="checkbox"/> Supplied Air Hood <input type="checkbox"/> Self-Contained Breathing Apparatus <input type="checkbox"/> None	<b>PROTECTIVE CLOTHING 7</b> <input checked="" type="checkbox"/> Cotton Liners <input checked="" type="checkbox"/> Gloves <b>2 pair</b> <input type="checkbox"/> Gloves <input type="checkbox"/> Gloves <input type="checkbox"/> Plastic Sleeves <input type="checkbox"/> Cotton Shoe Covers <input checked="" type="checkbox"/> Plastic Shoe Covers <input checked="" type="checkbox"/> Boots <b>1</b> pr. <input checked="" type="checkbox"/> Tape Openings <input checked="" type="checkbox"/> Cap <input type="checkbox"/> Hood <input type="checkbox"/> Lab Coat <input checked="" type="checkbox"/> Coveralls <b>1</b> pr. <input type="checkbox"/> Disposable Suit <input type="checkbox"/> Rain Gear <input type="checkbox"/> None	<b>PERSONNEL MONITORING</b> <input checked="" type="checkbox"/> NTS Whole Body T.L.D. <input checked="" type="checkbox"/> Self-Reading Dosimeter <b>2</b> <input type="checkbox"/> Extremity T.L.D. <input type="checkbox"/> Hands <input type="checkbox"/> Feet <input type="checkbox"/> Multiple T.L.Ds. <input type="checkbox"/> Neutron Dosimeter <input checked="" type="checkbox"/> Electronic Dosimeter <b>5</b> <input checked="" type="checkbox"/> Breathing Zone Air Sampler <b>5</b> <input type="checkbox"/> Continuous Air Monitor <input checked="" type="checkbox"/> Work Area Air Sample <b>4</b> <input type="checkbox"/> Nasal Smear <input checked="" type="checkbox"/> Bioassay <b>02-003</b> <input type="checkbox"/> Area Alarms <input checked="" type="checkbox"/> Personnel/Equipt. Frisking	<b>RADCON USE ONLY</b> <b>PORTABLE INSTRUMENTS</b> <input checked="" type="checkbox"/> GM Probe <input type="checkbox"/> Ion Chamber <input type="checkbox"/> Micro-R Meter <input checked="" type="checkbox"/> Scaler <input type="checkbox"/> Neutron Meter <input type="checkbox"/> FIDLER <input type="checkbox"/> Tritium Meter <input checked="" type="checkbox"/> NE Electra
	<b>ENGINEERING CONTROLS</b> <input type="checkbox"/> Ventilation <input type="checkbox"/> Temporary Shielding <input type="checkbox"/> Safety Interlocks <input checked="" type="checkbox"/> Water Misting <input type="checkbox"/> None	<b>AREA POSTING 2</b> <input checked="" type="checkbox"/> Contamination <input type="checkbox"/> High Contamination <input checked="" type="checkbox"/> Radiation <input type="checkbox"/> High Radiation <input type="checkbox"/> Very High Radiation <input checked="" type="checkbox"/> Airborne Radiation <input checked="" type="checkbox"/> Radioactive Material	<b>HEALTH INSTRUMENTS</b> <input type="checkbox"/> HPT Coverage <input type="checkbox"/> Oxygen <input type="checkbox"/> Toxic Gas <input type="checkbox"/> Explosive Gases <input type="checkbox"/> None	<b>WASTE HANDLING EQUIPMENT</b> <input type="checkbox"/> Waste Accumulation Container <input type="checkbox"/> Suspected Prohibited Materials Container <input type="checkbox"/> Waste Package <input checked="" type="checkbox"/> None
	<b>RADIOLOGICAL TRAINING</b> <input type="checkbox"/> Pre-Job Briefing <input type="checkbox"/> Post-Job Debrief <input type="checkbox"/> Rad Worker I <input checked="" type="checkbox"/> Rad Worker II <input type="checkbox"/> GERT <input type="checkbox"/> Escort Required	<b>RADCON COVERAGE</b> <input type="checkbox"/> Start of Work <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Completion of Work		

# RWP (cont)

<u>DOSE RATE, CONTAMINATION LEVELS &amp; COLLECTIVE DOSE DATA</u>		<u>ACTUAL (OBSERVED)</u>	<u>ESTIMATED</u>	<u>LIMITING CONDITIONS/ SPECIAL INSTRUCTIONS</u>
DOSE RATE RANGE (mR/Hr)			0.1 - 0.5	
MAXIMUM AREA DOSE RATE (mR/Hr)			0.5	See Attached
Date & Time of Survey	NA			Special Instructions
REMOVABLE ALPHA (dpm/100 cm <sup>2</sup> )			<1000	
REMOVABLE BETA (dpm/100 cm <sup>2</sup> )			<10,000	
Date & Time of Survey	NA			
NEUTRON DOSE RATE (mRem/Hr)		NA		
TRITIUM (µCi/ml)		NA		
Date & Time of Survey	NA			
TOTAL PERSON-REM				
MAXIMUM INDIVIDUAL REM				
EXTREMITY REM		NA		ALARA REVIEW AS REQUIRED BY ARTICLES 312 & 313
RADIOISOTOPE (IF KNOWN)		See Special Instruction		<input checked="" type="checkbox"/> YES (Attach Documentation) <input type="checkbox"/> NO

A P P R O V A L S	<b>M. Krauss</b>	8-27-02
	Job Supervisor or Facility/Project Manager Approval	Date
	<b>P. Greenbaum</b>	8-27-02
	Operational Health Physics Supervisor Approval	Date
<b>A. Ogurek</b>	8-27-02	
Rad/Con. Organization Manager Approval "Attach additional Organization(s) Rad/Con Managers' Approval"	Date	
Terminated By:	Date	Time
JUSTIFICATION: <input type="checkbox"/> Cancelled <input type="checkbox"/> Completed <input type="checkbox"/> Expired <input type="checkbox"/> Conditions Changed <input type="checkbox"/>		

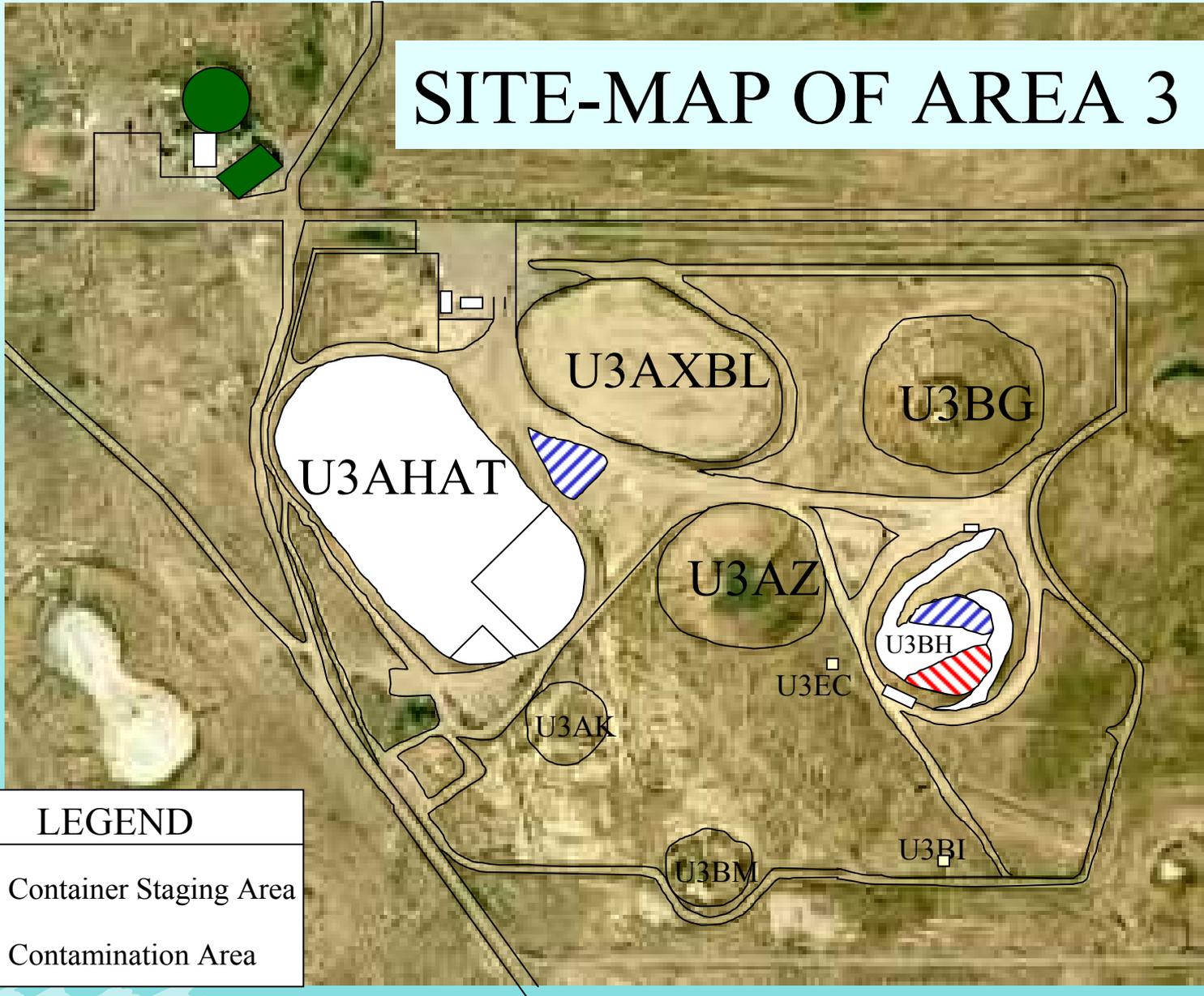
DISTRIBUTION: 1. ORIGINATOR/REQUESTER  
2. HPD/RCS FILE

BN-0103 (10/97)

# RWP (cont)

- RWP Action Levels – General Area Contamination:
  - Uranium  $\geq 5000$  dpm/100 cm<sup>2</sup> alpha
  - Transuranics  $\geq 500$  dpm/100 cm<sup>2</sup> alpha  $\geq 50,000$  dpm/100 cm<sup>2</sup> beta-gamma
- Postings are “as required” by the existing conditions.
- **Respiratory Protection is required during unloading**
- Work Area sample to be drawn to establish conditions during unloading process.
- Personnel directly involved with the off-loading of the Roll-off container shall wear Breathing Zone Air Samplers. At a minimum, that includes all personnel in the pit during the unloading of the Roll-off container.
- Self-reading dosimeter required if working within a posted radiation area.
- PPE is required for all work inside the posted contamination area. When protective clothing is being worn, two pairs of gloves are required. Two pair of gloves consists of two pair surgeons gloves or one pair surgeons gloves and one pair leather or heavy cotton work gloves. Cotton liners and cap may be worn if desired. Personnel working in U3BH outside the posted CA are required to wear boots.
- PPE is not required for vehicle operators that do not exit their vehicles.

# SITE-MAP OF AREA 3



## LEGEND



Container Staging Area



Contamination Area

# Intermodals staged in U3BH prior to emptying



# Intermodal spacing



# Intermodal door securement devices.



# Binders must be loosened in the Contamination Area



# Door is opened prior to truck rolling into position.



# Truck begins to lift intermodal container.



# As intermodal is lifted, the contents slide out.



Hose with spray nozzle to mitigate possible airborne contamination

# Truck pulls forward to once the package contacts ground.



# RCT uses mazzlin mop to swipe inside of container.



# RWMS personnel must unsecure the door.



# Door is closed once RCT survey is complete



# RWMS personnel attach door latch to binder



# Bottom plate is latched into position



# Bottom plate is secured



# Door hinge and latch are tightened in unison



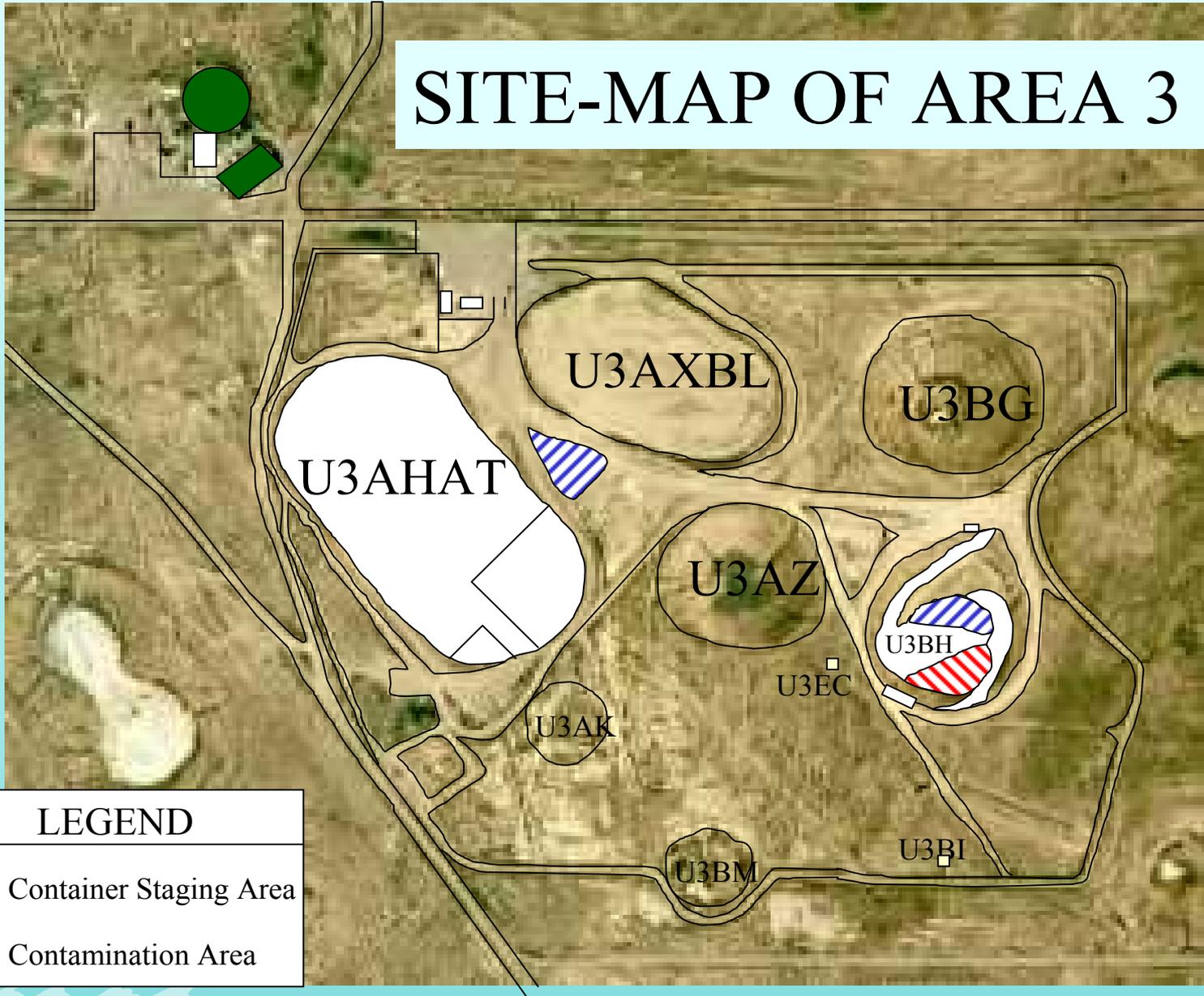
# Final survey is performed before truck leaves C.A.



# Intermodals are staged to be re-loaded onto trucks.



# SITE-MAP OF AREA 3



## LEGEND



Container Staging Area



Contamination Area

# After off-loading

- Large area wipe (mazzlin mop) is surveyed by Rad. Con. Personnel.
  - A Gamma-Spectroscopy is done to determine the amount of U-235 is within DOT limits.
- Return Paperwork is generated by BNFL.
- Containers are listed as rad-empty.
- Empty containers are loaded on flatbed trailers according to the return paperwork.

# Summary & Conclusion

- The RWMC has received 17 intermodal shipments to date averaging 449 ft<sup>3</sup>, 32,500 lbs, and 1.25 GBq per container.
- At current pace, approximately 5 shipments can be off-loaded, emptied, and covered per day. This number will vary depending on weather conditions.
- Approximately 700 shipments are scheduled to occur in FY03 pending reactivation of the profile.