

Regulatory Challenges and Innovations Related to DOE EM Sites in New Mexico

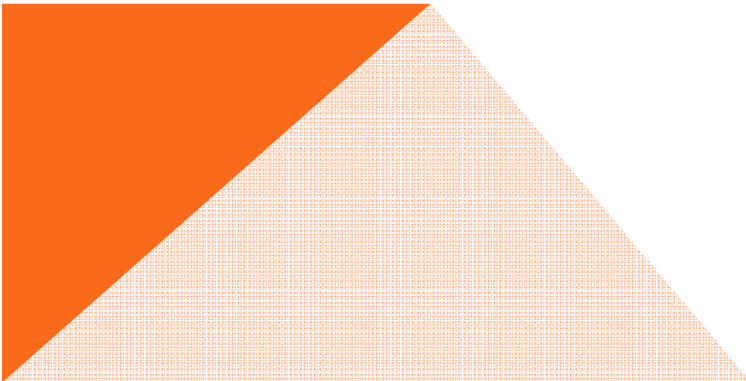
F. DAVID MARTIN, SECRETARY
NEW MEXICO ENVIRONMENT DEPARTMENT

WM 2013 Symposia

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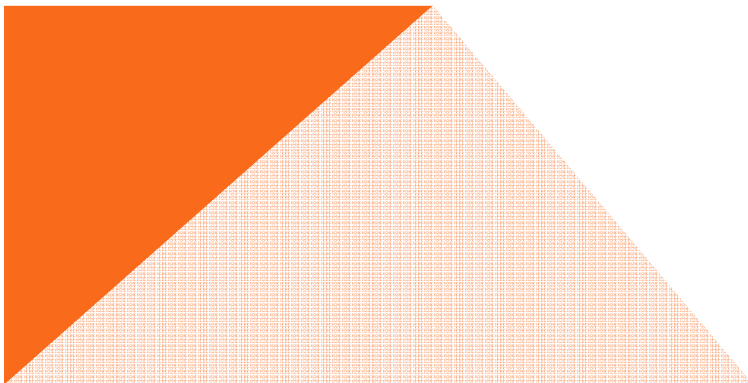
Phoenix, AZ

February 27, 2013



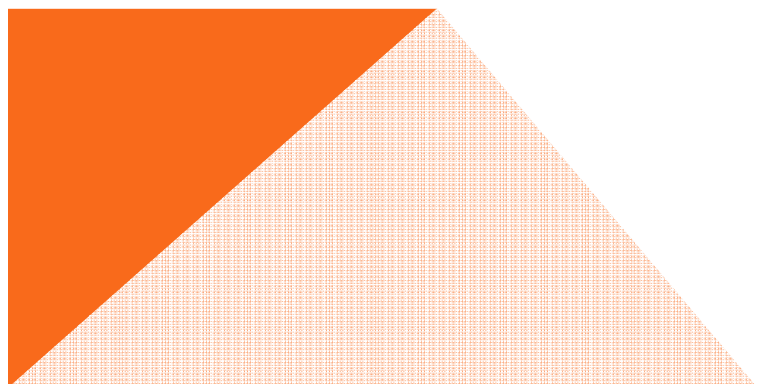
Goal of the States for DOE EM Sites

- Successfully implement environmental programs at the state level:
 - ✧ Demonstrate commitment to protecting public health and the environment
 - ✧ Provide oversight, cleanup and management of hazardous waste at federal facilities



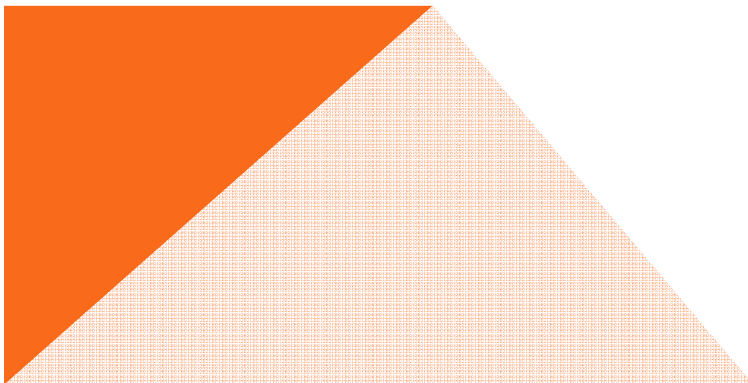
NMED Regulatory Challenges

- State Budget
 - ✓ Reduced 22.5% in 2011
 - ✓ Flat Thereafter
- Inadequate Federal Funding
- Department Culture
 - ✓ Largely antagonistic toward regulated community
 - ✓ History of fining regulated entities



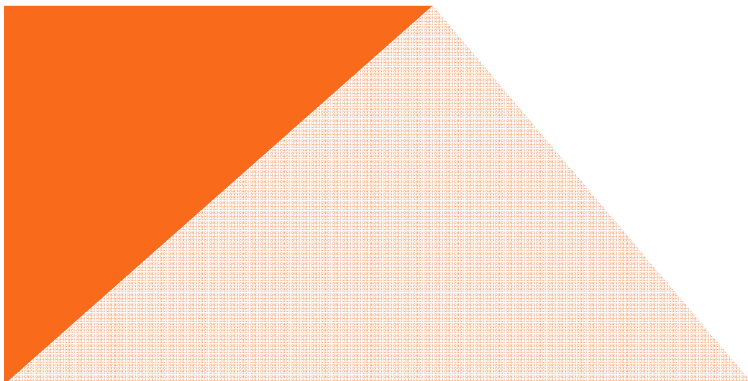
NMED Reorganization

- Converted two divisions to bureaus and combined into one division
- Reduced number of exempt positions from 10 to 6
- Reduced number of attorney positions from 14 to 11
- Reduced salaries of exempt positions and reduced overall salaries of top level positions



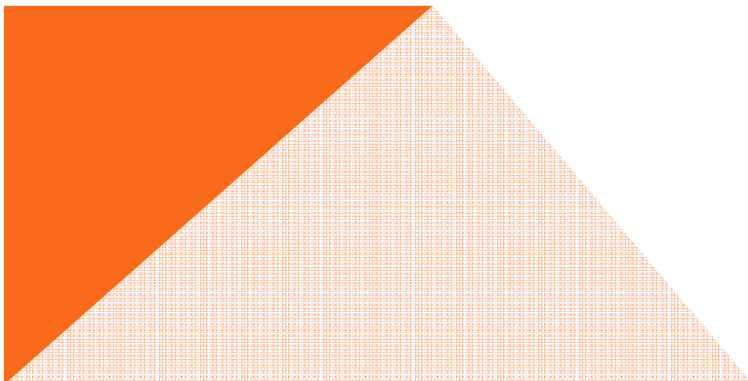
New NMED Approaches

- Develop new goals and objectives for the department
 - ✓ Articulate goals and objectives to staff
 - ✓ Release a professional code of ethics
- Aspire to achieve a culture of positive behavior
- Organize a “Tiger Team” inter-bureau approach to attack complex problems
- Change the way the department interacts with the regulated community
- Interact with funding agencies to help ensure cleanup budgets are adequate



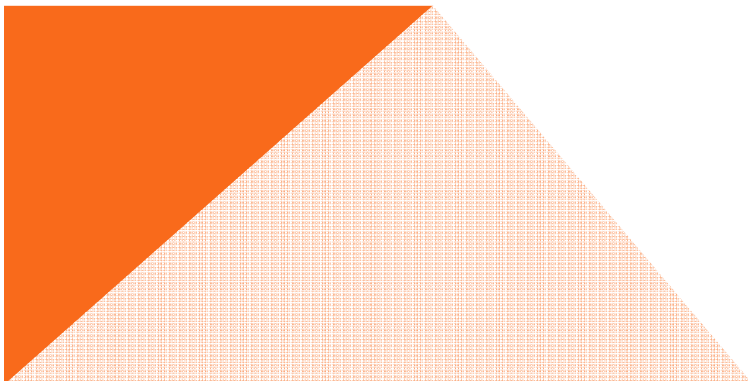
New Direction

- Keep open communications with interested parties
- Articulate rules, regulations, and expectations clearly so that all parties can set priorities and make informed decisions
- Carry out the mandates and initiatives of the Department in a fair, objective, consistent, and predictable manner
- Establish a better appreciation of the costs of regulations to those entities being regulated
- Balance regulatory policy with economic development and employment growth



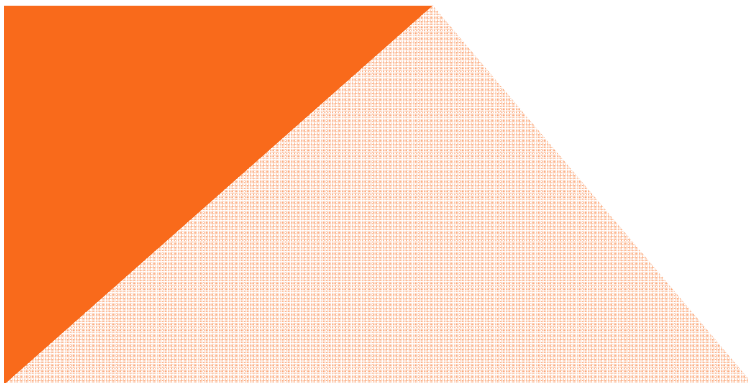
NMED Objectives

- Maintain the highest possible ethical standards
- Treat all applicants equally and with respect
- Encourage the agency to act as facilitators, not antagonists
- Improve efficiency in the permitting process
- Establish early dialogue between regulators and those regulated
- Establish expectations early to avoid later conflicts
- Minimize the prospects of litigation
- Base decisions on scientific data and facts, not opinion



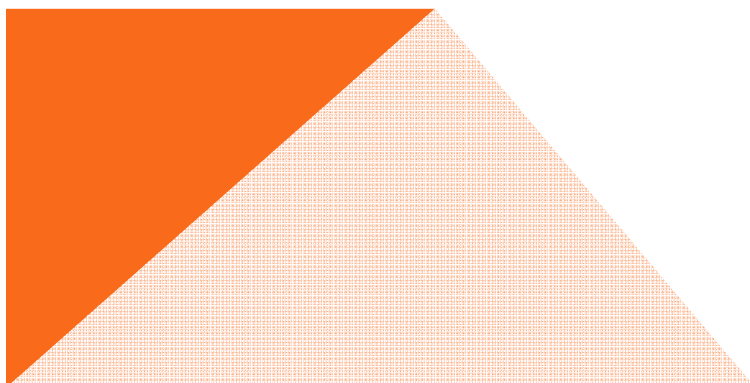
New Initiative: “Lending A Hand”

- This initiative will make the agency more “user friendly” by:
 - ✓ Improving onsite compliance assistance and outreach
 - ✓ Rescinding or revising outdated regulations
 - ✓ Evaluating rules and regulations in surrounding states
 - ✓ Correcting deficiencies in existing rules and regulations
 - ✓ Streamlining permitting processes
- Near term goal is for a user friendly Webpage to guide applicants—one-stop shopping
- Longer term goal is on-line permitting, payment, and filing



Priority DOE EM Sites in New Mexico

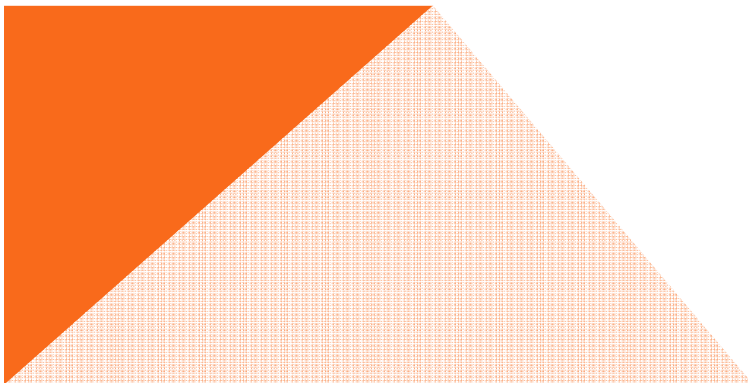
- The Waste Isolation Pilot Plant (WIPP)
 - ✧ Only deep geologic repository in the U.S. for disposal of nuclear waste from defense sites across the DOE complex
 - ✧ Model offered by the President's Blue Ribbon Commission on America's Nuclear Future
 - ✧ NMED regulates some aspects of operations
- Los Alamos National Laboratory (LANL)
 - ✧ R&D and testing related to nuclear arms have resulted in contamination at various sites over the past 70 years
 - ✧ Corrective actions to address investigation and cleanup of legacy contamination have been conducted under a Consent Order issued in March 2005





LANL Legacy Waste

- Large volumes of transuranic (TRU) waste have been stored for many years on the surface at Area G, TA-54
- A large wildfire in May-June 2000 came within a half mile of Area G
- A major wildfire in June-August 2011 increased the sense of urgency to remove this TRU waste
- In September 2011 Governor Martinez and NMED met with senior DOE officials to discuss high priorities for the cleanup
- Core team and tiger team established to address the issue

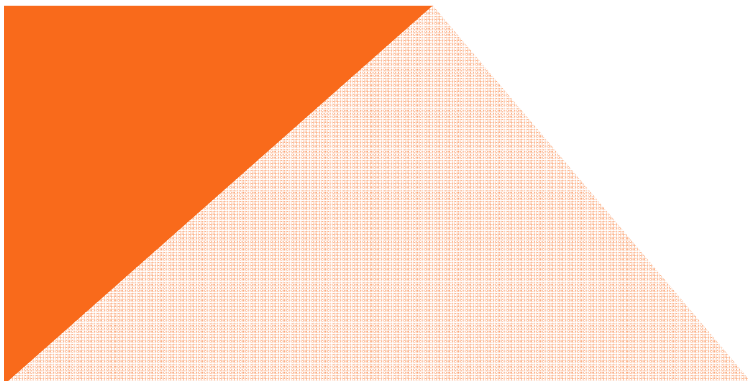




LANL Cleanup

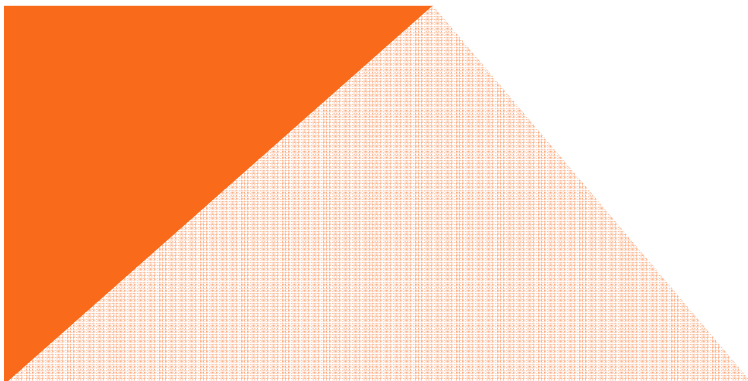
- Re-prioritization to Address Greatest Risk
 - ✧ Above-ground Transuranic (TRU) Waste
 - ✧ Groundwater Protection Near the Site
 - ✧ Surface Water Runoff: Drinking Water Protection

- Framework Agreement
 - ✧ Non-binding Agreement, 5 Jan 2012
 - ✧ Re-schedule Activities Based on Risk
 - ✧ 3706 Campaign: TRU Waste to WIPP by 30 June 2014
 - ✧ Develop Plan for Below-ground TRU Waste by 31 Dec 2012
 - ✧ Continued Groundwater and Surface Water Monitoring
 - ✧ Milestones and Quarterly Progress Review
 - ✧ Annual Evaluation of Plans (Six-month Planning for FY 13)

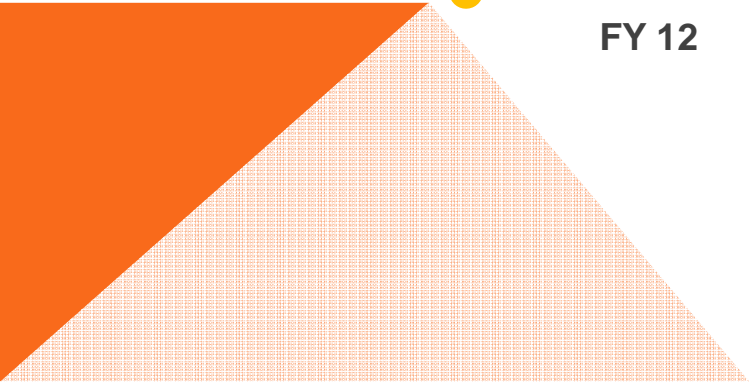
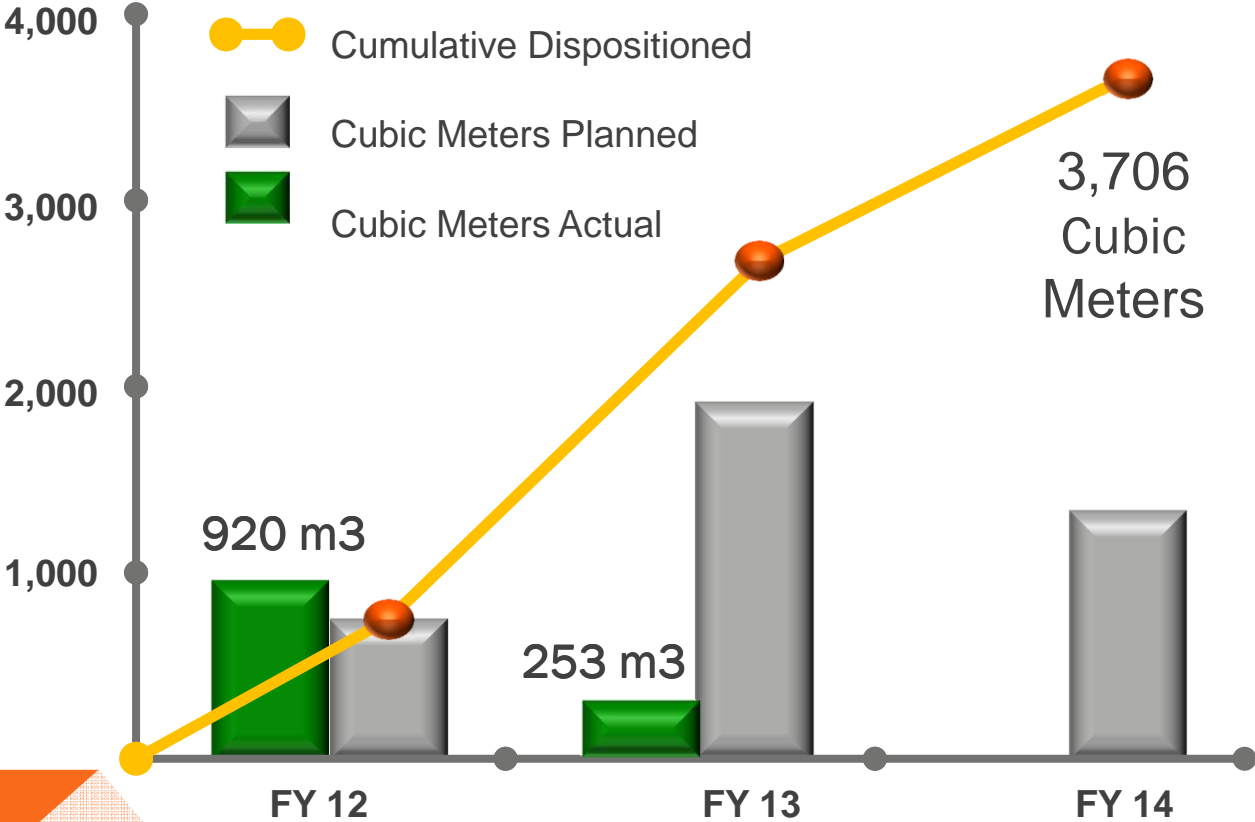


Status of LANL Consent Order

- DOE acknowledged in January 2012 that completion of Consent Order activities by December 2015 cannot be met
 - ✧ Technical challenges
 - ✧ Inadequate funding
- NNSA/DOE request to renegotiate LANL Consent Order
 - ✧ NMED will consider based on the commitment for adequate funding and demonstration to remove TRU waste

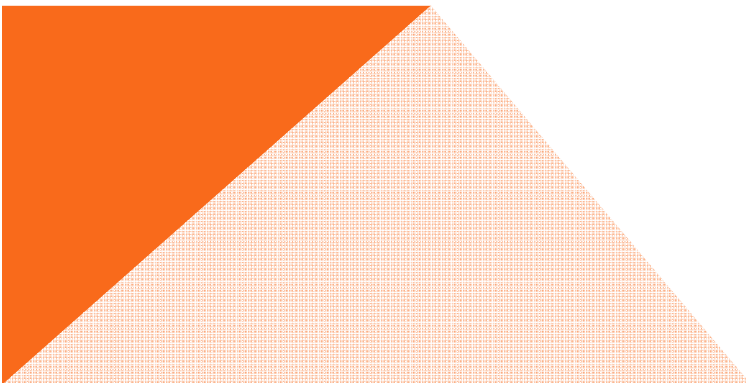


TRU Removal Strategy



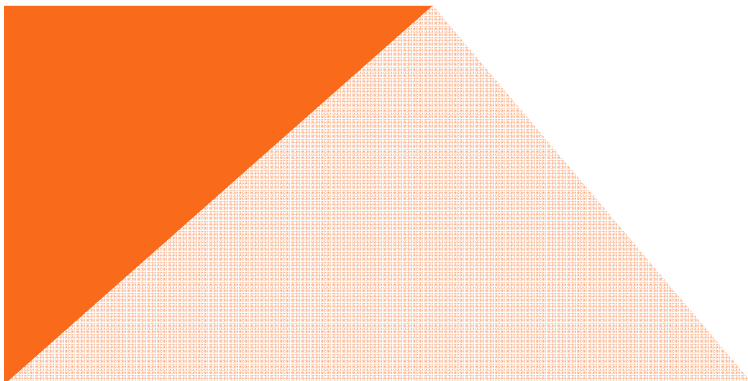
WIPP

- The Waste Isolation Pilot Plant (WIPP) is the only operating facility in the U.S. that permanently disposes defense-related transuranic waste from the research and production of nuclear weapons.
- WIPP, located 26 miles outside of Carlsbad, NM, is a U.S. Department of Energy facility that is managed by Nuclear Waste Partnership LLC, employing a total of approximately 600 people.
- TRU waste temporarily stored at sites around the country is shipped to WIPP and permanently disposed in rooms mined out of an ancient salt formation 2,150 feet below the surface in the 3,000 foot thick salt Salado and Castile Formations.



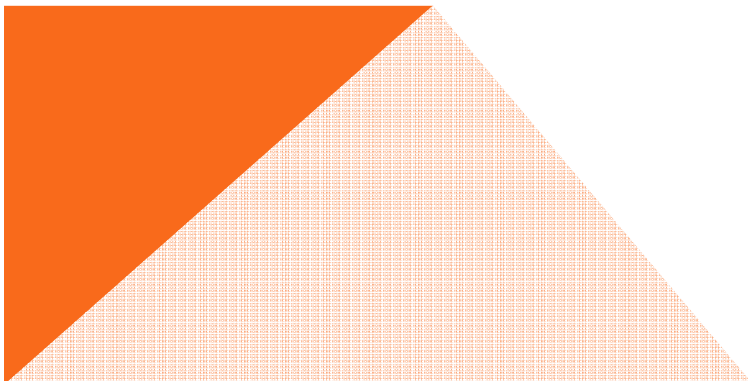
Shipments to WIPP

- As of 2-18-13, 85,498 cubic meters of defense-related TRU waste disposed (3.02 million cubic feet)
- A total of 11,112 shipments have been safely emplaced
 - ✧ Idaho National Lab 5467
 - ✧ Rocky Flats 2045
 - ✧ Savannah River 1492
 - ✧ Los Alamos National Lab 1138
 - ✧ Hanford 572
 - ✧ Argonne National Lab 156
 - ✧ Oak Ridge 131
 - ✧ Others 111



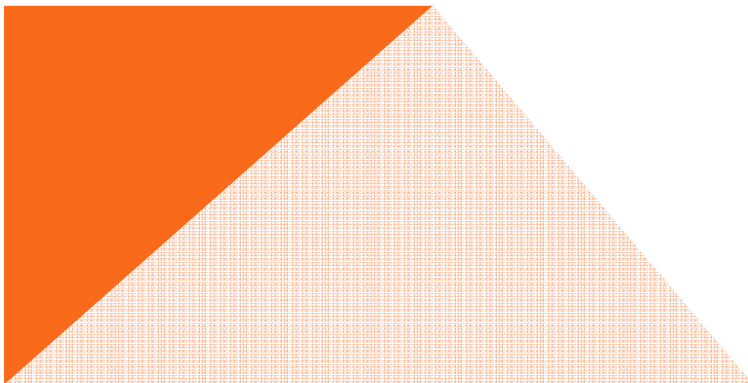
Proposed WIPP Permit Improvements

- Simply Significantly (currently 1700 pages)
- Eliminate Redundancy (example: requirement to submit a Waste Stream Profile Form is written 7 times, in 7 different ways)
- Remove Non-RCRA Components
- Develop a format that links requirements to monitoring, recordkeeping and reporting



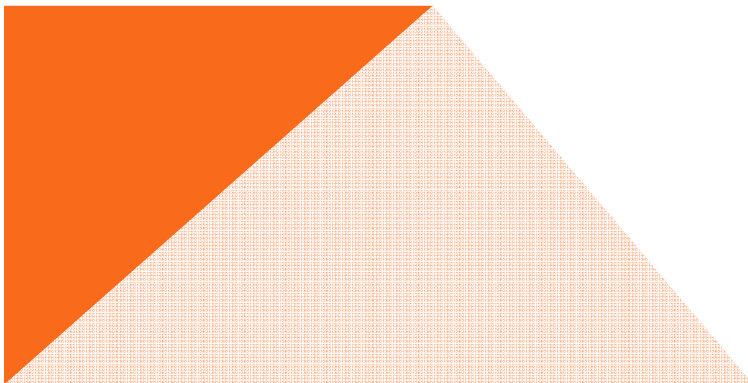
Improving Efficiency at WIPP

- Process Class 1 Permit Modification Requests as soon as possible
- Allow submittal of bundles when practical
- Eliminate the requirement for mandatory and extensive sampling that is deemed to be unnecessary and costly
- Approach Class 3 PMRs with an open mind (example: repository reconfiguration, panel closure design)
- Balance and better manage work loads
- Reconsider format and frequency of WIPP Quarterly Meetings



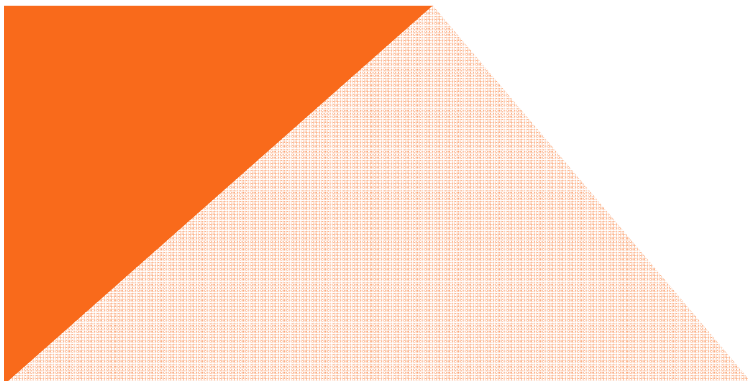
Common Funding Problems

- For the foreseeable future, cleanup funding is not likely to be sufficient to meet all milestones in state-DOE compliance agreements
- Tight future budgets require maximum utilization of available funds: need to work together
- In May 2012, the NGA Federal Facilities Task Force (FFTF), in consultation with DOE, released a set of principles regarding how state regulators and DOE would jointly approach the planning and prioritization of cleanup work

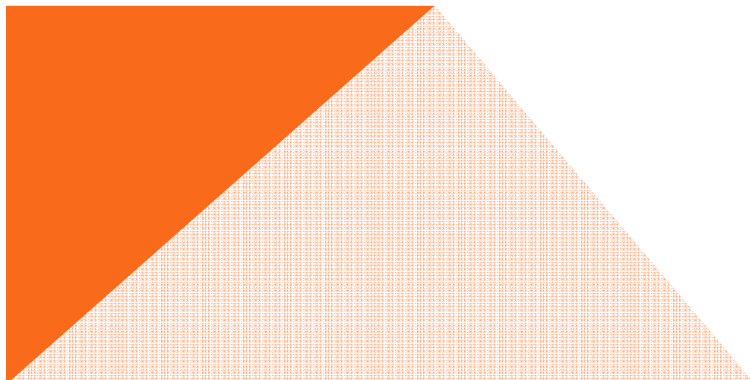


NMED Future Plans

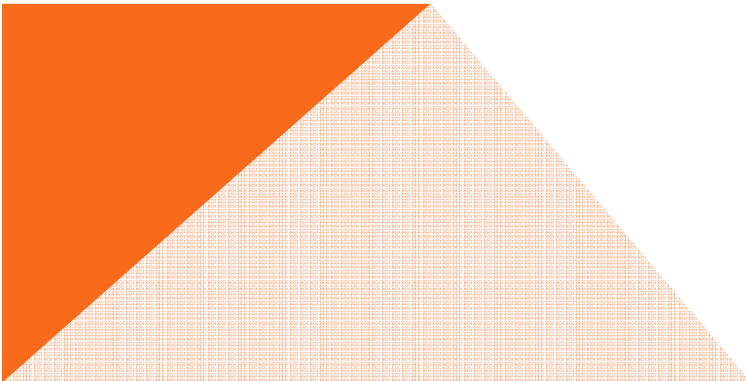
- Visit with state regulators at other key DOE-EM cleanup sites
 - ✧ Increase collaboration
 - ✧ Incorporate best practices into future agreements
- Maintain regulatory role but become more efficient
- Work with DOE to expedite the safe and effective cleanup activities at the DOE EM sites, based on the principles outlined by the FFTF.



thinking

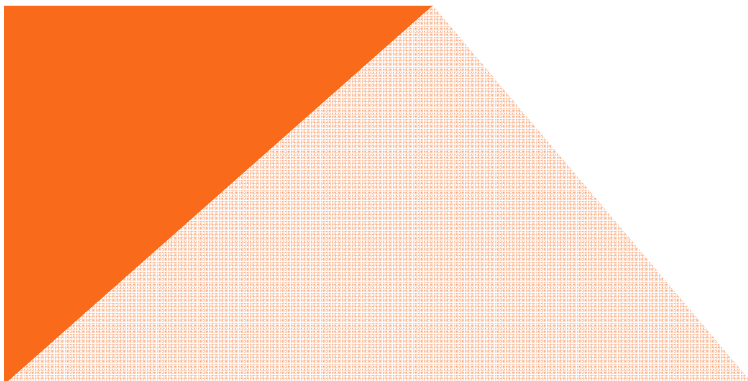


Backup Slides



TRU Volume Removed

TRU Volume Removed		FY12 Actual		FY13 Projections		FY14 Projections	
3706 TRU Campaign Shipments	2014 Goal	Cumulative		Cumulative Projection	% Complete	Cumulative Projection	% Complete
		Actual to Date	% Complete				
Volume (m3)	3706	920		2600		3706	
			25%		70%		100%
Drum Equivalents	17817	4424		12500		17817	
Radioactivity (PE Ci)	41085	23075	56%	33739	82%	41085	100%



Mixed Waste to WIPP

- Mixed waste shipped to WIPP contains both radioactive and hazardous components and is jointly regulated by EPA and NMED
- Radioactivity exceeding 100 nCi per gram
- Alpha radiation with half-life greater than 20 years
- Includes plutonium, americium, neptunium, curium and others
- First mixed waste shipment to WIPP on September 9, 2000

