



WASTE MANAGEMENT 2013

**THE FUTURE OF
SNF/HLW CONSENT
BASED SITING**

BY
JOHN HEATON

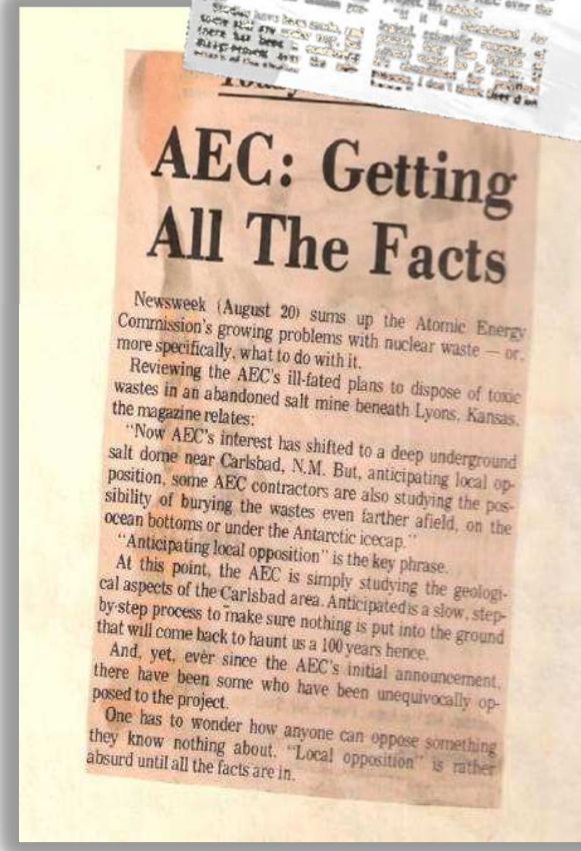
“At the end of the day it must be the science that will lead us to the best decision that will be in the best interest of this community and of our nation.”



**Governor Susana
Martinez addresses
the BRC in Carlsbad,
January 2011**

History

- 1957–The National Academy of Sciences recommends deep geologic disposal for radioactive waste and suggested salt
- 1968 – A demonstration, “Project Salt Vault,” is tested at a mine near Lyons, Kansas
- 1971 – State Senator Joe Gant Jr. contacts U.S. Congressman Harold Runnells and suggests that the AEC take a look at Carlsbad’s salt beds
- 1979 – Congress authorizes WIPP as a research and development facility
- **LAW SUIT BY AG 1980**
- 1981 **C&C Agree**, EEG Formed, Leg Over Sight Committee formed
- 1981 – The Department of Energy proceeds with construction of WIPP





1980's
Santa Fe
New Mexico

History



- 1982 – NWPA enacted
- 1985 – NWPA Co-Mingling Amend
- **1986 – WIPP standards established 194**
- 1987 – NWPA Designates Yucca Mtn
- 1989 – The DOE completes repository construction
- **1991 – EPA & DOE coordination**
- 1992 – Congress passes the WIPP Land Withdrawal Act. The act is amended in 1996.
- **1995 – SYSTEM PRIORITY MANAGE**
- 1998 – The EPA certifies that WIPP meets all applicable regulations
- 1999 – The first shipment of TRU waste arrives at WIPP on March 26. **The NMED issues a RCRA permit in October**
- 2005 – The final TRU waste shipment from Rocky Flats is received at WIPP
- 2007 – The first shipment of RH-TRU waste arrives at WIPP on January 23

CARLSBAD CURRENT-ARGUS

50 cents newsstand (36 cents home-delivered) 12 Pages FRIDAY March 26, 1999 Serving Eddy County, New Mexico

THIS IS NOT A DRILL

WIPP gets 1st shipment

Good afternoon, Eddy County Special Edition

Complete coverage of the first shipment of transuranic waste to the WIPP site in eastern Eddy County.

Waste Cycle

A look at steps in the process of shipping waste to the WIPP site in eastern Eddy County.

WIPP facility opens for business



By Victoria Parker-Stevens

CARLSBAD — With each truck of the truck's horns, there were more screams, noise-makers and flag waving.

Update

The Current Argus was notified this morning that the first shipment was to be made.

Carlsbad greets WIPP truck with open arms

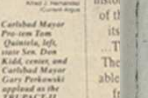


Richardson Mayor Jon Stewart (left) and Carlsbad Mayor Gary Pinkowski (right) greet the WIPP truck as it enters the town.

Carlsbad — Several blocks of a mighty horn heralded a new era in Carlsbad early today as the truck carrying nuclear waste hunkered to small crowds of supporters as it made its way through the heart of Carlsbad.

A clutch of about 10 people stood at the corner of Governor and Canal streets early today on its way to the WIPP site.

Richardson Watch Jon Stewart takes a stab at the governor



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Richardson Watch

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Richardson Watch



The truck carrying the WIPP-FACT II containers to the Waste Isolation Pilot Plant is greeted by Carlsbad Mayor and Governor streets early today on its way to the WIPP site.

DAILY BRIEFING C3 • COMICS C4

Jan. 2007

METRO & NM

ALBUQUERQUE JOURNAL

Thursday, January 25, 2007

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COURTESY DEPARTMENT OF ENERGY

The first shipment of a new type of more highly radioactive waste arrives Tuesday at the Waste Isolation Pilot Plant near Carlsbad.

High-Level Waste Rolls In

WIPP takes its first shipment of dangerously radioactive nuclear material for disposal

By John Ellick Journal Staff Writer

The Department of Energy lifted the veil of secrecy Wednesday from the first shipment of a new type of more highly radioactive waste to a nuclear waste disposal site in

New Mexico. The shipment from Idaho, which arrived Tuesday evening in a lead-lined steel shipping container, was a major milestone for the Waste Isolation Pilot Plant, the nation's only deep underground burial site for dangerously radioactive waste.

The Energy Department won final approval last week for the shipment, but would not say when the first truck would roll, citing security concerns. Assistant Energy Secretary James Rispoli, in a statement issued Wednesday morning,

called the milestone "particularly significant to DOE" as it cleans up nuclear waste around the country. WIPP, a 2,150-foot-deep salt mine near Carlsbad built for the disposal of plutonium-contaminated nuclear weapons waste, has been open since March 1999.

Instant Family

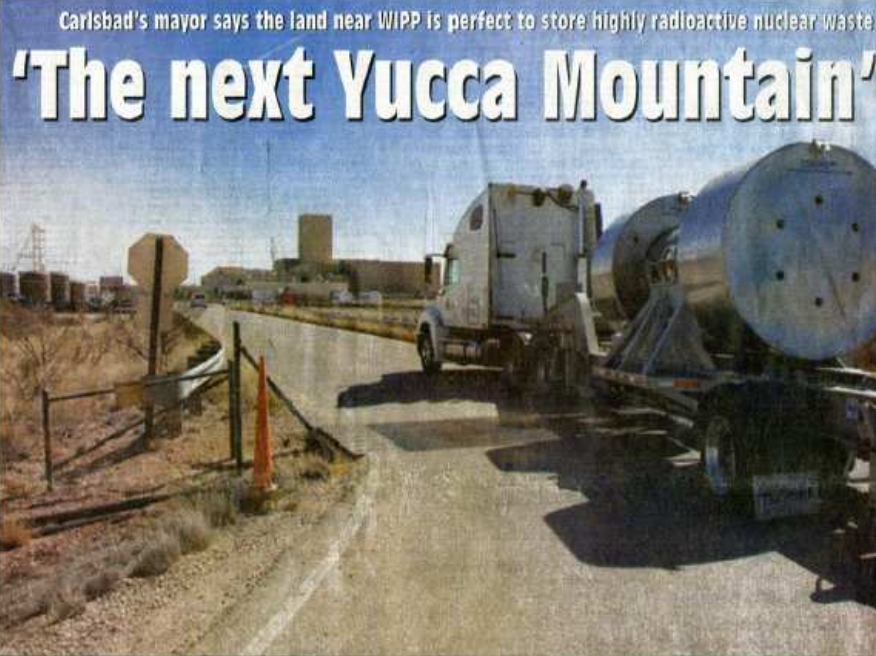


N.M. Marine In Iraq 2 Months

Santa Ana Man Enlisted in 2005 and Jennie Sanchez of Santa Ana Pueblo. Emilian Sanchez was single and did not have children.

News-Sun

JAL EUNICE HOBBS LOVINGTON TATUM SEMINOLE DENVER CITY



Carlsbad's mayor says the land near WIPP is perfect to store highly radioactive nuclear waste.

'The next Yucca Mountain'

This Feb. 27 photo courtesy of the U.S. Department of Energy's Carlsbad Field Office shows the arrival of remote-handled transuranic waste at the Waste Isolation Pilot Plant near Carlsbad.

'The community's ready, the timing couldn't be better'

ALBUQUERQUE (AP) — Longtime Carlsbad Mayor Bob Forrest recalls the days when no one wanted to take the federal government's radioactive waste except his southern New Mexico community.

Ten years after it opened, the Waste Isolation Pilot Plant, commonly known as WIPP, remains the government's only radioactive waste dump.

But now, Forrest says, the climate for all things nuclear has changed, and communities across the nation are fighting for projects.

Forrest himself believes the vast, 250 million-year-old salt beds that house WIPP east of his community of about 35,000 could store high-level nuclear waste such as that once destined for the Yucca Mountain project the Obama administration is apparently abandoning.

Such a repository would be separate from WIPP, he said.

WIPP excavated 2,150 feet below the surface of the desert, is designed for so-called transuranic waste generated by the nation's defense work — such



An historic marker is seen as the cooling towers of Three Mile Island's Unit 1 Nuclear Power Plant pour steam into the sky in Middletown, Pa.

SEE YUCCA, Page 3

Global warming giving nuclear power new support

MIDDLETOWN, Pa. (AP) — The nation's worst nuclear power plant accident was unfolding on Pennsylvania's Three Mile Island when an industry economist took the rostrum at a nearby business luncheon.

It did not go well.

Those in the standing-room-only crowd listened to economist Doug Biden's thoughts about cheap, reliable nuclear power, but Biden could not calm their nerves or answer their pointed questions: Should they join the tens of thousands of people fleeing south-central Pennsylvania? Should they let their children drink local milk?

Three decades later, fears of an atomic

SEE NUCLEAR, Page 3

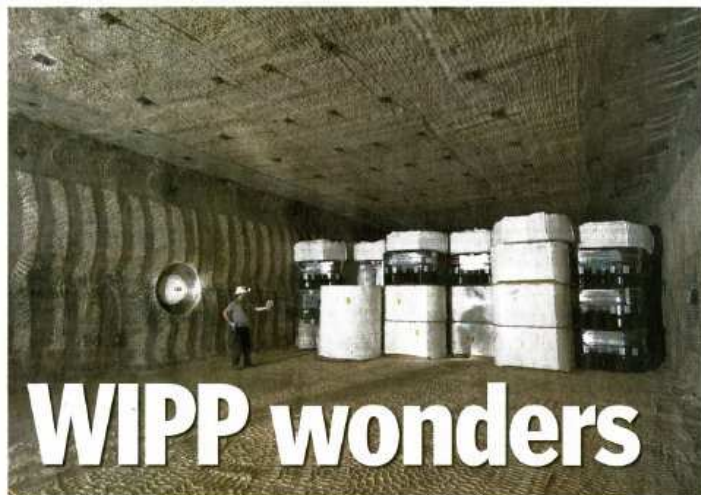
THE SANTA FE NEW MEXICAN

SUNDAY, MARCH 29, 2009

www.santafenewmexican.com

ONE DOLLAR

Ten years in operation, the nation's only nuclear waste disposal site boasts a sterling safety record and continued community support



WIPP wonders

STORAGE After radioactive waste arrives at the Waste Isolation Pilot Plant in containers, it's placed in a series of tunnels called panels. Each panel has a series of rooms that are filled, then sealed and left so the rock salt can slowly encase the waste. See videos of the underground tour at www.santafenewmexican.com.

By Sue Vorenberg
The New Mexican

CARLSBAD — Deep in an underground tunnel, standing 20 feet away from a stack of barrels of nuclear waste left over from the Cold War, Egger Nelson, chief scientist at WIPP,

It's been 10 years since the Waste Isolation Pilot Plant began operations, and more than 7,200 shipments later the site and its transportation system have had no major problems, including no releases to the environment and no worker contamination, Nelson said proudly.

"Both of those categories have to be zero, or we're not doing our jobs," Nelson said.

After more than 30 years of planning and operations, the site remains the only functioning nuclear waste disposal site in the United States. In the 10 years since it started

taking waste, the site has maintained a strong safety record — which has led to some very early discussions, at least by Carlsbad politicians, of the creation of new nuclear waste disposal sites in the area.

That includes a possible alternative to the Yucca Mountain nuclear waste repository that continues to be stalled through political opposition in Nevada.

"WIPP's been a great success story for us," said Carlsbad Mayor Bob Forrest, who added that he plans to lobby for a Yucca Mountain-like facility to come to the area should plans for the current site fail.

Still, some officials from the state government are not particularly fond of that idea, at least not if it involves expanding WIPP's mission to handle high-level waste.

"The federal government must abide by the promise it made to New Mexicans more than a decade ago and focus on WIPP's original purpose to dispose of only transuranic waste"

— trash containing radioactive elements such as plutonium — New Mexico Environment Department Secretary Ron Curry said. "We will vigorously oppose any attempt to expand or alter the mission of WIPP to allow high-level waste at the site."

As far as WIPP's current mission, and thinking back on the site's history, Sen. Jeff Bingaman, a Silver City Democrat, said he's impressed by how well things have gone so far. The site has been a valuable national asset for getting rid of some types of defense-related nuclear waste and a boon to the economy of southeastern New Mexico, he said.

"I think the WIPP site has worked out well for the purpose we established it for," said Bingaman, who has worked on legislative aspects of the site since 1981. "It has operated smoothly and our state has benefited economically from the employment."

Please see WIPP, Page A-6



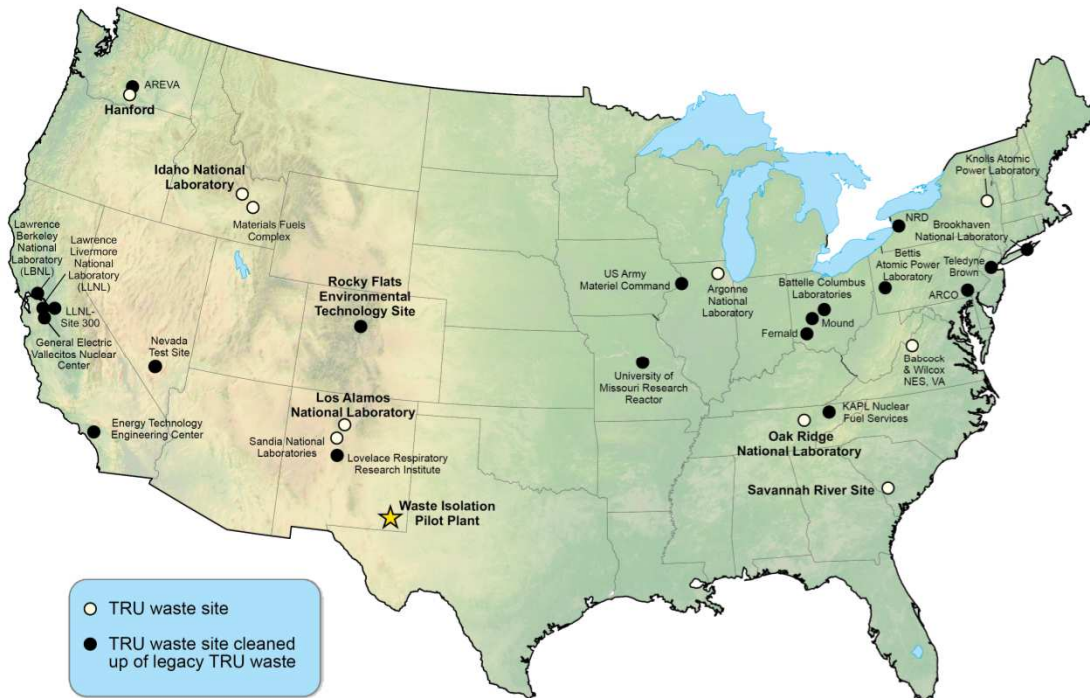
TRANSPORTING WASTE A container called RH-72B is a lead-lined cask used for shipping remote-handled transuranic waste.



SALT WALLS A continuous miner is used to carve disposal rooms out of the salt formation, nearly a half-mile below the surface.

WIPP's Record of Success

14 Years of **Safe Operation**



- **22** TRU waste sites cleaned up to date
- More than **11,000** safe shipments
- Over **12 million** loaded miles traveled
- More than **84,000** Cu Meters disposed
- More than **150,000** containers disposed

NATURAL DISASTERS & RISK



Drought



Fukushima



Sandy 2012



Sandy



Sandy

6 LEAKING TANKS, MORE?



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TWO PRONGED APPROACH

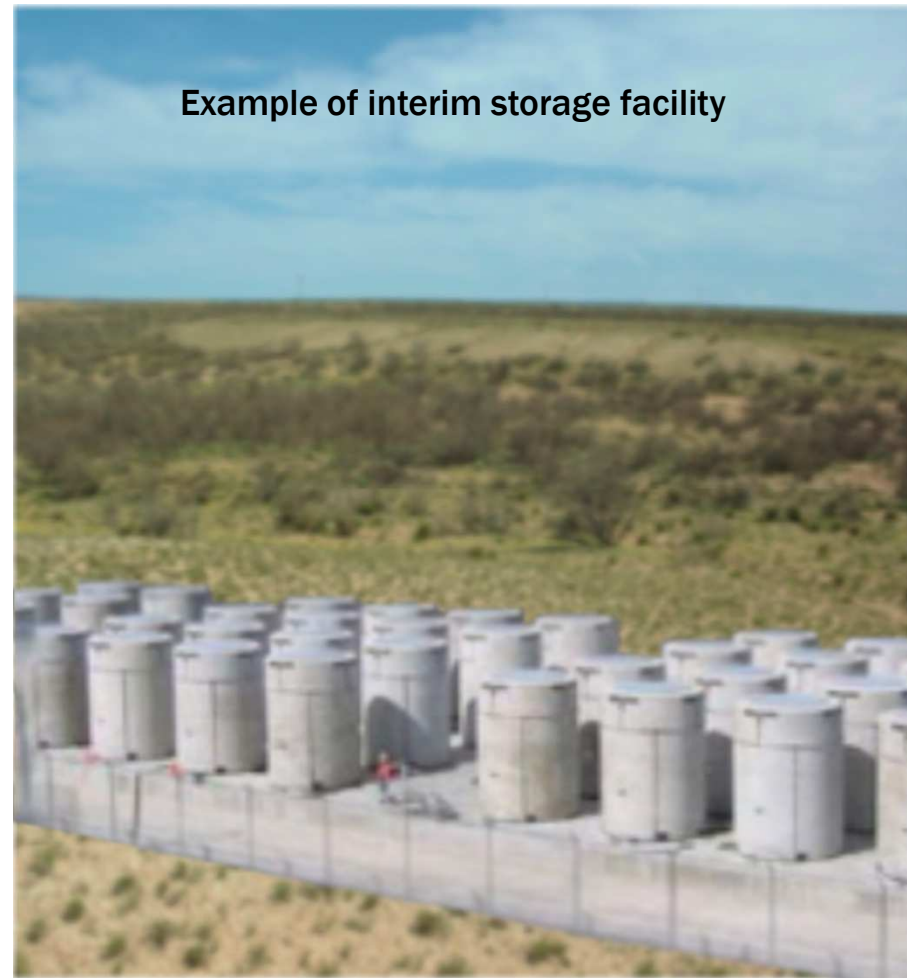
**USED FUEL
CONSOLIDATED
INTERIM
STORAGE**

**HIGH LEVEL
WASTE
SALT NEAR WIPP**

ANOTHER CONSENT PROCESS

EDDY LEA ENERGY ALLIANCE (ELEA)

- **ELEA is an LLC that includes the cities of Hobbs and Carlsbad, New Mexico, and Eddy and Lea counties**
- **ELEA purchased 1,000 acres of land approximately halfway between Carlsbad and Hobbs, N.M. for potential use**
- **Land studied extensively during Global Nuclear Energy Partnership process**
- **Includes land ideal for interim storage**



WHY THE ELEA SITE?



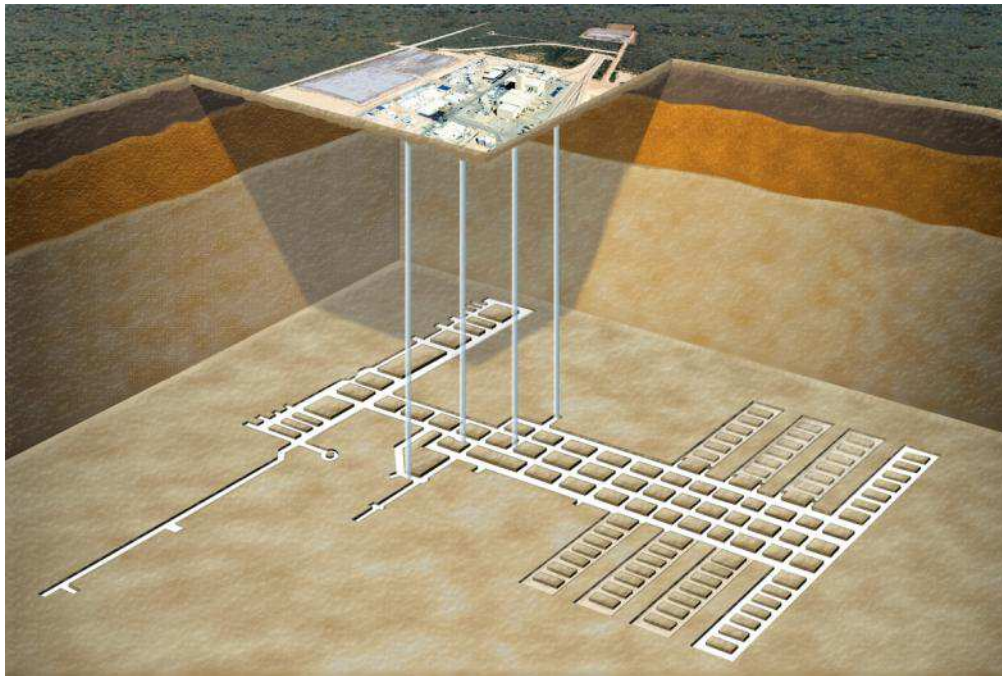
- Remote location
- Geologic stability
- Dry area
- Infrastructure present, including rail
- Preexisting robust scientific and nuclear operations workforce
- Excellent location for future repository nearby
- Highly supportive community

Available Withdrawn Land



Next Pilot Mission for WIPP

A National Solution for DHLW



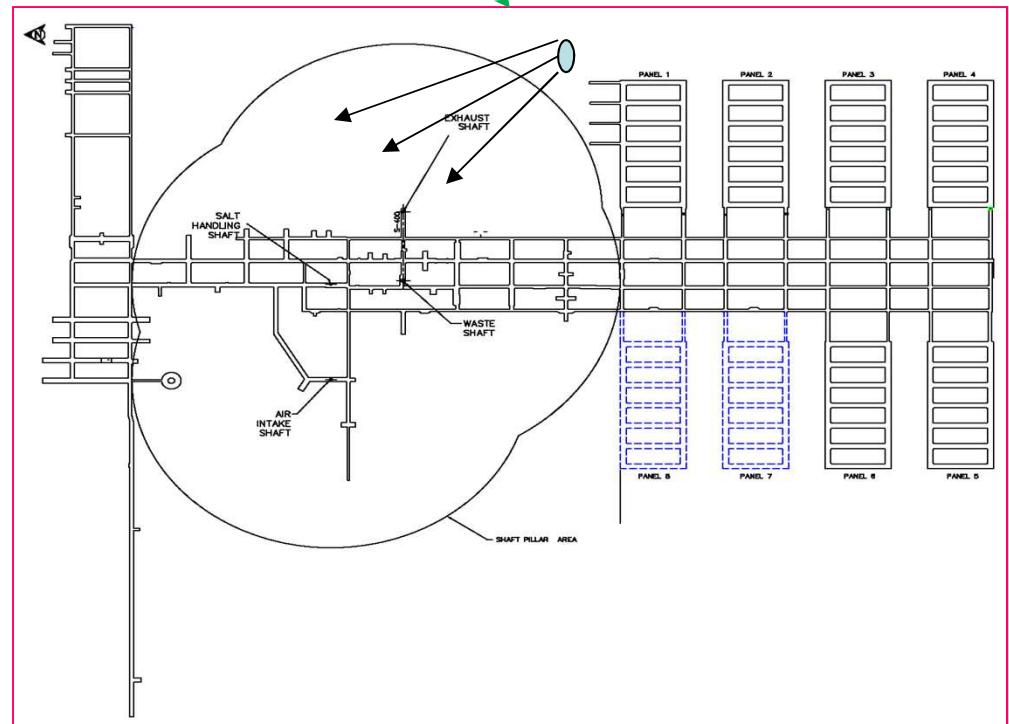
- WIPP is America's only deep geologic repository for the permanent disposal of defense-generated transuranic (TRU) radioactive waste.
- Originally being characterized for HLW
- Salt was recommended by NAS

Why Conduct SDDI Field Test at WIPP?

- COST SAVINGS BY TENS OF MILLIONS OF DOLLARS
- TIME SAVINGS BY DECADES DUE TO INFRASTRUCTURE
- TESTS CAN BEGIN NOW
- TESTS TO PROVE & CONFIRM:

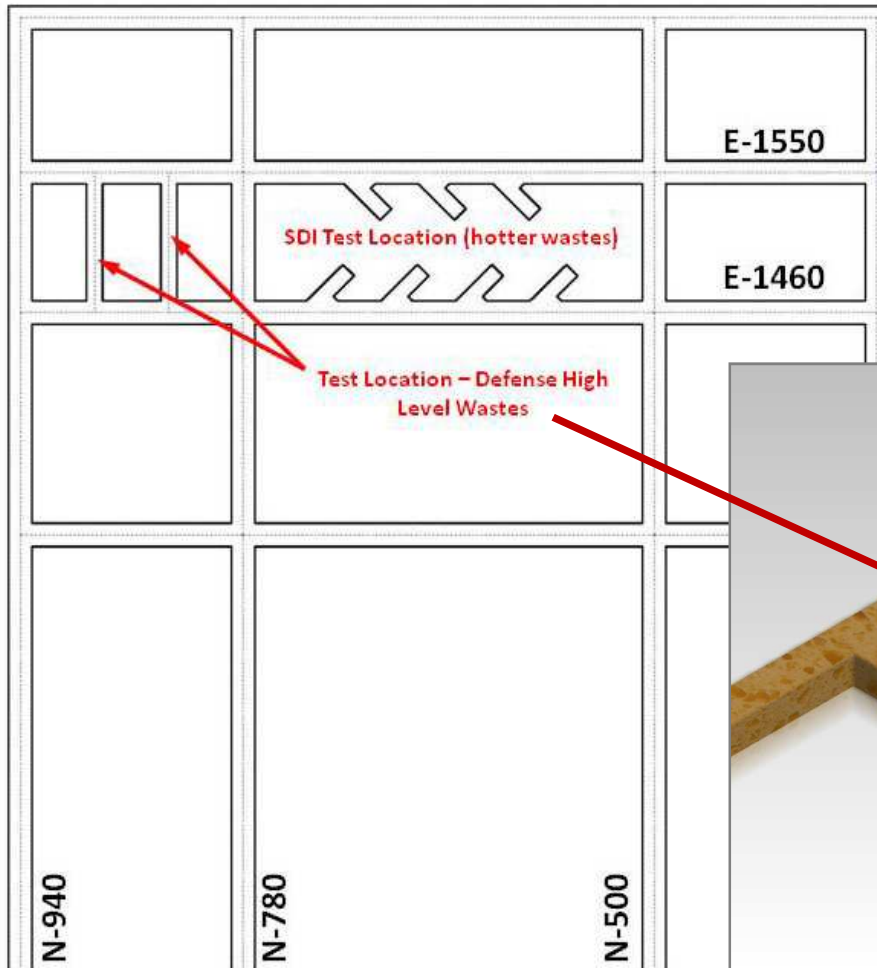
- Instrumented to measure:
 - >water movement
 - >temperature
 - >deformation rate
 - >alcove closure rate
 - >crushed salt pressure
 - >ventilation conditions
- Confirm lab tests
- Dispersion of heat

Access SDDI Drifts Heater Test

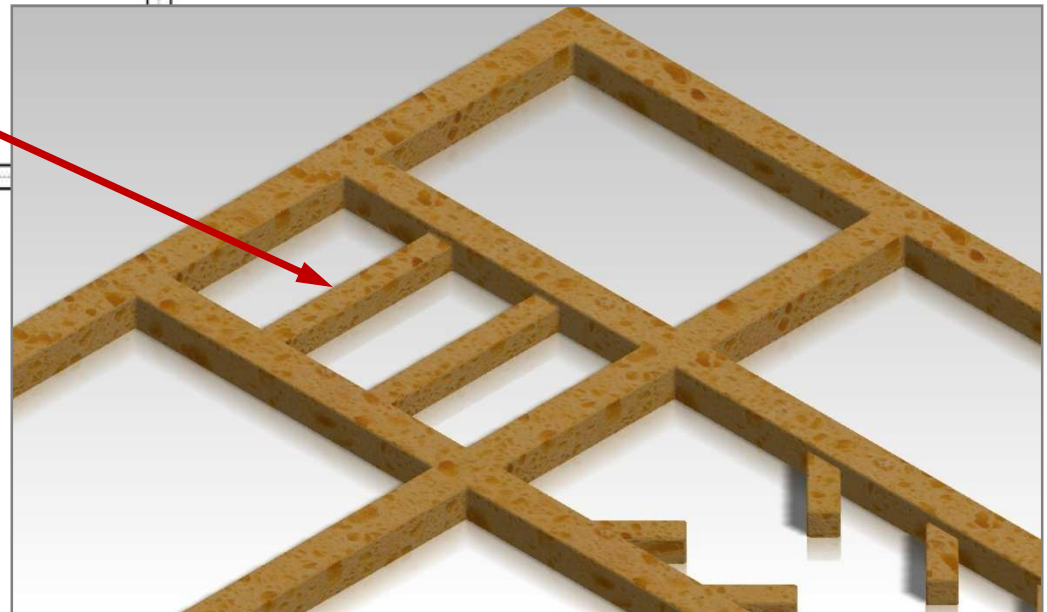


Potential Test Location Within WIPP URL

SDDI could be conducted in drifts near the planned test location for the hotter SDI experiments.



Two 80 ft long drifts spaced approximately 35 ft apart (rib to rib). Each drift would be excavated with minimal mining (~10' tall x 16' wide).



A NEW HOST AGREEMENT

- What is a consent based process?
 - Every community, every state will have their own ideas, requirements and process
 - Begin with a Willing Community – region
 - Tentative acceptable geology & geography
 - Agreement by state to host the facility to allow geo-technical/environmental assessment
 - Agreement is the set of conditions required to accept the facility

Host Agreement

- Health, safety and environmental standards
 - How much involvement? Defer to NRC?
 - Violations?
- Security
 - Defer to NRC standards? Additional?
- Communication level? Who?
- Transportation oversight?
- Reporting? Who? What? How much?
- What is the definition of “Interim”?
- Resolution of disputes? Arbitration?
- Competent Court of Jurisdiction?
- Incentives? Each entity will have their own wish list.
- Decommissioning?
 - How clean is clean?
 - Financial assurance for decommissioning?

AGREEMENT, WHAT THEN?

- Public education and integration of project in region and state
- DOE negotiates deal to move forward
- Environmental, geo-technical evaluation to prove site
- Final agreement with state approved
- DOE agreement to support NRC license
- DOE chooses sites
- DOE engages contractor thru RFP



Stock Picks To Beat The Rush



Where You Might Not Shop In 2012



Top-Earning Grammy Winners



AdVoices Walki

Nuke Us: The Town That Wants America's Worst Atomic Waste



Carlsbad residents (including former mayor Bob Forrest, center, in grey sweater) show their support for the Waste Isolation Pilot Plant.

There's a secure solution to America's nuclear waste problem: bury it under Carlsbad, New Mexico. The locals are ready — if only Washington would get out of the way.

