

Update 3/4/04

Shipments expected for the week of 02/29/04 through 3/6/04: RFETS (14), SRS (6)

# TRU TeamWorks

A weekly e-newsletter for the Waste Isolation Pilot Plant team

March 4, 2004

## The Big Story Raising crane



**Topics**

- [Characterization News](#)
- [Transportation News](#)
- [Disposal News](#)
- [Safety News](#)
- [Working Smart](#)
- [Announcements](#)

**Tools**

- [Acronym List](#)
- [Archives](#)
- [Back to Main Page](#)
- [WIPP Home Page](#)
- [Links](#)

**Feedback**

Contact us with feedback or submit your e-mail address for updates. Click [here](#) to e-mail.

WIPP Shipments  
(as of 03/4/04  
at 7:51 a.m.)

Shipments scheduled to arrive at WIPP 2/29/04 - 3/6/04 20
Total shipments received at WIPP 2,376
Total volume disposed at WIPP 18,324 m <sup>3</sup>
<a href="#">FY04 Performance Metrics</a>

The overhead cranes at the Waste Handling Building's TRU docks are integral to the surface waste handling process. Last fall, two new cranes were added for a total of four cranes to service the docks (two cranes for each dock). The new cranes increased waste handling throughput, efficiency and reliability. Now the two original cranes are being refurbished to maintain that reliability.

Curtis Chester, WTS cognizant engineer for CH waste handling equipment, explains; "Preventive maintenance inspections on the original cranes revealed wear to the main bridge beams and trolley wheels. While the level of wear on the cranes was not an immediate safety concern, continued wear could have eventually impacted waste handling operations."

The refurbishment activities were precisely coordinated by Waste Handling Operations and Construction Management to avoid impacting ongoing waste receipt. "Thanks to the oversight of Mike McFarland, WTS Design and Construction, and good teamwork the goal was achieved," adds Chester.

Timing of the project has also fit national TRU waste shipping schedules. The decision to proceed with refurbishment was based on a projected increase in waste receipt rates for 2004.



*A close-up view of the new beam as it is prepared for welding.*

Refurbishment of one crane has been successfully completed and work on the second crane is now underway. Chester notes that the new beams are patent track beams. "The need to also replace the trolley wheels complemented the design of the new track beams. The combination of the new beam and wheels enhances the crane's reliability and durability."

Ederer Services LLC of Seattle, Washington, completed the design and fabrication of the bridge beams. Beam replacement is being performed by local contractor, Lunsford Welding, under Ederer Services and WTS' supervision. Final work on the crane is expected to be completed by month's end.

**In the news**



NTS on again



Old vs. new



Mining in 3



Wardens at work



SNL-CPG IIII

### Back in action at NTS



#### Topics

[Characterization News](#)  
[Transportation News](#)  
[Disposal News](#)  
[Safety News](#)  
[Working Smart](#)  
[Announcements](#)  
[Our Team](#)

#### Tools

[Acronym List](#)  
[Archives](#)  
[Back to Main Page](#)  
[WIPP Home Page](#)  
[Links](#)

Considerable attention has been given to the Nevada Test Site (NTS) lately. In January, waste shipments from the site marked the opening of a new transportation route and generated media attention along the way. The shipments - ready for months - had been stalled until a corridor agreement was reached between DOE and the states of California and Nevada. Seven shipments from NTS to WIPP completed the removal of waste that had been previously characterized by CCP in 2002.

Now NTS is back in the WIPP spotlight as CCP readies for a new phase of characterization operations. Tim Hedahl, WTS National TRU Programs manager, explains, "The corridor agreement between the states of California, Nevada and DOE provides a window of opportunity in 2004 that CCP personnel are ready to capitalize upon. Our team, headed by CCP Project Manager Joe Franco, will re-establish characterization operations at NTS to process as much waste as possible before the end of the agreement time frame."

Characterization personnel and equipment are being relocated from Hanford to support operations at NTS. Franco explains the resource reallocation, "Much of the characterization equipment deployed at Hanford had already been certified for use at NTS. Taking that same equipment back to NTS allows us to maintain our certification there." Franco noted that additional equipment may also be considered at NTS to increase throughput and efficiency.

The CCP team will capitalize on the experience already gained at NTS to help them jumpstart characterization operations this time around. "Joe oversaw the initial CCP operation at NTS in 2002," Hedahl comments. "His experience at the site will afford consistency in the program as we begin this new operational phase." Franco agrees, "Startup at a site always involves an intense amount of work. But our personnel and experience at NTS gives us an edge in moving forward with our operations. This is vitally important as we work to characterize as much waste as possible before the end of the year."

CCP personnel will begin arriving at NTS next week. Some equipment and vendor personnel are already at the site, with more on the way. The DOE baseline for NTS calls for the completion of characterization of 720 drums this year. WTS has been challenged to characterize more if possible. "Characterization field operations must be completed by late November," Franco notes. "This will be followed by data package review and certification. Waste shipments from NTS to WIPP must be completed before the WIPP Christmas shutdown."

Beyond 2004, CCP looks to return to Hanford in 2005. "The I-40 corridor agreement is only effective until the end of 2004 so our resources must be focused at NTS this year." Hedahl comments, "But we look forward to returning to Hanford, as well."



*Shipments from NTS will once again be on the road to WIPP.*

### A new, improved version

WIPP TRUPACT-II shipping packages travel the nation's highways on customized trailers. But today's trailers were not the first to accommodate TRUPACT-II and HalfPACT packages.

Early WIPP trailers were designed and tested with the expectation that they would always carry three TRUPACT-II or HalfPACTs. After site shipments began, many loads consisted of two rather than three TRUPACTs due to weight limitations and shipping schedules – leaving the third position at the rear of the trailer open.

The open third position caused the trailer to lose some rigidity, and soon WIPP engineers began to see small cracks in the welds on the rear cross member.



#### Topics

[Characterization News](#)

[Transportation News](#)

[Disposal News](#)

[Safety News](#)

[Working Smart](#)

[Announcements](#)

[Our Team](#)

#### Tools

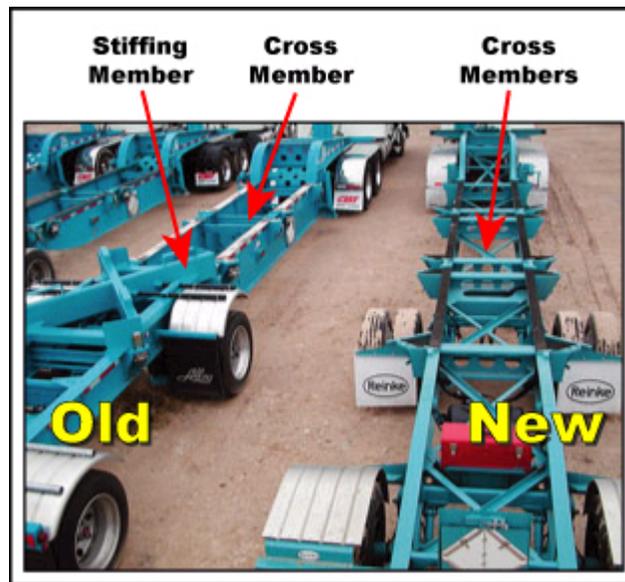
[Acronym List](#)

[Archives](#)

[Back to Main Page](#)

[WIPP Home Page](#)

[Links](#)



To reinforce the trailer, Todd Allen, WTS senior packaging engineer, designed a cross member to insert in the empty third position on the trailer. The device provided added structural resistance and weld cracks dropped sharply. But, it didn't prevent them.

In September 2001, CBFO and WTS decided to look at other trailer options or possible redesign of the TRUPACT trailer. They were able to find an existing trailer design that required little modification to accommodate the shipping packages.

The new trailers were designed and tested to the American National Standards Institute criteria.

The sturdy trailer design incorporates both straight and diagonal cross members down the length of the trailer. Previous trailer models used straight cross members only.

Currently, there are 68 new trailers in the fleet, and according to Allen, "The new trailers have performed as expected."

**Just in time mining**



- Topics**  
[Characterization News](#)  
[Transportation News](#)  
[Disposal News](#)  
[Safety News](#)  
[Working Smart](#)  
[Announcements](#)  
[Our Team](#)

- Tools**  
[Acronym List](#)  
[Archives](#)  
[Back to Main Page](#)  
[WIPP Home Page](#)  
[Links](#)  
[Hoist Schedule](#)

When waste-filled Panel 1 was closed off last July, underground crews began making rough cuts in Panel 3. Now, eight months later, Panel 3 is 80 percent complete. Waste emplacement is ongoing in Room 5 of Panel 2.

According to WTS Mine Operations Manager Bob Kirby, "Everything has gone as scheduled. We've had great support from everyone that's been involved with Panel 3. We're now in Phase III with a targeted completion date of July 2004." WIPP panels are mined in three phases:



*The Eimco drum miner uses a laser guide as it cuts into the face of a drift in Panel 3.*

***Phase I***

The panel and accessing drifts are rough cut and opened up for ventilation. The back (roof) is cut to final dimensions.

***Phase II***

Crews finish the ribs (walls), widening them to the standard 33- to 34-foot width. Roof bolt patterns are installed in disposal rooms.

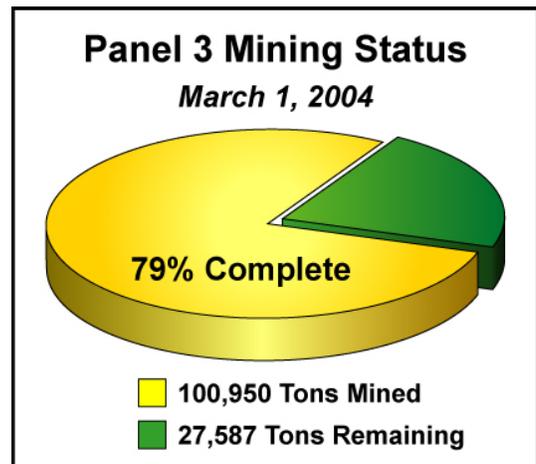
***Phase III***

Approximately three to four feet of floor is taken out to gain the panel's desired 14-foot height.

Months after mining Panel 2, crews were obliged to go back in and re-mine the floor due to natural convergence. This time Kirby says crews will mine additional inches out of the floor to offset the convergence rate, ensuring continued 13-foot clearance throughout Panel 3's active use.

Only one mining machine, the Eimco, has been used in Panel 3. The seven members of Mining Crew B work 10-hour shifts Wednesdays, Thursdays and Fridays and take four days off. The following week, the crew will work Wednesdays through Sunday. The newly adopted schedule appears to be working well. Referring to the mining schedule, Dave Sjomeling, WTS underground mine engineer, notes, "We're right where we should be."

Sjomeling, who charts weekly mining activities, says roughly 100,950 tons of salt have been removed from Panel 3, generating more than 14,000 haul-truck trips to the salt hoist.



One thing you won't hear underground mining and ground control crews say is "Are we there yet?" They know when they'll get there – 27,500 tons from now.

### Office wardens make a difference



#### Topics

[Characterization News](#)  
[Transportation News](#)  
[Disposal News](#)  
[Safety News](#)  
[Working Smart](#)  
[Announcements](#)  
[Our Team](#)

#### Tools

[Acronym List](#)  
[Archives](#)  
[Back to Main Page](#)  
[WIPP Home Page](#)  
[Links](#)

A shrill beep, beep, beep, accompanied by flickering lights – everyone knows the drill. WIPP employees stop what they're doing and immediately head for the nearest designated exit. But how do they know where to go and who to report to during an emergency? Answer: their volunteer office warden. Office wardens play an important role at WIPP. They ensure safe egress from buildings and account for personnel once safely outside.

You will know an office warden by their work area. Within reach is an orange vest, clipboard and bio-kit - to protect against blood-borne pathogens should the office warden assist the injured.

Each department has a centrally located sign-out board used by department office wardens for accountability. Although office wardens frequently check sign-out boards to make sure they are current, accountability is the responsibility of each employee.

The chief office warden, affectionately known as the COW, is responsible for rolling up accountability checklists to establish overall building and plant accountability. During a recent fire drill at the Skeen-Whitlock building, all employees evacuated and were accounted for in record time – due in no small part to volunteer office wardens.

In a changing work environment, employees (who serve as office wardens) may move from building to building or from town offices to the WIPP site. Certainly, back-up volunteers are always needed. If you would like to participate, talk to your manager and contact Buddy Webb at Extension 8178. Volunteers are required to attend office warden training.

### *Hats off to Faye Kirkes*

*Faye Kirkes, Chief Office Warden for the Skeen-Whitlock Building, plans to retire after many years of service at WIPP. Faye was instrumental in establishing the "in town" office warden program. Her dedication and quiet direction in both real and practice emergencies have created a safer work place for us all.*



### SNL Hydrology Team - Part III

## Bass reels in Sandia scientist for Otis water analysis

Sounds like a fish-catches-man story, but it's actually much simpler.

Danny Bass owns an automotive repair business and serves on the board for Otis Water Users Cooperative. Randall Roberts, a Sandia National Laboratories (SNL) geologist and hydrologist, is his customer. They talk. The co-op is experiencing a critical water shortage after extended drought. Bass recognizes Roberts' expertise could help resolve the community's water supply dilemma.

Voila! Roberts begins a complex, three-year groundwater availability and sustainability investigation for the Otis community water board. The study is in its infancy, says Roberts, a SNL Carlsbad Programs Group hydrology team member who consults with New Mexico small businesses through the SNL Small Business Assistance Program.

Since 1989, Roberts has worked on repository analyses and characterized groundwater systems at WIPP and internationally in regions of France and Canada. Now, Otis will benefit from SNL's shared expertise and highly specialized, WIPP-developed modeling software to analyze well-test data. The nSIGHTS (n-dimensional Statistical Inverse Graphical Hydraulic Test Simulator) software is used to analyze test data (e.g., pressure responses in water wells) to obtain estimates of aquifer properties. These properties are used to determine the long-term sustainable yield from water supply wells.



**Randall Roberts,  
SNL-CPG**

Absence of data about a series of Cass Draw aquifers, interconnections with rivers, as well as the quality, quantity and accessibility of Otis groundwater, necessitated Roberts' investigation. Cass Draw runs off the Guadalupe Mountains and crosses Old Cavern Highway in Carlsbad about six miles east of the U.S. 285 South "Y" intersection on the route to Otis.

The Otis community's three supply wells are co-located within several hundred feet, says Roberts, and are drawing from the same water source. The study will provide Otis far more reliable data for future well sites, Roberts explains. Results will be mutually beneficial to adjacent Loving and Malaga community water systems that also pump from Cass Draw.

Well-test and water-quality data will be combined to determine the extent and connectivity of the various aquifers in the area. "The ultimate goal is to increase people's understanding of existing groundwater resources," Roberts explains. "Information we will obtain from actual tests in the Otis area can be used to calculate the long-term sustainable pumping rate and also the area affected by the pumping." Roberts' study will be unaffected by the Otis co-op's consideration of changing its operation to a mutual domestic water association.



#### Topics

[Characterization News](#)

[Transportation News](#)

[Disposal News](#)

[Safety News](#)

[Working Smart](#)

[Announcements](#)

[Our Team](#)

#### Tools

[Acronym List](#)

[Archives](#)

[Back to Main Page](#)

[WIPP Home Page](#)

[Links](#)

---

## Announcements



### Topics

[Characterization News](#)  
[Transportation News](#)  
[Disposal News](#)  
[Safety News](#)  
[Working Smart](#)  
[Announcements](#)  
[Our Team](#)

### Tools

[Acronym List](#)  
[Archives](#)  
[Back to Main Page](#)  
[WIPP Home Page](#)  
[Links](#)

### WIPP Team Recognized for Excellence

The WIPP TRU Waste Inventory Project has been nominated for a team award as part of the 2004 Sandia Employee Recognition awards program. The team was nominated by the Carlsbad Programs Group Manager of Sandia National Laboratories, **Paul Shoemaker**, who provided the following citation: "This team rendered exceptional service in the national interest, providing technical and quality assurance oversight to enable a complete update of DOE's defense-related TRU waste." Congratulations to all the team members on this significant recognition. Members are:

**Kathleen Byle, SNL/CPG**  
**Christi Leigh, SNL/CPG**  
**Amy Rein, SNL/CPG**  
**Janis Trone, SNL/CPG**  
**Grace Sosa, SNL/CPG (SAIC)**

**Sheila Lott, LANL/CB**  
**Laurie Sparks-Roybal, LANL/CB**  
**Greg Van Soest, LANL/CB**  
**Bev Crawford, LANL/CB**  
**Brian Fox, SNL/CPG (Stoller)**

---

### WTS offers \$20,000 in scholarships to Eddy and Lea County graduates

Washington TRU Solutions (WTS) is offering up to \$20,000 in two separate scholarship programs for 2004 Eddy and Lea County high school seniors and college students.

Two different applications are available now from area high school and college counselors and financial aid officers. WTS will award scholarships this spring at area high schools and jointly with Carlsbad Foundation and Carlsbad area non-profit organizations. Over 10 years, WTS scholarships have totaled more than \$160,000.

Scholarships are available for three specific areas of study at any accredited community college, technical school or university: math, science or engineering degree; education degree in math, science or technology; accredited technical programs in radiation technology, waste-handling or waste management.

WTS is offering \$1,000 scholarships to seniors selected by Carlsbad, Loving and Artesia high schools in Eddy County, as well as Hobbs, Eunice, Tatum, Jal and Lovington high schools in Lea County. Senior class counselors have those applications.

---

### March audiogram now available

The safety audiogram is a quick and entertaining safety reminder system that uses a recorded telephone message and WIPPnet, the WIPP intranet. The message is both informative and musical. To hear the March recorded message call SAFE (7233). From outside the WIPP telephone system, the number is "BE-4-SAFETy" (234-7233).

WIPPnet users may hear the same message by accessing the Industrial Safety and Hygiene (ISH) web page and clicking on the "Safety Audiogram" link in the left column. This month the message emphasizes back injury prevention and proper lifting techniques.