

## Topic Links

Home  
Characterization News  
Transportation News  
Disposal News  
Safety News  
Working Smart  
Announcements  
Our Team

## Tools

Acronym List  
Archives  
Links  
WIPP Home Page

## Feedback

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

## By the Numbers

Transportation and disposal statistics are available on pages 3 and 4.

## Lawrence Livermore sends first waste shipment

**I**n a California-style send-off, the first shipment of TRU waste from Lawrence Livermore National Laboratory (LLNL) left the Golden State October 19 in a downpour. The shipment and its payload of forty-two 55-gallon drums began the 1,400-mile trip to WIPP with a forecast of favorable weather and road conditions ahead.

The 32-hour drive began Tuesday at 10:15 a.m. MDT and arrived safely at the WIPP site Wednesday, October 20, around 6 p.m.

The shipment started in Livermore, 45 miles east of San Francisco, traveled south on Interstate 5 and California State highways to Bakersfield, Calif., where it turned east onto Interstate 40. The route followed Interstate 40 through Arizona and New Mexico, finally turning south onto U.S. 285 at Clines Corners for the last leg of the journey to WIPP.

“This was the first of 20 projected shipments for LLNL, with the final one scheduled for completion by January 2005,” says Casey Gadbury, CBFO TRU waste logistics work coordinator.



A shipment of TRU waste, similar to the one shown above, arrived from LLNL Wednesday, October 20.



A mobile loading unit is used to close the outer vessel lid on a TRUPACT-II in preparation for shipment.

**T**o date, all of Livermore’s TRU waste has been characterized using the CCP mobile characterization units. The portable units and crews are certified to complete waste characterization at TRU waste sites that lack the facilities or expertise to perform the required tests. The units were mobilized at LLNL in October 2003, and CCP personnel completed characterization activities in September 2004. Most of the units used at LLNL have been, or soon will be, deployed to Idaho to assist INEEL in preparing waste for shipment to WIPP.

CBFO also sent a mobile loading unit to LLNL to load waste drums into the TRUPACT-IIs. The unit, operated by Los Alamos National Laboratory-Carlsbad Operations staff, will remain in California until the final shipment is loaded in January 2005.

LLNL marks the eighth site to ship waste to WIPP. “I am extremely proud of everyone that made this shipment possible. It’s hard work and dedication like this that has made WIPP so successful,” adds Herb Cruickshank, CBFO national TRU waste planning manager.



## CCP records management

**A** waste container earmarked for shipment to WIPP undergoes many steps in the characterization process, beginning with review of acceptable knowledge documents, then real-time radiography, non-destructive assay, headspace gas analysis ... you get the picture. And records are generated at each step. By the time the drum is certified for shipment to WIPP, records for that drum can fill about 1/3 of a file drawer.

With more than 61,000 waste containers now disposed at WIPP, that's a lot of file drawers. Where are all of those records kept? Who maintains them? What happens to the records once the waste is emplaced at WIPP?

Records on waste containers characterized and certified as part of the Central Characterization Project (CCP) pose a unique dilemma. Because they are generated as part of CCP operations, they must be made available to WIPP personnel for review, approval, audits, tracking, etc. But ultimately, they remain the permanent "property" of the generator facility.

How are these records handled and made available for use? The CCP Records Center in Carlsbad works with records custodians at the generator facilities to ensure these records are managed and maintained appropriately.

After the records are created at the generator facility, they are transmitted to the CCP Records Center in Carlsbad for maintenance and use. Once CCP operations cease at a generator site, the records are prepared and returned to that facility to be maintained under its records program.

**L** &M Technologies, Inc., manages the CCP Records Center in Carlsbad. Sheila Percy, L&M team leader, says, "The records volume we handle is enormous. But our system allows us to process, transmit and maintain the characterization records efficiently from start to finish."

The facility records custodians, some of whom work for L&M, and others employed by other companies, handle the necessary records functions at the sites and transmit the records generated there to the central records center in Carlsbad. "We currently work with facility records custodians at LANL, SRS and NTS," says Percy. "And soon we will begin working with a new custodian at INEEL."

The Carlsbad records custodians receive and maintain the characterization records transmitted by each generator site. The Carlsbad group is responsible for:

- Creating and maintaining Records Inventory & Disposition Schedules (RIDS) annually for the CCP Project Office and generator facilities performing characterization operations
- Record receipt, acknowledgment, maintenance, scanning and retrieval
- Audit, assessment and surveillance support
- P-TS (Project Office Data Tracking System) data entry
- Procedure reviews on records

The records are made available to people at the generator facility and at WIPP electronically through the P-TS system. "Once the records are scanned into the P-TS, they are available to anyone who has access to the system," Percy explains. "This is important because the sites are spread out across the nation. The P-TS allows us to protect the original record while making it available for use."

"The service this team provides for CCP is invaluable," notes L&M Technologies Manager Michael Fox. "The CCP teams work to ensure that the waste they send to WIPP is characterized and certified properly. Our team ensures they can prove it."

**Topic Links**

- Home
- Characterization News
- Transportation News
- Disposal News
- Safety News
- Working Smart
- Announcements
- Our Team

**Tools**

- Acronym List
- Archives
- Links
- WIPP Home Page

**Feedback**

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

**CCP Records Center Custodians (Carlsbad):**  
 Sheila Percy  
 Katie Chester  
 Lyndi Estrada

....

**Facility Records Custodians:**  
 Julia Lehnert  
 Danette Martinez (LANL)  
 Kathleen Bernard (NTS)  
 Colleen Monk  
 Tracy Mussman  
 Maria Stead (SRS)

## The road less traveled

**O**pen up a U.S. road atlas and you will quickly realize that in this nation there are many ways to get from point A to point B. But when it comes to the WIPP shipments, the only way to WIPP is on an approved route.

TRU waste generator sites are located all across the country, and all waste shipments, except those from LANL and Rocky Flats, must travel through several states to get to WIPP. For example, shipments from the Savannah River site travel through South Carolina, Georgia, Alabama, Mississippi, Louisiana, Texas and New Mexico.

So what is the best way to get from A to B? WIPP routes are determined by the affected states and tribes in cooperation with CBFO. Guidance for making these determinations is taken from Department of Transportation (DOT) regulations for highway route controlled quantities (HRCQ) of radioactive materials. HRQC regulations call for the use of interstate highways to the maximum extent possible, unless states have alternative preferred routes. Although most WIPP shipments do not have enough radioactive materials to be subjected to HRCQ regulations, CBFO has committed to following these conservative standards for all shipments.

If a route is not designated by HRQC regulations for a particular site, such as with Lawrence Livermore National Laboratory in California, the state and CBFO work together to determine an alternative. Alternative routes can be safer than those that follow an interstate highway for a variety of reasons, such as lower affected populations, lower traffic counts, etc.

**O**nce a preferred route is determined and agreed upon by the state and CBFO, the state files the route designation with the DOT's Federal Motor Carrier Administration (FMCA) and advises CBFO of its concurrence with the routes.

The routes become effective when a state receives formal acknowledgement from the FMCA or upon notifying CBFO that the route is agreed upon. To date, California, Nevada and New Mexico have agreed to alternate routes.

The benefits of designated routes are re-evaluated by the states every two years. This evaluation provides important information as to whether the route should remain the same, or if an alternate route might be necessary.

“CBFO has worked with several states to select the safest and most effective routes for transporting TRU waste between generator sites and WIPP,” notes Ralph Smith, CBFO Institutional Affairs manager. “Route designations signify one of the many layers of safety built into the WIPP transportation system.”



### Topic Links

- Home
- Characterization News
- Transportation News
- Disposal News
- Safety News
- Working Smart
- Announcements
- Our Team

### Tools

- Acronym List
- Archives
- Links
- WIPP Home Page

### Feedback

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

### By the Numbers

Shipments scheduled to arrive at WIPP week of 10/31/04 - 11/06/04: **24**

- INEL - 4
- NTS - 2
- RFETS - 15
- SRS - 3

(subject to change)

**3,086** total shipments received at WIPP as of 10/27/04

## MEGA detector to search for mini-particle at WIPP

### Topic Links

Home  
 Characterization News  
 Transportation News  
 Disposal News  
 Safety News  
 Working Smart  
 Announcements  
 Our Team

### Tools

Acronym List  
 Archives  
 Links  
 WIPP Home Page

### Feedback

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

### By the Numbers

Waste disposed in the WIPP underground as of 10/27/04:

**56,629** waste drums

**3,813** standard waste boxes

**1,225** ten-drum overpacks

**24,573** cubic meters

**T**hey exist in a subatomic world, magnitudes below most detection devices. With near-zero mass and no electric charge, the secretive neutrino continues to puzzle scientists. **Gaps in the current mathematical Standard Model, used to explain fundamental particles and how they interact, have scientists looking to the tiny neutrino for answers.**

To learn more, LANL scientist Steve Elliott and his collaborative partners began first-phase construction of the Multiple Element Germanium Array (MEGA) apparatus deep underground at WIPP. The MEGA components, says Elliott, are a precursor to a larger experiment: the Majorana Project.



PNNL scientists Craig Aalseth (left) and Todd Hossbach unwrap MEGA components in the clean room

Project leads from LANL and Pacific Northwest National Laboratory say the ultimate goal is to measure neutrino mass – a revelation that Elliott says “would lead to clues about the Standard Model’s symmetries and may provide extraordinary insight into how the universe is built.”



LANL scientists Victor Gehman, Steve Elliott, and Dongming Mei in Connex City

The [Majorana detector](#) is designed to measure beta rays resulting from the neutrino-less double beta decay of enriched germanium - a rare process in which a single nucleus emits two electrons. “The rate of decay should be proportional to the neutrino’s mass,” explains Elliott. The MEGA detector is an engineering prototype for Majorana.

Installation began last month in the Room Q alcove that Elliott calls “our Connex City”– five pre-fab buildings that include a clean room, an insulated unit, an office, and other structures to house project activities.

**I**n 2001, DOE proposed expanding the availability of the WIPP facility to scientific research. The depth of the repository makes it ideal for experiments that require extremely low background radiation. Research activities are located far from the disposal area and do not impact primary operations.

Eventually 16 to 18 germanium detectors will be placed in the cosmic ray-shielded underground. Elliott says the group plans sporadic trips to WIPP while detector components are developed and tested at labs in other parts of the country.

“We’re always impressed by the helpfulness and enthusiasm of WIPP employees who have assisted on the project,” he adds. Scientists hope to begin testing the MEGA detectors in [early 2005](#).

## Turning close calls into accident prevention

**W**hite knuckles on the steering wheel, your foot slamming on the brake pedal and the sound of screeching tires. Yes, we've probably all been there. Typically, this is followed by a sigh of relief and the words, "That was a close call!"



### Topic Links

Home  
 Characterization News  
 Transportation News  
 Disposal News  
 Safety News  
 Working Smart  
 Announcements  
 Our Team

### Tools

Acronym List  
 Archives  
 Links  
 WIPP Home Page

### Feedback

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

What if we could take all close calls, small and large, and turn them into a tool for preventing accidents? At WIPP, employees in the WTS Safety Department are doing just that.

A new Close Call Program has been started for everyone's benefit, regardless of which organization you work for at WIPP. The idea is to address potential safety issues before they have a chance to cause problems.

A close call is any situation or condition that could result in harm to a person or equipment, but has not, either by chance or timely intervention. The program allows close calls to be reported on a form to your manager or directly to the WTS Safety, Security and Technical Support Department. The concern is then investigated and tracked, as appropriate. In some cases, it may be elevated to the WIPP Form process (see related article in the [April 29, 2004 issue of TRU TeamWorks](#)).

Curtis Wynne, a safety professional at WIPP, sums up the program. "It's all about employees," says Wynne. "If employees will take the time to report close calls, we all win. That's the lesson that was learned at the Johnson Space Center, and we can do it at WIPP."

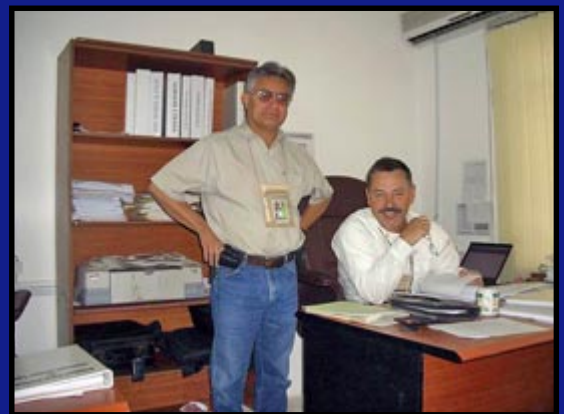
**F**rom its start in January 1995 through September 2002, employee participation in Johnson Space Center's close call system resulted in an 80 percent drop in the days-away-from-work rate and a 30 percent drop in the OSHA recordable rate.

Since the program at WIPP began last month, 20 close calls have been reported. Forms for reporting close calls are at various locations around WIPP, and employees can also find the form on the Industrial Safety & Hygiene Intranet page. Also available through the Close Call link on that page is a listing of close calls submitted.

## Update from Iraq

*TRU TeamWorks* recently received an update from former WIPP employee Ricardo Sanchez about his experiences in Iraq. Sanchez writes that he is currently working with John Bennett, also from WIPP. The two work for Washington Group International's Project Controls group in Green Zone, Baghdad.

Since his arrival in Iraq, Sanchez has worked in several areas, including the K2, Bayji and Mullah Abdullah Power Plants; Camp Diamondback, Mosul; Camp Victory, Baghdad; and now Green Zone, Baghdad. "The only places I have not made it to are Mad Dog, Dibis and Erbil. I have met some fantastic people in Iraq, and each location has a different view of life and politics."



Former WIPP employees, Ricardo Sanchez (left) and John Bennett have teamed up in Iraq. The two are pictured in the Project Control office in Green Zone, Baghdad.

## And the survey says ...

### TRU TeamWorks readers voice their opinions

#### Topic Links

Home  
 Characterization News  
 Transportation News  
 Disposal News  
 Safety News  
 Working Smart  
 Announcements  
 Our Team

#### Tools

Acronym List  
 Archives  
 Links  
 WIPP Home Page

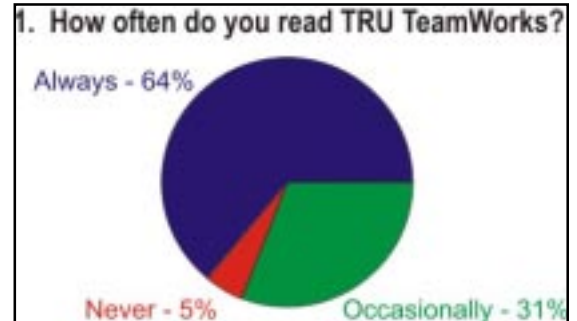
#### Feedback

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

**S**ometimes the best way to improve communication is to simply listen. In early October, *TRU TeamWorks* sent out a survey to see how we were communicating, what we were doing well and what could be improved. You responded. In fact, more than 300 participated in the survey.

#### The Results

Survey results have been compiled in a two-page summary, which is available by clicking [here](#). Below is an overview.



Sixty-four percent of respondents always read *TRU TeamWorks*, compared to 31% who read it occasionally and 5% that never read it. Only 35% of respondents read every page.

Employee and external stakeholder readership by page was quite different. The most read page for both groups is the “The Big Story” with 82% readership. WIPP employees had much higher readership of the Announcements and Our Team pages, while external stakeholders had much higher readership of the Characterization, Transportation and Disposal sections. Readership of the Safety and Working Smart sections was relatively close in both groups. Combined, readership by section ranked as follows: The Big Story, Announcements, Our Team, Safety, Transportation, Disposal, and Characterization/Working Smart (tie).

By a wide margin, the writing was deemed simple and easy to understand. The publication frequency was also deemed “just about right” by a large majority. Articles were rated as very useful by 37%, somewhat useful by 57% and not useful by 6%.

In addition to these results, written comments were extensive. *TRU TeamWorks* staff members are carefully reviewing pages of written comments to determine how to serve WIPP employees and stakeholders even better.

#### What now?

Stay tuned to *TRU TeamWorks* to see the changes that may result. Our staff hopes to build on the items you said you liked and improve by incorporating as many of the suggestions as possible. We appreciate your participation and hope you’ll keep reading!

**Topic Links**

- Home
- Characterization News
- Transportation News
- Disposal News
- Safety News
- Working Smart
- Announcements
- Our Team

**Tools**

- Acronym List
- Archives
- Links
- WIPP Home Page

**Feedback**

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



**Technical journal features WIPP research**

**Dr. Hung Cheng Chiou (WTS)** and **Dr. Robert Hayes (WTS)** have published an article titled “Creating a Baseline Radiological Standard for the Waste Isolation Pilot Plant Underground.” The article was published in the journal *Isotopes in Environmental and Health Studies*, Volume 40, Number 3, in September of 2004. It discusses the levels of removable surface activity that are expected in the underground due to naturally occurring radioactive material sources.

This knowledge will be useful if future measurements show detectable surface activity in the repository. Then a determination can be made as to whether the detected activity is at a level that should be of concern.



**TRU TeamWorks survey results available**

TRU TeamWorks staff members would like to thank everyone who responded to our survey. We are reviewing the comments and hope to incorporate as many of them as possible in the near future. For a complete rundown of the survey results, please turn to the Working Smart section of this issue.



**Early voting information**

Early voting is currently available to Eddy and Lea County residents and ends October 30.

**Eddy County**

County Clerk’s office at 101 W. Greene (corner of Greene and Main streets)  
 Tuesday through Friday from 8 a.m. to 8 p.m. and Saturday from 10 a.m. to 6 p.m.

**Lea County**

County Clerk’s office located at 100 N. Main  
 Monday through Friday from 8 a.m. to 5 p.m. and Saturday from 10 a.m. to 6 p.m.

Alternate site

Hobbs Lea County Complex, 1923 N. Dal Paso  
 Monday through Friday from 12 – 8 p.m. and Saturday from 10 a.m. to 6 p.m.



**Birthdays**

**Lana Steven (WTS)** - October 31  
**Mike Antiporda (WTS)** - November 3  
**Heather Evans (CTAC)** - November 3  
**Kathryn Zbryk (WRES)** - November 4

**Gerald Holguin (NCD)** - November 5  
**Chuck Conway (WTS)** - November 7  
**Ken Hasten (L&M)** - November 8  
**Steve Porter (WTS)** - November 10

**Topic Links**

- Home
- Characterization News
- Transportation News
- Disposal News
- Safety News
- Working Smart
- Announcements
- Our Team

**Tools**

- Acronym List
- Archives
- Links
- WIPP Home Page

**Feedback**

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



**Calling all veterans**

*TRU TeamWorks* is soliciting information for a special Our Team salute to WIPP veterans to run in our November 11 edition. Past and present project employees or family members who are active or retired veterans of the armed forces are invited to [submit](#) the following information for inclusion: name, branch of service and dates served. Also identify if you served in foreign wars or are one of the many brave men and women currently serving our country.

Please note that *TRU TeamWorks* is available externally via the WIPP home page. For more information contact Kim Greer at Extension 7293.



**Jason Eaton, WIPPEST, wore job-appropriate personal protective equipment as he worked in the area where the bees congregated.**

**Bees swarm at WIPP**

A swarm of bees landed at the site on October 15. The bees settled on a steel platform/ladder next to a water tank between the Safety and and Support buildings. Emergency response personnel quickly roped off the area to keep employees away from the bees until they could be suffocated with a non-hazardous soap foam. Personnel involved in the response included Nadine Kuhn, Jason Eaton, Alvy Williams, Paul Orr and Tommy Orgain.