

# TRU TeamWorks

March 31, 2005

## 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  
04/03/05 - 04/09/05:

Hanford - 2  
INL - 5  
RFETS - 12  
SRS - 2

(subject to change)

total shipments  
received as of 03/30/05:  
3,469

### Disposal

Waste disposed as of  
03/30/05:

4,383 standard waste  
boxes  
1,411 ten-drum  
overpacks  
61,305 waste drums  
27,464 cubic meters

## Six years and going strong

*Congratulations to all WIPP employees on six years of excellence in safety and operations.*

*March 26, 1999  
to  
March 26, 2005*

### The Big Story:

## WWIS goes public

Want to learn more about WIPP waste?  
Just ask ...



### Operations:

## Regulation clean

A different kind of clean ...



### Operations:

## Setting limits

When lower is better ...



### Safety & Security:

## Laser lineup

Eye on laser safety ...



### Working Smart:

## The search continues

Exciting developments in the search for WIPP's logo and motto ...



### Our Team:

## Team news

WIPP team news and information ...



TRU TeamWorks is a biweekly e-newsletter for the Waste Isolation Pilot Plant team



## What is WWIS?

The WIPP Waste Information System (WWIS) is the database repository for information on WIPP waste. It maintains every detail, characteristic and parameter required by NMED and EPA regulations.

Click [here](#) to see the WWIS public access Web page.

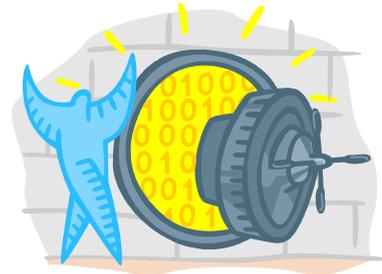
## WWIS goes public

**W**ant to learn more about the waste emplaced at WIPP? The WIPP Waste Information System (WWIS) is the place to find the answers.

Until recently, access privileges to WWIS were limited to generator sites, select WIPP personnel, DOE, NMED and EPA. In response to a recent NMED compliance order, members of the public may now obtain selected WWIS information on waste containers already emplaced in the underground via a link on the WIPP homepage. The link was activated February 25, and seven information requests have been made so far.

Dave Kump, manager of the WWIS team, sees a benefit to the service. "Making this information available can only increase public trust in the project. Extensive information is maintained on all containers of WIPP waste. Allowing the public to see these details without compromising security demonstrates our commitment to safety, accuracy and compliance."

Currently, information requests are handled manually by WWIS team members. The team will eventually design a system that can handle the responses automatically, allowing members of the public to list and print container-specific information directly.



Once a question is submitted, WWIS personnel perform preliminary research. Those results are then reviewed by WRES staff for compliance purposes.

Response time varies, but the team works to provide a response within one business day. "If we can't make that time frame, we send the requestor an e-mail message stating that we are working on the question," explains Dennis Hofer, WWIS Data Administrator. "We also note when we expect to have a response for them, so that they are apprised of the progress."

Hofer continues, "If we cannot provide the exact data requested, we correspond with the requestor to ensure we give them information that will meet their needs."

**N**ot all requests that have come into the WWIS request line have been applicable to the WWIS system. Kump recalls one request that was better handled by the WTS Communication group, which regularly handles most public information queries. "An emergency responder along a WIPP corridor was requesting information regarding the shipments that move through his city. This was more of a transportation question, not directly WWIS related. The Communication team handled that response immediately. So, even though the gentleman did not obtain WWIS data, his information needs were met."

Responding to WWIS information requests is now a major duty for the WWIS team. "Researching a single information request can be time consuming, and may require input from several WIPP organizations," says Kump. Requests may require the creation of a unique, well-designed database query that will call up all of the applicable details. The data must then be reviewed and formatted before it is released.

"The process is labor intensive," agrees Randy Chatfield, an NCI employee who supports the WWIS. "But each time we research a request, we learn more about WWIS and our capabilities. The requests have helped to expand our experience with WWIS even further."

"We're glad to provide this service to the public," concludes Kump. "We're proud of the work we perform at WIPP and glad to share our knowledge of the WIPP waste inventory with others who find it useful."

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## A day at the lab

WIPP Laboratories Manager Mansour Akbarzadeh shows WTS General Manager Dick Raaz and Assistant Deputy Manager Farok Sharif around the Carlsbad Environmental Monitoring Center (CEMRC). CEMRC Director James Conca presented an overview of facility activities prior to the tour.



From left to right: James Conca, Farok Sharif, Mansour Akbarzadeh and Dick Raaz.

## Characterization

### Define clean

**J**im Johns, WRES senior buyer, has a new appreciation for the word clean. He was asked to purchase 140 clean plastic spoons and stainless steel "scoopulas," 120 chisels and 50 stainless steel tongs for sampling INEEL waste. Johns says the tools were easy enough to come by, but cleaning them to meet permit requirements was another story.

As trays of freshly exhumed waste move through Pit 4's drum packaging station, operators use the tools to chip up or scoop—depending on consistency—waste samples that are then bottled for lab analysis. The single-use utensils are discarded and packaged as part of the waste stream.

Rick Chavez, WRES, says the waste is sampled and analyzed before packaging to confirm the accuracy of prior characterization processes. "To ensure more precise analyses of Pit 4 wastes, we sample at one location and take a duplicate sample adjacent to it. The samples are analyzed on-site at INL's laboratory."

Procuring the cleaning services was a challenge, according to Johns. "Initially, I could only find one vendor who performed this type of work. While negotiating with them, someone suggested I check with Trace Analysis. They're a Lubbock company that cleans sampling tools for the environment monitoring group at the site. Trace met all QA department requirements and, about 50 phone calls later, we were in business."

**T**hough the utensils were purchased new and packaged, the company was required to batch and clean them. By procedure, one item must be randomly selected from each batch and rinsed with de-ionized and high performance liquid chromatography water. The resulting rinse water is collected in a clean container and tested for target analytes. If such analytes are found in the collected water, cleaning is repeated until results indicate no analyte is present in concentrations greater than three times the minimum detectable limits.

While the utensils, ranging from spoons to chisels, were off-the-shelf items, the cleaning and service provided by Trace were one-of-a-kind. Smiling, Johns adds, "We were under some pretty tight deadlines, but the peoples at Trace did a great job."



A spoon in any other package would not be as clean. These plastic spoons have been certified clean enough to sample WIPP waste.

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## Did you know ...

Radiation is all around us as a part of our natural environment.

The annual average dose per person from natural background sources of radiation is about 350 millirem, 150 millirem more than the lowered WIPP administrative limit.

It is not uncommon for any of us to receive more than 350 millirem in a given year, largely due to medical procedures we may have done.

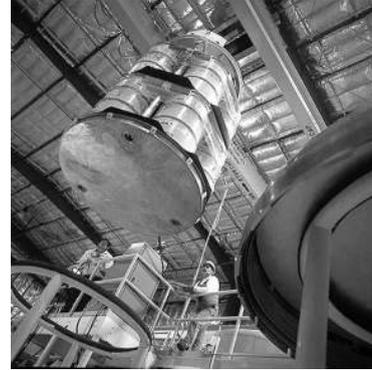
--excerpted from  
[www.nrc.gov](http://www.nrc.gov)

## Disposal

### Smaller is better

**H**ow low can we go? That was the question asked when referring to the radiation exposure limits for radiation workers at WIPP. Exposure is measured in terms of rem or millirem. These units measure the amount of radiation absorbed by the human body over a given period of time. Limits are put in place to protect radiation workers from unnecessary, prolonged exposure to dangerous levels of radiation. WIPP has administrative guidelines in place that dictate the amount of radiation a worker can be exposed to on an annual basis.

The legal exposure limit for a radiation worker is five rem per year. DOE has lowered that limit to two rem per year, and WIPP went even lower with one rem per year. While WIPP's limits were already far below the legal limit of five, recently that level was reduced even more. The newly issued administrative guidelines for WIPP lowered the allowable amount of exposure for a radiation worker to 200 millirem per year.



Workers at a generator site prepare to load waste drums into a TRUPACT-II.

"WIPP has a unique exposure situation in comparison to other sites in the DOE complex," according to Don Harward, Manager of Radiation Safety & Emergency Management. "Our exposure limits are extremely low."

**T**his new administrative guideline was put in place as a proactive measure to challenge both employees and managers alike to eliminate unnecessary exposure. The three basic principles to reduce exposure are to minimize the amount of time when being exposed to elevated radiation levels, maximize the distance from the source of the radiation, and finally if work must be done near a radiation source, use shielding if possible to lower exposure. For WIPP, minor changes will make this limit achievable. For example, if a discussion is taking place within a radiation control area and near waste drums, by simply moving that discussion to another area will lower or eliminate unnecessary exposure for all parties involved.

"We are always looking for ways to improve and enhance the safety environment at WIPP," Harward added. "These low exposures are achievable because of the design, engineering, operations and training programs employed at WIPP."

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## How big is your ecological footprint?

With Earth Day approaching (April 22nd), it's time to reflect on our ecological footprint. An ecological footprint is a measure of consumption each human places on the environment they live within. For each modern city dweller, this has been estimated to be about 12 acres (three city blocks).

Below are some links, including a footprint calculator to show you how your own lifestyle affects the planet.

[www.myfootprint.org](http://www.myfootprint.org)  
[www.ecouncil.ac.cr](http://www.ecouncil.ac.cr)  
[www.rprogress.org/](http://www.rprogress.org/)  
[www.bestfootforward.com](http://www.bestfootforward.com)

*Information provided by  
 Celeste M. Marsh,  
 Pollution Prevention (P2)  
 Coordinator*

## Got your laser safety training, Mr. Solo?

**D**o you suppose Han Solo obtained a qualification card for safely using lasers? What about Captain Kirk? If they had worked at WIPP, they would have. Today, lasers have thousands of practical uses that range from printing to barcodes and laser surgery to mining equipment at WIPP. The key to these great tools of technology, however, is safe use.

A February 2005 DOE report cites seven laser accidents at other facilities over the past five years that resulted in eye exposures to six people. Six of those accidents have undergone root cause analysis. Four of them involved a Class 4 (high-power) laser and one involved a Class 3b (medium-power) laser. According to the report, all six eye injuries could have been prevented if personnel had worn laser protective eyewear.

**U**nderground at WIPP, lasers are mounted on continuous miners to provide precise measurements for making straight and level cuts in the rock salt.

“Our employees obtain a qualification card before they are ever allowed to operate the equipment,” says Bob Kirby, WIPP’s laser safety officer. “This is exactly the same technology that is used at local farms to laser plane fields.”

In both cases, the lasers are tied-in to the equipment’s hydraulics that control the height and angle of the cutting edge or plane. Surprisingly, WIPP’s Class 3a lasers are not very powerful and don’t require specific personal protective equipment.

Class 3a lasers are visible lasers that can produce spot blindness and other possible eye injuries under certain conditions, but it’s not likely. “It would be like looking into the sun,” adds Kirby, “Normal reflexes would cause you to blink or turn away before any harm occurred. You would have to intentionally stare into a 3a laser for an extended period of time to cause an injury.”



WIPP uses lasers on underground equipment to make straight, level cuts in the salt while mining.

### Lasers 101: All lasers are not equal

<b>Class 1</b> <i>Exempt</i>	Laser printers and compact disc players
<b>Class 2 and 2a</b> <i>Low-power</i>	Barcode scanners
<b>Class 3a</b> <i>Low-risk</i>	Laser pointers, alignment lasers, survey equipment and laser levels
<b>Class 3b</b> <i>Medium-power</i>	Research lasers
<b>Class 4</b> <i>High-power</i>	Medical lasers, research lasers, industrial lasers and military lasers

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## Finding the perfect match

**T**RU TeamWorks put out the call for WIPP logo and motto submissions and the response was overwhelming! Twenty-two logo designs and 36 motto candidates were turned in by WIPP personnel.

The logo and motto contests were opened to all WIPP project participant employees, and all logo and motto submissions have been judged by the TRU TeamWorks editorial board, which is comprised of representatives from CBFO, LAN/CB, SNL-CPG, CTAC and WTS.

**T**hree conceptual logo designs and three motto candidates have been selected for further

consideration by the editorial board. "The selection of WIPP's logo and motto are very tough decisions," notes WTS Communication Manager Jay Lees. "The editorial board wants to make the best choice, but will need to have further consideration of the final candidates before making its selection."

Final selection of the WIPP logo and motto will be announced via TRU TeamWorks or through a TRU TeamWorks Extra newsflash. Watch for more news as the search for these important WIPP symbols continues.



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## WIPP's for the birds



A WIPP roadrunner checks out the controls on a trailer jockey after completing WH01A training.



A burrowing owl calls a field behind the Skeen-Whitlock Building home.



## Birthdays

Lisa Campos-Hernandez (WTS) - March 25  
 Raquel Acosta (WTS) - March 26  
 Steve Davis (SNL/CPG) - March 26  
 Angela Johnson (WTS) - March 28  
 Gary Strong (WTS) - April 1  
 Tricia Rose (L&M) - April 6  
 Charlie Riggs (CTAC) - April 9  
 Shari Cullum (WTS) - April 12

Submit your  
birthday

[HERE](#)



## Leaving

**Bill Beeman**, WTS Hoisting/Operations, will leave WIPP effective March 31. Bill wishes everyone at WIPP to know that he has enjoyed working on the project and he will miss his fellow employees. "I wish all of them the best in their future endeavors."

**Suzanne Byrd**, WTS Operations, will leave WIPP effective April 7. Suzanne wishes everyone at WIPP well and says, "thanks for the memories."



## Employee discount program

WTS employees are now eligible to receive discounts on personal purchases of Chrysler and Nissan vehicles. These discounts are in effect through December 31.

Nissan: <http://www.insidenissan.com/>

General Motors:  
<http://intraweb.corp.wgint.com/corporate/hr/gm/>

Ford:  
<https://www.fordpartner.com/Login/login.asp>, discount code is L7RDB

Chrysler:  
<https://www.dc-rewards.chrysler.com/login.jsp>, discount code is S90971

Contact any member of Human Resources for assistance.

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