
WIPP Quick Facts

(As of 10-5-05)

3,972

Shipments received since opening

31,839

Cubic meters of waste disposed

71,611

Containers disposed in the underground

Franco appointed acting remote-handled waste program manager

Joe Franco is now the acting remote-handled waste program manager. He will be responsible for coordinating activities across WTS involving remote-handled waste.

Franco is a 23-year veteran in the nuclear industry. Before joining the WIPP team in 1989, his career was in the Commercial Nuclear Industry and the U.S. Navy. His diverse career has included nuclear operations and maintenance, emergency management, security and project management.

Franco most recently served as project manager for the Central Characterization Project at the Nevada Test Site and Hanford, and as deputy project manager for the Central Characterization Project. He holds a Bachelor of Science degree.

EPA says Compliance Recertification Application complete

DOE-CBFO has sent the Environmental Protection Agency (EPA) all the information it needs to decide if WIPP continues to comply with disposal criteria set by the agency in 1998. EPA notified DOE on September 29 that the WIPP Compliance Recertification Application (CRA) is complete. Russ Patterson, CBFO compliance certification manager, was clearly pleased with the news. "This is an important step: The notification of completeness starts the clock ticking. EPA will say "yea" or "nay" to recertifying WIPP by March 29, 2006." EPA now has six months to conduct a full technical review of the CRA information.



The Environmental Protection Agency will decide whether or not to recertify WIPP by March 29, 2006.

CBFO submitted the CRA to EPA on March 26, 2004, exactly five years after the first waste was received at WIPP. EPA immediately began its review of the 10,000-page document to determine if further information was needed. Since that time, EPA has made six formal and several informal requests for supplementary information and analyses from DOE.

"I believe we've provided everything they have asked for," says Patterson. "In many cases, we provided more detailed information than was required for the original Compliance Certification Application."

EPA first certified that the WIPP repository would safely contain radioactive materials for 10,000 years on May 13, 1998. To ensure continued protection for WIPP workers, the public and environment, Congress stipulated that EPA would reassess WIPP compliance every five years. At five-year intervals, CBFO provides EPA with updated scientific data, revised human intrusion and radionuclide studies, generator site inventories and other information relevant to repository performance assessment.

A Federal Register notice announcing the close of the public comment period on DOE's recertification application will be published within the next two weeks. EPA will accept comments up to 45 days after the publication date of the notice. As part of the review process, Patterson says he expects that EPA will visit either Hanford or INL to review generator site inventories provided by CBFO in the CRA, and formally ask additional technical questions concerning the CRA content.

Three small quantity sites cleaned up since August

One by one, the number of sites with TRU waste destined for WIPP is falling. DOE celebrated the end of TRU waste at the Rocky Flats Environmental Technology Site (RFETS) in March. The 2,045-shipment cleanup of RFETS was the result of an enormous effort, but 11 other sites with smaller quantities of TRU waste have been steadily cleaned up, too.

"Cleaning up sites around the country is the bottom line," says Farok Sharif, WTS assistant general manager for Retrieval, Characterization, and Transportation. "Whether we clean up one drum or a thousand drums at a site, the end result is a

TRU waste safe

Last week's blaze in southern California is a reminder of why TRU waste is safer at WIPP. A wildfire swept through California's San Fernando Valley, burning more than 24,000 acres and a number of buildings. One of those buildings was part of Boeing's Rocketdyne facility. Rocketdyne's primary mission was developing and testing rocket engines, but the facility was also home to DOE's Energy Technology Engineering Center (ETEC). Just three years ago, ETEC stored contact-handled and remote-handled TRU wastes.



Photo courtesy of Boeing

ETEC's TRU waste was shipped to Hanford in December 2002 in two CNS 10-160B shipping containers, escorted by WIPP External Emergency Management personnel and a senior CBFO official.

WIPP employees earn PMP credentials

Eight WIPP employees recently achieved credentials as Project Management Professionals (PMP).

The globally-recognized PMP credentials demonstrate the individual's level of education, knowledge and experience in project management.

Congratulations to the following individuals who passed a rigorous examination to become project management professionals:

- ⌘ Chuck Conway (WTS)
- ⌘ Marsha Eastham (WTS)
- ⌘ Ed Flynn (WTS)
- ⌘ Esther Najjar (WTS)
- ⌘ Lana Steven (WTS)
- ⌘ Chad Twitchell (SNL-CB)
- ⌘ Jim Walker (WTS)
- ⌘ Judy Zwickl (WRES)

reduction of risk to people and the environment." However, it takes a great deal of site coordination and up-front preparation regardless of the size of the TRU inventory. Collection of Acceptable Knowledge information, waste characterization and repackaging and preparation of transportation documentation are required before the waste can be removed.

Sealed sources, like the one at right, and plutonium foils are used for nuclear measurements and instrument calibration.

These radioactive sources are recovered by the LANL Off-Site Source Recovery Program under CCP Certification at LANL.

Many of the sources will eventually be disposed at WIPP. Some of the types of sources contain Pu-239, Pu-238 and Am-241 radioisotopes.



For WIPP, sites can be cleaned up in any one of three methods or a combination of them: 1) Direct shipment to WIPP, 2) Ship ment to another site for characterization prior to eventual disposal at WIPP and 3) Recovery by the LANL Off-Site Source Recovery Program (OSRP). Three sites that WIPP recently cleaned up used two of these approaches.

Brookhaven National Laboratory (BNL)

BNL is located in Upton, N.Y. Its TRU waste inventory was 0.6 cubic meters of contact-handled waste, which included eight paint cans (one gallon each) of plutonium ash (stored in one 55-gallon drum) generated at RFETS, sealed sources and five plutonium foils. The sealed sources were recovered by the OSRP in March. The single 55-gallon drum of waste was shipped to the Advanced Mixed Waste Treatment Plant (AMWTP) at Idaho National Laboratory on July 13. The site's cleanup of TRU waste was complete when the OSRP recovered the last of the plutonium foils on August 26.

Knolls Atomic Power Laboratory – Nuclear Fuel Services (KAPL-NFS)

KAPL-NFS is located in Erwin, Tenn. and no longer has TRU waste. The site's original TRU waste inventory was 213 cubic meters of contact-handled debris waste. WTS shipped the waste to the Oak Ridge National Laboratory, which is also in Tennessee, just 1.5 hours away. The final shipment was made on September 28.

Fernald Closure Project

Fernald is located 18 miles northwest of Cincinnati, Ohio. Its TRU waste inventory consisted of six Americium 241 sealed sources stored in 55- and 30-gallon drums. The OSRP recovered the sources on September 30.

Other sites are also making significant progress. Battelle Columbus Laboratories in Columbus, Ohio, and Framatome in Washington State are both ready and able to ship their TRU waste inventories pending DOE approval of a receiver site. The Material and Fuels Complex (formerly Argonne National Laboratory-West) has shipped approximately 12 cubic meters to the AMWTP, eliminating its entire contact-handled TRU waste inventory.

Three sites, Lawrence Livermore National Laboratory (LLNL) in Livermore, Calif., Argonne National Laboratory (ANL) in Argonne, Ill., and the Nevada Test Site (NTS) in Mercury, Nev., have cleaned up more than 50 percent of their TRU waste inventory. LLNL has made 18 shipments and ANL has made 13 shipments to WIPP.

NTS has made 42 direct shipments to WIPP, resulting in the disposal of 343 cubic meters of contact-handled waste inside 1,648 drums. Additional wastes will be shipped to WIPP this fall.

October is National Fire Prevention Month

Did you know that the latest data shows an estimated 18,000 home fires annually, which resulted in about 130 deaths.

WTS employees donate thousands of dollars to Hurricane Katrina relief effort

WTS employees have donated \$8,385 to the Hurricane Katrina relief effort. But due to dollar-for-dollar matching by the Washington Group Foundation, the total donation to the American Red Cross will be \$16,770.

Washington Group International previously donated \$500,000.

WTS October Service Awards

5 years

Raymond Neuman
Abraham Romo

10 years

Brad Day

15 years

Jacaleen Davis
Rebecca Walker
Edward Flynn

20 years

Dirk Roberson
William Barnhart

25 years

Tom Fabian

30 years

Steve Offner

Sites where all legacy TRU waste has been removed:

- Arco
 - Brookhaven National Laboratory
 - Energy Technology Engineering Center
 - Fernald
 - Knolls Atomic Power Laboratory - Nuclear Fuel Services
 - Lawrence Berkeley National Laboratory
 - Lovelace Respiratory Research Institute
 - Mound Plant
 - Missouri University Research Reactor
 - Rocky Flats Environmental Technology Site
 - Teledyne-Brown
 - U.S. Army Material Command
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Going batty?



This Mexican Free-tail bat recently attempted to attend a meeting in the Skeen-Whitlock Building. The bat managed to find its way into a second-floor conference room. Environmental staff were able to release the unbadged visitor outside. About a million bats reside in the nearby Carlsbad Caverns during the warmer summer months and return to Mexico for the winter.

Birthday Wishes!

Sheila Lott (LANL)
October 7

Janice Mashaw (WTS)
October 9

Mark Edwards (WTS)
October 11

Jim Wilburn (CTAC)
October 11

Mary Helen Hernandez (L&M)
October 12

Randy Steger (CTAC)
October 12

Robert Johnson (WTS)
October 17

Kevin Hughes (WTS)
October 17

Jim Morrison (NCI)
October 18

Joe Field (CEHMM)
October 20

Garry Bannister (WTS)
October 20

Doug Evans (LANL)
October 21

Kirk Nance (WTS)
October 22

Porf Martinez (CTAC)
October 23

Kim Greer (WTS)
October 27

Lana Steven (WTS)
October 31

Panel 2 soon complete

It's been two and a-half years since the first drum of TRU waste was placed in Panel 2. Soon, the panel's seven 300-foot-long disposal rooms will reach capacity (approximately 18,000 cubic meters). Once the final containers are disposed, Colorado contractor, Harrison Western, will have 180 days to construct a 12-foot-thick isolation wall, effectively closing the panel off from the rest of the mine.



The first waste disposed of in Panel 2 was from the Savannah River Site on March 13, 2003.

According to Gary Morrison, WTS project manager for panel closure, more than 23,000 solid concrete blocks, weighing 35 to 37 lbs. each, and 6,000 bags of mortar are staged for construction to begin.

"We're committed to doing the project with zero injuries," says Morrison. "At the present time, Harrison Western is putting together its job hazard analyses, safety manual and work plan, which will be submitted to WTS for approval before work begins."

Harrison Western specializes in mine construction and was responsible for the successful closure of Panel 1 in July 2003. Morrison says the solid, non-combustible blocks that will be used to seal Panel 2 will be half the size and weight of those used in Panel 1. "The 75- to 80-pound blocks used in Panel 1 were difficult to stack and handle. These lighter blocks will be easier and safer for work crews to manage."

Panel 2 is the second of eight panels planned for the WIPP underground. Panel 1 was completed in four years and contains approximately 10,500 cubic meters of TRU waste. Long before WIPP began receiving waste, engineers determined the need for isolation walls at the entry of each waste-filled panel to protect workers once ventilation, power and maintenance were discontinued in the panel. The 12-foot-thick walls are capable of withstanding air blast, fire, explosion and ground movement.

The largest contributor to Panel 2 wastes was RFETS with more than 9,000 cubic meters, followed by SRS at 5,582 and INL's 1,555 cubic meters.

WIPP moves ahead with facility transfer vehicles



A sample AGV, similar to what will be put into service at WIPP.

WIPP engineers say automated guided vehicles (AGVs) would make waste handling more efficient. In January 2004, CBFO submitted a Class 2 permit modification request to the New Mexico Environment Department seeking to use the flat-bed robots at WIPP. The modification was approved in May of 2004. After a solicitation process, WTS awarded a subcontract to Mentor AGVS for just over \$2.4 million for five vehicles.

A variety of industries use AGVs to improve process cycle-time and efficiencies. At WIPP, the vehicles will be used to transport facility pallets inside the Waste Handling Building and onto the waste conveyance for transport to the underground. AGVs may be laser-guided, use guide wires (installed in the floor), or have an internal guidance system. The vehicles are equipped with laser bumpers that prevent them from running into objects or personnel and a fail-safe emergency stop in the event the AGV loses communication with the guidance system. Additionally, in the interest of safety, each vehicle will have a load rating that exceeds that of its expected payload.

“The vehicles that will be used at WIPP will be customized for this project, but will use standard technology,” said Curtis Chester, cognizant engineer for the AGV project. “The exact guidance system that will be used at WIPP is still being analyzed; however, we believe there are some advantages to the laser system.”

Expected delivery date for the new vehicles is August 2006.

October is Energy Awareness Month



The U.S. Department of Energy
Waste Isolation Pilot Plant

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