

WIPP Quick Facts

(As of 10-19-05)

4,007

Shipments received since opening

32,223

Cubic meters of waste disposed

71,895

Containers disposed in the underground

All in a day's work at WIPP



WTS employees Adrian Munoz and Doug Pierce look on as an empty TRUPACT-II is loaded onto a trailer.



Munoz inspects a tie down that secures the TRUPACT-II to the trailer.

Safety, inside and out

The Close Call Program, Voluntary Protection Program, Safety Awareness Committee, WIPP form, Stop Work policy and Integrated Safety Management System are but a few of the mechanisms that assure WIPP employees a safe workplace. Employee-management safety goals have produced remarkable results: a calendar-year recordable case rate of 0.94 that is down-trending.

But not all WIPP operations are inside the fence. The Central Characterization Project has mobile teams of experts and equipment working at a number of TRU waste generator sites to help those sites characterize, package and ship wastes to WIPP. A question posed by Voluntary Protection Program auditors during their September visit to WIPP was "How is safety exported to the field?"

In the past, CCP teams worked to the site safety standards where they were deployed. Overlapping policies and procedures, as well as ill-defined roles and responsibilities, left room for needed safety rigor.

This year, CCP has taken a close look at worker safety and health at active sites. Dave Haar, CCP characterization manager, says, "We want to ensure all employees are afforded the same quality of safety, regardless of where they work." So, how has off-site safety changed?

Haar says, what once was a daily status call to check waste certification progress at CCP sites has expanded to address work concerns, equipment problems and other issues. CCP, he says, is instituting a formal reporting system so that employees in the field can readily document concerns or issues for prompt resolution.

How do you know field personnel are properly trained to do their job? How do you ensure procedures are comprehensive, and that they're implemented and followed? Are employee-supervisor communications adequate? CCP has reviewed these conduct-of-operation processes at host sites for improvement.

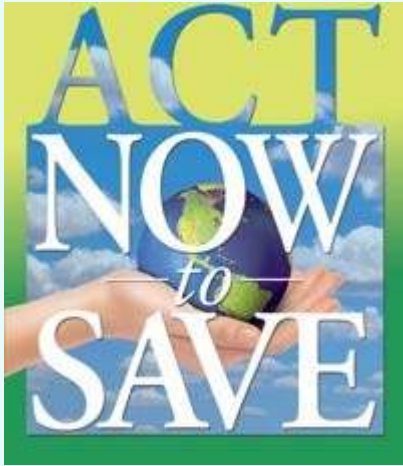
Each CCP site now has at least two field supervisors, says Haar. Personnel experienced in headspace gas sampling, gas generation and NDA have also been added in the field. "We're beefing up the sites so that management has more time to look around and provide details about what gets looked at, and when." Haar says more quality assurance people will be fielded, as well.

"We identified a number of weaknesses, such as radiological controls, configuration management and employee-management communications. Steps have been taken to clarify safety expectations." Haar continues, "Productivity and safety aren't contradictory, they go hand-in-hand. Our goal is to provide CCP teams the level of safety they deserve."

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Dave Haar
CCP characterization manager



Fuel Conservation

On September 26, President Bush signed a directive requiring all departments and agencies to “take appropriate actions to conserve natural gas, electricity, gasoline and diesel fuel to the maximum consistent with effective discharge of public responsibility.” Currently, departments at WIPP that oversee government vehicles are going to be asked to “stand one down” or park it until further notice. As a result of a parked vehicle, individuals will not be allowed to increase the use of other vehicles — the idea is to conserve fuel. Certain vehicles are exempt from this new requirement, including emergency response equipment and those essential to facility operations.

WTS property management is developing an implementation plan that will address how WIPP will change to meet these requirements. More information will follow upon successful completion and implementation of this plan.

Paper conservation

All copy machines at WIPP buildings have been defaulted to make double-sided copies. Two-sided copies reduce the amount of paper used and thus reduce paper waste. One of WIPP’s pollution prevention goals is to reduce paper waste for the entire WIPP facility. Employees are asked when making copies select the two-sided option on the machine.

Disposal in Panel 2 complete



Waste disposal operations in Panel 2 were completed in the last week. The red stands each hold five 4,200 pound supersacks of Magnesium Oxide (MgO). Environmental Protection Agency requirements determine the amount of MgO needed based on the mass of cellulose, plastic and rubber material in the disposal room. There are more than 3,500 supersacks, or over 7,000 tons of MgO in Panel 2.

Taking nuclear safety at WIPP to another level

The nuclear safety landscape at WIPP is about to look a bit different. DOE approved Revision 9 of the Contact-Handled Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) on September 28. WIPP only has until December 29 to implement the new controls established in the DSA/TSR.

“We have strengthened our safety culture,” says Tom Lex, WIPP’s chief nuclear engineer. “WIPP’s safety culture is well established and it is based on three areas of safety: industrial, mining and nuclear. All three areas are essential but implementing Rev. 9 of the CH DSA will significantly strengthen WIPP in the area of nuclear safety.

Development of the new DSA has been underway since November 2004 following an assessment performed by DOE EM-24. The EM-24 assessment concluded that the WIPP Revision 8 DSA required changes to align with DOE Standard 3009.



The new DSA was developed by first performing an unmitigated hazard evaluation and screening of accidents, followed by a final mitigated hazard evaluation and accident analysis. The final analysis included selected controls to prevent or mitigate the consequences from the accidents. Following the initial submittal of the DSA to CBFO on March 31, an iterative process followed, working closely with CBFO and CTAC until submittal to EM-24 on June 17.

Supporting our Troops US Postal Service helps support the troops ... free of charge

The United States Postal Service is offering free packing materials to family and friends of military members deployed overseas (APO or FPO addresses).

To take advantage of this service call 1-800-610-8734 then press 1 for English and then press 3 to talk to an operator. Once the operator answers, simply ask for the "Military Pack". They will send you free boxes, packing materials, tape and mailing labels. These products are to be used to mail care packages to service members.

The "Military Pack" includes the following items:

- ⌘ 5 each - box, 12x12x8
- ⌘ 5 each - box, 7x7x6
- ⌘ 1 each - roll of Priority Tape
- ⌘ 10 each - 106A address label
- ⌘ 15 each - Form 2976A - Customs Form
- ⌘ 15 each - Form 2976E - Envelope for Customs Form
- ⌘ 5 each - Tyvek envelope (tear and water proof)

*Courtesy US Army and US
Department of Veterans Affairs*

Throughout this time period, control alternatives were evaluated, trying to balance safety, operational limits and overall needs of the TRU waste program. Review comments from EM-24 were successfully resolved prior to the final approval on September 28.

The major changes to the WIPP safety basis include credited structures, systems and components to protect the public, site and facility workers from the consequences of fires, drops and punctures involving waste drums. WIPP will now have equipment that is designated as Safety Class because it is equipment that is credited with protecting the public. Another example of this type of change is the Waste Handling Building (WHB) Fire Suppression System being designated as Safety Significant because of the protection it provides to the facility/site workers by preventing small fires in the WHB from becoming large fires.

Once Revision 9 is implemented, WIPP will be required to operate in accordance with Specific Administrative Controls (SAC) and Limiting Conditions for Operation (LCO), which are spelled out in the TSR. SACs are specific actions that must be followed at all times to remain in compliance with the TSRs. LCOs establish conditions that must be satisfied to safely handle waste and if the conditions are not satisfied there are specific time limits established for taking required actions. The following LCOs have been established for WIPP:

- ⌘ **Underground ventilation**
Air flow rates in the underground must be checked before every shift. No waste handling operations are permitted if the air flow rate limits can not be met.
- ⌘ **Fire Water Supply System**
The inventory of water in storage tanks and operability of fire pumps must be verified. If the conditions can not be met, waste can not be introduced into the Waste Handling Building.
- ⌘ **Fire suppression in the Waste Handling Building**
Correct system valve alignment and system pressure in the Waste Handling Building must be verified. If the requirements for system operability can not be met, waste can not be introduced into the Waste Handling Building.
- ⌘ **Waste Handling Equipment Automatic/Manual Fire Suppression System**
Waste handling vehicles in the underground are equipped with automatic and manual fire suppression systems. If the automatic system is not operating, then the equipment can be used for a limited amount of time (48 Hours) with just the manual system in place, provided that a specific person, called a fire watch, is posted to watch for a fire. If both the automatic and the manual systems are not operable, a fire watch must be posted and waste handling with the affected equipment stopped in no more than four hours.

Lex expressed great appreciation for the teamwork demonstrated by the WTS organization and there were some specific individual contributors that he highlighted. "James McCormick and Anne Strait did a great job completing the complex calculations and evaluating the consequences of the hazards and applying their detailed facility knowledge to identify the needed controls."

The team won't have much time to rest, however. Even before the DSA goes into full force, a similar document for remote-handled waste is already under way.

New class teaches first responders how to react to a radioactive dispersive device

Where can first responders learn how to safely respond to a "dirty bomb"? Right here in Carlsbad! During the week of October 10, the Carlsbad Environmental Monitoring & Research Center (CEMRC) and Washington TRU Solutions performed a dry run of a new emergency response class for first responders encountering an exploded radioactive dispersive device, more commonly called a "dirty bomb."

Birthday Wishes!

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

Mike Antiporda (WTS)
November 3

Heather Evans (CTAC)
November 3

David Lewis (WTS)
November 3

Chuck Conway (WTS)
November 7

Ken Hasten (L&M)
November 8

Jeff May (CTAC)
November 8

Danette Harvill (CTAC)
November 9



Scenes from the training course dry run held at the Carlsbad Environmental Monitoring & Research Center.

Photo collage courtesy of Ruthie Porter, CEMRC.

The dry run lasted three full days and included written exams, hands-on practice with radiation monitoring equipment and an outdoor full-scale practical exercise, where two simulated dirty bombs were exploded. A burned-up car, smoke, dead bodies (mannequins), French tourists and curious members of the public who contaminated themselves (simulated) walking into the scene were all part of the exercise to which first responders had to assess and react.

"Carlsbad is the perfect place to develop and present this type of training," says Candice Jierree, WTS Health & Safety. "The talent and experience of professional personnel at CEMRC and WTS for dealing with potential radiological emergencies is excellent."

The class was nine months in the planning and includes DOE's Modular Emergency Response Radiological Transportation Training (MERRTT) accredited training class provided by WTS' External Emergency Management organization. Information about radioactive dispersive devices, radiation safety, use of survey meters, crime scene preservation, hands-on practice and a film about how a "dirty bomb" event could occur and the type of preparation needed for such an event rounded out the class.

New Mexico State University is offering two college credits for undergraduates who are registered students and who complete the three-day, intensive class. Others taking the class will receive continuing education credits.

CEMRC has begun marketing the class to first responders nationwide. The course will be offered at least once a month at CEMRC. Organizers expect the first class to begin on December 13.

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

Please send comments and/or
suggestions to: [TRU TeamWorks](mailto:TRU_TeamWorks)

