

Update 2/19/04 Shipments expected this week: SRS (6)

TRU TeamWorks

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

February 19, 2004

The Big Story WIPP public information meetings held



Topics

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

Tools

- [Acronym List](#)
- [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 02/19/04
at 6:55 a.m.)

Shipments
scheduled to
arrive at WIPP
this week
6

Total shipments
received at WIPP
2,348

Total volume
disposed at WIPP
17,968 m³

FY04 Performance
Metrics

The DOE Carlsbad Field Office and Washington TRU Solutions are holding public meetings this week to provide information on recent WIPP Hazardous Waste Facility Permit Modification Requests (PMRs). The first meeting was held in Carlsbad on Tuesday, February 17. The meeting was well-attended, with approximately 20 audience members. Bob Kehrman, WRES senior technical advisor, explained the PMRs. CBFO RCRA Compliance Manager Jody Plum and Steve Zappe, NMED, were also on hand to answer questions.



Steve Zappe, NMED; Bob Kehrman, WRES, and Ben Walker, EEG, gather during the Carlsbad meeting.



Bob Kehrman, WRES, gives a presentation outlining the PMRs.

The PMRs discussed during the meetings include:

- PMR submitted to the NMED on January 8, to enhance container management at WIPP.
- PMR submitted on January 8, to upgrade the current waste conveyance loading car with new facility transport vehicles.
- PMR submitted on January 8, to establish drum age criteria (DAC) for direct-loaded 85- and 100-gallon drums and ten-drum overpacks.
- PMR submitted on January 12, to implement Public Law 108-137, Section 311, signed by the President on December 1, 2003.

Notices for these information meetings were posted in area newspapers. These postings began a sixty-day time period for the submittal of written comments. NMED considers written comments when formulating a decision on the approval of the PMRs.

Kehrman closed the Carlsbad meeting by encouraging attendees and other members of the public to submit formal written comments on the PMRs to NMED and also informally to CBFO. "Public feedback and participation is vitally important to this process."

Two more public meetings will take place today from 2-4 and 6-8 p.m. at the Courtyard by Marriott in Santa Fe. The PMRs are available on the WIPP Homepage at <http://www.wipp.ws>. Copies may also be obtained from the WIPP Information Center.

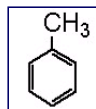
In the news



Sitting DACs



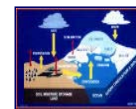
IART ready



VOC count



Long time safe



Wet work

What exactly is DAC?



Topics

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

Tools

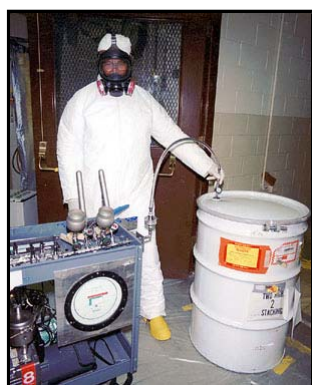
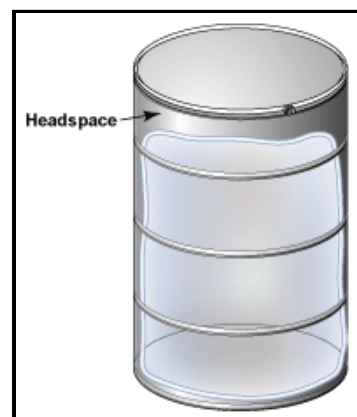
[Acronym List](#)
[Archives](#)
[Back to Main Page](#)
[WIPP Home Page](#)
[Links](#)

A WIPP Hazardous Waste Facility Permit (HWFP) modification request on the addition of drum age criteria (DAC) values for new containers was recently submitted to NMED. If approved, the request would establish DAC values for 85- and 100-gallon drums and ten-drum overpacks. DAC values already exist for 55-gallon drums and standard waste boxes. But what exactly is DAC?

To understand, consider an onion stored in a refrigerator. Left too long, the onion's odor eventually permeates the entire space. If the onion is placed in a plastic bag the result is the same, though it may take a while longer for the smell to permeate the plastic. The same is true of volatile organic compounds (VOCs) inside containers of TRU waste.

Multiple plastic bags are often used to control radiological contamination. Contaminated articles are placed inside plastic "trash" bags, and then bagged again before being placed inside of a waste container, which may contain its own plastic liner. The container is then sealed and stored. If the container has VOCs inside, these compounds will eventually migrate through the layers of plastic until they collect in the void area inside the container, but outside the plastic. This is called the headspace of the container.

Headspace gas sampling is performed on containers at generator sites to measure VOC levels. This sampling is required by the WIPP hazardous waste facility permit. If containers are sampled too soon after they are generated, the VOC measurements are not representative of the actual concentrations inside because the VOCs take time to migrate into the headspace.



This INEEL employee samples the headspace gases in a waste drum.

The DAC value determines how many days a container of waste is required to sit idle prior to the performance of headspace gas sampling. Specifically, headspace gas samples are considered representative when the VOC concentrations in the headspace are at least "90 percent of the equilibrium steady-state within each layer of confinement".

The HWFP initially established what are called "default DAC values" for a "worst case scenario" of five layers of plastic bags as a bounding condition for debris waste and two layers for homogenous solids, soils and gravel. But not all containers of debris waste contain five layers of plastic bags. Some may contain none, one or two layers. However, without container-specific DAC values, these would have to sit much longer than is necessary before they are sampled. The same is true for some homogenous waste containers. The unnecessarily long wait before sampling can translate into significant delays in the characterization process.

To expedite the characterization of these containers, a permit modification request was submitted to NMED with DAC values calculated for different packaging configurations. All of the calculations maintain the original "90 percent of the equilibrium steady-state concentration" requirement in the permit, they merely allow for the containers to be sampled much sooner after they are closed.

Bob Kehrman, WRES senior technical advisor, explains, "WIPP's priority is the safe, expedient and cost-effective disposal of TRU waste. The revised DAC values will allow generator sites to package and ship waste much more quickly while maintaining compliance with the HWFP."

IART - ready to assist



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](#)

In the unlikely event of a WIPP transportation incident, responders will be ready. CBFO established the Incident/Accident ResponseTeam (IART) to respond to off-site incidents involving a WIPP shipment. The IART is a CBFO program that is managed by WTS External Emergency Management to provide the safe recovery of shipping packages involved in an incident and/or accident.

The primary function of the IART is to ensure protection of the public, the environment and team members throughout recovery operations.



TRUPACT-II recovery exercise in Hobbs, NM.

There are five positions on the team which is made up of CBFO and WTS personnel. Each position has a primary, secondary and backup member. Following is a list of the positions and the individuals that fill them:

Team Leader

Casey Gadbury, CBFO
Ralph Smith, CBFO
Mike Brown, CBFO

Public Information Officer

Dennis Hurtt, CBFO
Bobby St. John, WTS
Susan Scott, WTS

Package Engineer

Mike Caviness, WTS
Joe Willis, WTS
Todd Sellmer, WTS



Transportation Engineer

Roy White, WTS
Bob Nieman, WTS
Kathy Hernandez, WTS

External Emergency Management Coordinator

Jim Ammons, WTS
David Lewis, WTS

IART Communication Equipment

IART members are required to complete training classes specific to recovery of TRU waste packages. Members also participate in an annual exercise that offers them a real-time opportunity to test response capabilities and hone the skills needed to safely respond in an actual transportation incident.

Each team member is assigned responsibilities, step-by-step response instructions and the specialized equipment needed for deployment. Team members must be prepared to travel on short notice and be able to use portable IART equipment such as satellite telephones, lap tops and a video camera.

"While we never want to receive "the call," this training allows us to maintain a state of readiness as a team" according to Casey Gadbury, National TRU Waste Logistics team leader and IART team leader.

The VOC trackers



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](#)

Looking over the latest lab report, Wes Boatwright comments, "There a a lot of zeros in our data." Boatwright, WRES associate scientist, along with Oscar Garcia, WTS environmental technician and WRES monitoring program team leader Mark Crawley, monitor volatile organics compounds (VOCs) in the WIPP underground.

The three-member group tracks repository VOCs to ensure cumulative amounts will not exceed regulatory limits. Since disposal operations began, quantifying VOCs has been accomplished by siphoning off and analyzing gases that collect in the head of waste drums. However, headspace gas sampling, performed at the shipping site, cannot not provide valid repository-room-based readings.

Baseline monitoring for VOCs at WIPP began years before waste was received. The VOC Monitoring Program has evolved today to include two air sampling stations, as well as sampling locations added in 2003 to monitor the air in rooms of the active panel that have now been closed to ventilation.

Stations A and B are strategically placed in the waste disposal air circuit, an area that encompasses the waste transport route, waste disposal rooms and air exhaust drift.



Oscar Garcia, WTS environmental technician, checks canisters used to monitor VOC concentrations.

Station VOC B, located upstream from Panel 2, tests for background VOCs in the fresh air flowing into the area, while Station VOC A, downstream from Panel 1, samples air that has circulated in the disposal area and is being exhausted. VOCs are tabulated by subtracting fresh air values from exhaust air values.

Air is sampled for six hours twice a week at Stations A and B. Additional sampling units are now placed on the air inlet and air exhaust sides of a "closed" disposal room (the last room to be filled and a ventilation barrier installed) and next to the room where active waste emplacement is underway. Once the active room is filled and closed, sampling units will be moved forward into that room.

Although there are a number of VOCs in WIPP waste, nine compounds – that pose 99 percent of the hazard to human health and the environment – are measured. Environmental Monitoring maintains chain of custody on the six-liter air sample canisters which are sealed and shipped weekly to a California laboratory for analyses. According to Boatwright, "We do see some concentrations in our closed-room samples, but lab analyses show them to be orders of magnitude below regulatory limits."

Working safely for almost two decades

Luke Meadors, a maintenance technician for WTS Operations, has worked at WIPP since 1986 without a lost-time accident.

Luke works in confined spaces and in areas that present potential electrical and fall hazards. But he jokingly states that the greatest hazard he faces on a day-to-day basis is the ride to the site. On a more serious note, Luke says that fall hazards really pose the greatest risk to his safety.

When asked how he has avoided injury or a lost-time accident, he says, "What keeps me safe is job knowledge, wearing the appropriate personal protective equipment (PPE), following lockout and tagout procedures and working safely every day."

Luke's personal protective equipment includes gloves, steel-toed boots, a hard hat, safety glasses and hearing protection. He and his co-workers are also enrolled in the hearing protection program. They are tested on a yearly basis to ensure that their hearing has not been adversely affected while performing their duties.

There are five people in Luke's maintenance crew. Over the years, Luke witnessed a co-worker injure his thumb. The incident, he said, made him even more aware of how important it is to wear the appropriate PPE.

Safety at WIPP depends on safe work habits. Knowing your job, wearing the right protective equipment, using the right tool for the job and hazard awareness are some of the ways to prevent injury – decade after decade.



Luke Meadors (WTS) works to stay safe everyday.



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](#)

Sandia scientists seek long-term water solutions for southeast New Mexico



[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](#)

The tide is rising on the topic of water in Southeast New Mexico. Fortunately, a team of Sandia National Laboratory (SNL) scientists has dived in to provide watershed information for the future.

David Chace, Randall Roberts and Jesse Roberts, scientists for SNL Carlsbad Program Group, bring specific expertise to WIPP. Beyond WIPP, the team assists with complex regional water resource issues.



Pecos riverbank following herbicidal eradication of salt cedar.

engineer's decision. Chace began his study nearly two years ago, just to characterize the resource. Now he's getting inquiries about protecting the resources. A substantial aquifer feeds the Salt Basin Groundwater System.

High-profile projects

"We do it because we enjoy it," Chace says about self-supporting studies the SNL team members conduct through the SNL Small Business Assistance program. "Through our own choice, we have gone out and developed this work in addition to our full-time work at WIPP."

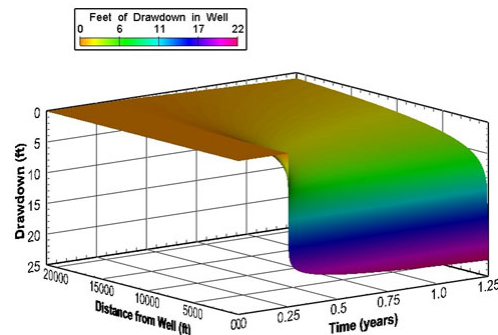
David Chace, an SNL hydrologist since 2001, is investigating the potential of Otero Mesa groundwater resources. A group of Dell City-area ranchers may do business as the Last Chance Water Company – depending on the study results and the state

Randall Roberts, a WIPP geologist and hydrologist since 1989, is principal investigator for an Otis groundwater availability and sustainability study. Roberts will employ highly specialized, WIPP-developed modeling software to graphically analyze well-test data from Otis community wells. Issues about continued operation of the Otis Water Users Cooperative have been in local news reports. Otis data will be mutually beneficial to neighboring water systems, including Carlsbad, Loving and Malaga, as the latter two systems' wells tap Cass Draw, just as Otis does. "Everybody wins here. They're all facing the same issues at some point in time," Roberts emphasizes.

Jesse Roberts, an environmental and mechanical engineer, consults on surface water issues, including soil erosion and sediment transport. One study for Carlsbad Irrigation District examines the potential impacts to the Pecos River channel, including Brantley Dam and reservoir, resulting from eradication of salt cedar trees. The study will provide follow-up data about changes in the river route that could affect farmland and other private property, riverbank erosion, sediment transport in the channel and impact of vegetation replacement.

Support from elected officials

Southeastern New Mexico's elected officials have been universally supportive of SNL's technical assistance projects. High-profile water issues carry the potential to greatly impact New Mexico's future. "Every elected official wants to grow their community," Chace acknowledges. "More growth means more water." For any locale, lack of water resources quickly becomes a growth-limiting factor for business expansion and recruiting.



Sample graphic from Sandia's nSIGHT software. The software models well test data.

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](#)

Stoller awarded Environmental Business Journal (EBJ) gold medal for medium-sized firms

S.M. Stoller Corp. was award the EBJ Gold Medal for executing a dramatic turnaround over the past several years, growing from 40 employees in the mid-1990s to over 400 employees today. The loss of a major DOE contract in 1995 prompted the exodus of hundreds of employees at the 40-year-old company. Several key employees acquired the company through private funding and initiated a turnaround plan that today has brought Stoller to the \$75-million level in annual revenues today. In the past 18 months, Stoller has been awarded nearly \$400 million in new contracts, including some of the largest let by DOE to small businesses: multiple contracts for DOE's Pantex Plant in Texas; a \$22-million contract at DOE's Rocky Flats Environmental Technology Site; a \$33-million contract at the Idaho National Engineering and Environmental Laboratory's CERCLA Disposal Facility; prime contractor responsibility, exceeding \$128 million, at DOE's Grand Junction Office; and a \$200-million contract at DOE's Nevada Test Site.

Safety footwear visits scheduled

Two safety footwear vendors will be on site for the benefit of WTS employees who need to purchase footwear. WTS will only reimburse employee purchases that meet ANSI standards. The maximum reimbursable amount is \$150 and manager approval is required.

- **Wednesday, February 25, from noon to 4 p.m.** a Lubbock vendor will be in the WIPP parking lot.
- **Wednesday, March 10, from noon to 5 p.m.** An El Paso-based vendor will be in the WIPP parking lot.