

WIPP Quick Facts
(As of 3-26-13, 6 a.m.)

11,159
Shipments received since opening
(10,521 CH and 638 RH)

85,719
Cubic meters of waste disposed
(85,403 CH and 316 RH)

165,362
Containers disposed in the
underground
(164,731 CH and 631 RH)



**WIPP Laboratories receives
Certificate of Registration**

WIPP Laboratories has received a Certificate of Registration for Clinical Laboratory Improvement Amendment (CLIA). The certificate permits the laboratory to conduct radiochemical testing of emergency bioassay samples provided by the Center for Disease Control. This would be in support of federal agencies, such as the Department of Homeland Security.

The CLIA certificate permits the laboratory to begin testing upon receipt, but an assessment must still be conducted to determine the lab's compliance with other CLIA requirements.

An audit is expected to be scheduled this year.

Above, Dr. Charlotte Sisk-Scott loads a sample into a gamma spectrometer

**14 years later:
WIPP cleanup mission continues**



March 26, 1999 was just the beginning. Now 14 years later, the U.S. Department of Energy's (DOE) Waste Isolation Pilot Plant (WIPP) has achieved many successes in its national cleanup mission.

"The first shipment was historic," said Carlsbad Field Office (CBFO) Manager Joe Franco, who worked at WIPP for Westinghouse at the time. "But every shipment since then has been just as important to our mission. Safety is a constant that makes this project so successful and I'm grateful to our hard-working team that has maintained focus over a long period of time."

The WIPP safety culture has led to an impressive array of success indicators. As of the morning of the anniversary date, 11,159 shipments received and 85,719 cubic meters of waste disposed in 165,362 waste containers. In all, 22 sites have been completely cleaned up of legacy TRU waste, and numerous others continue their site cleanup, made possible by the safe transportation and disposal pathway provided by WIPP.

"We're better today than we were 14 years ago," added Franco. "And in the next 14 years, we'll be better than we are now. We're not resting on what we've done, but focusing on what we are doing now and trying to continuously improve in all that we do."

The photo above, taken on March 26, 1999, shows Jim Ankrom, who worked at WIPP at the time, watching as an underground transporter with the first waste passed by on its way to Panel 1, Room 7 for disposal. The first waste received at WIPP originated at Los Alamos National Laboratory in New Mexico.

a sample into a gamma spectrometer at the WIPP Laboratories.



A year flies by

Carlsbad Field Office (CBFO) staff and contractors recently surprised Joe Franco in recognition of his one-year anniversary as CBFO manager. Above, Franco speaking about his first year. Below, Franco is surprised when he walks into the room, with CBFO Site Operations Manager Casey Gadbury and Nuclear Waste Partnership (NWP) Central Characterization Program Manager Tammy Reynolds looking on. Bottom, NWP President and Project Manager Farok Sharif offers his congratulations.



WIPP Waste Hoist gets four new head ropes

Don't let the word "rope" fool you. The head ropes used on the U.S. Department of Energy (DOE) Waste Isolation Pilot Plant's (WIPP) Waste Hoist are engineered steel cables and they require tremendous planning and coordination to safely and successfully replace. But that's exactly what crews at WIPP recently accomplished, as they replaced not one, but four of them as part of the facility's preventive maintenance program.

The Waste Hoist used to transport waste underground at WIPP is considered by many to be an engineering marvel. The 2,150-foot descent to the underground disposal area is a smooth, quiet ride. The waste conveyance, which resembles a large cage, can hold up to 75 people, 45 tons of equipment or a payload of transuranic waste on its final journey to disposal.

The steel head ropes attach to the top of the conveyance, wrap around a 12-foot-diameter hoist drum and connect at the other end to a counterweight, consisting of a steel frame with a cast iron weight stack totaling 102,000 lbs. Each head rope is made up of 151 wires that, according to hoist engineer, Norm Siepel, is a machine in itself. The head rope comprises an outer layer of interlocking "Z" shaped wires, three inner layers of alternating round and "I" shaped interlocking wires, two more layers of round wires and a wire rope core. The wire layers are twisted in opposite directions to balance and minimize rope torque.

Siepel said the coordination to remove and replace the head ropes is nothing short of amazing.

"The team did a remarkable job," DOE Carlsbad Field Office (CBFO) Manager Joe Franco said. CBFO has responsibility for WIPP and the National TRU Program. "The four 2,300-foot-long head ropes, which is about one and $\frac{3}{4}$ miles total of steel rope, were removed and installed 10 to 14 feet at a time," said Franco. "When you count the ropes that were replaced along with the new ropes installed, that totals 3.5 miles of steel rope. This impressive achievement was completed safely and ahead of schedule."

It takes three to four days for WIPP crews to replace one head rope. In this instance, crews were able to accomplish the work during WIPP's planned maintenance evolution while waste disposal activities were temporarily suspended. Yearly, the maintenance evolution provides a time for the WIPP management and operating contractor to conduct periodical maintenance activities as may be determined to be needed at the WIPP site that are performed without the impact of the receipt of shipments and permanent waste disposal activity.

Three shafts extending to WIPP's underground area serve as points of egress for personnel who work in the mine. Each week a shaft crew descends on the conveyance work platform to inspect shaft conditions. The counterweight, the conveyance and head frame undergo monthly inspections.



WIPP marks Engineers Week by working with students

Engineers from the Waste Isolation Pilot Plant (WIPP) celebrated National Engineers Week by working with young scholars in local schools. A core group made it happen, reaching an estimated 1,750 students in 17 schools in Carlsbad, Loving and Hobbs, New Mexico.

Their visits to schools involved students in hands-on projects that teach them about principles of science and engineering.

Above, Nuclear Waste Partnership (NWP) engineer Curtis Chester works with students on a "roller coaster" to demonstrate the principles of potential and kinetic energy. Below, NWP Engineer Tim Goodwin uses model wings to teach the students about aerodynamics.



Mobile loaders get first-hand look at WIPP

Mobile loaders from across the Transuranic (TRU) Waste Complex recently visited the final resting place for TRU waste during a tour of the Waste Isolation Pilot Plant (WIPP).

The mobile loaders were among 24 visitors that toured WIPP. The group included members of Los Alamos National Laboratory's management team and key management representatives from Celeritex Services, which provides critical staffing services to the U.S. Department of Energy's TRU waste loading program, managed by Los Alamos National Laboratory's Carlsbad Operations.

What is a mobile loader?
Mobile loaders are WIPP employees who go to the generator sites to safely load TRU waste containers into the shipping containers, such as the TRUPACT-II or the RH-72B, and certify the containers for transportation to WIPP.

The tour represented the first time in the program's history that all mobile loading program members were together in Carlsbad and had an opportunity to see WIPP first-hand.

"There's not a lot of difference between what we do at the sites and here, but it is interesting to see the unloading aspect of the waste," Mobile Loader Edward Anaya said.

Anaya visited WIPP on one previous occasion, but this was his first opportunity to go underground and see where waste is emplaced.

Bill Thomas, who is a transportation certification official for LANL's mobile loading program group, was on his third visit to WIPP.

"I am glad I got to come down again," he said. "I was able to see a few things that I hadn't seen before."

Thomas, a resident of Idaho, has spent approximately five years as part of the mobile loading team. He currently works at the Savannah River Site, which is one of several sites from which he has loaded waste for shipment.

The tour began with a brief safety and orientation meeting at Los Alamos National Laboratory's Carlsbad office before participants travelled to WIPP. The group visited the Contact-Handled Waste Bay, automatic vehicle operating area and the Remote-Handled Waste Bay, where Los Alamos National Laboratory Program Manager and Group Leader Ned Elkins and Field Operations Manager Wade Weyerman explained the processes waste containers go through once they arrive at WIPP.

With several years of experience working at both the WIPP site and as a mobile loader at generator sites throughout the nation, Weyerman was able to discuss the

similarities and differences between loading operations at the generator sites and unloading and emplacement operations at WIPP.

"This is a much more technology-based process," Weyerman said of the often-automated unloading activities at WIPP.

After a tour of the WIPP's above-ground facilities, the visitors descended 2,150 feet down the Salt Shaft. Once underground, the group travelled to the waste disposal areas where they observed contact-handled and remote-handled waste at the end of its long journey.

Elkins said the mobile loaders provide a vital function for the national transuranic program and he was appreciative of how accommodating DOE and WIPP staffs were before and during the tour.

The photo above is the group in Panel 6, the active disposal panel.



WIPP Presentation at Waste Management 2013

CBFO Manager Joe Franco (right) presents a memento emphasizing that the Waste Isolation Pilot Plant (WIPP) exemplifies the DOE Environmental Management (EM) initiative to "Optimize Resources to Maximize Results" to Senior Advisor for EM David Huizenga on Feb. 25 at the 2013 Waste Management (WM) Conference, conducted by WM Symposia in Phoenix, Ariz. Huizenga and Franco participated in the weeklong 39th annual WM conference, which draws international and national attendance to discuss management of radioactive materials and related topics.



WIPP team participates in Waste Management 2013

CBFO Manager Joe Franco (far right) and CBFO National Transuranic (TRU) Program Director J.R. Stroble (second from the right) participated in the panel on the Realignment of TRU Disposition Priorities and Franco addressed WIPP status and plans at the Feb. 24-28 Waste Management (WM) Conference, conducted by WM Symposia. Also at the conference (not shown) were CBFO Chief Scientist Roger Nelson and CBFO International Programs and Policy Advisor Dr. Abe Van Luik, who addressed the group discussing the Worldwide Perspective of Radioactive Waste Management and Geologic Disposal, and other CBFO and contractors' representatives.

New Mexico Environment Department approves change to permit

On March 13, 2013, the New Mexico Environment Department (NMED) approved some changes to the WIPP Hazardous Waste Facility Permit regarding the chemical sampling and analysis methods described in the Waste Analysis Plan. The U.S. Department of Energy-Carlsbad Field Office and Nuclear Waste Partnership LLC (permittees) submitted a permit modification request to the NMED in December 2012. The request sought to eliminate the requirement for generator/storage sites to conduct chemical waste sampling and analysis as part of the waste characterization process. This change reduces the complexity of waste

characterization, cost and personnel radiation exposure.

Prior to the approval of this modification, generator/storage sites were required to conduct chemical sampling and analysis on every waste stream. Chemical sampling and analysis refers specifically to both headspace gas and solidified waste sampling and analysis.

Generator/storage sites can now accomplish waste characterization using solely acceptable knowledge, radiography, and visual examination. Acceptable knowledge involves reviewing and compiling records associated with each waste stream that document the physical and chemical characteristics of the waste. Radiography provides x-ray images of the contents inside a waste container to verify the physical form of the waste and ensure that no prohibited items are present. Finally, visual examination is the process of physically opening the waste containers and inspecting the waste items, also to verify the waste's physical form and the absence of prohibited items.

Should the generator/storage sites need to perform chemical sampling and analysis of a waste stream, that information will be specifically requested by the Permittees and included as part of the acceptable knowledge record for the waste stream. Chemical sampling and analysis will not be required as long as sufficient characterization information can be provided by the remaining characterization methods. The approved modification will result in an overall cost savings for waste characterization activities and will also increase efficiencies for the overall process.

It is important to note, this change does not reduce the ability of WIPP to provide continued protection to human health and the environment. The information gained from the chemical sampling and analysis activities is not used to make decisions regarding the storage and disposal of transuranic mixed waste at the WIPP facility. Additionally, these methods are not required to meet the Resource Conservation and Recovery Act regulations; therefore, it was not necessary to continue using these techniques.



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

To be added to the TRU TeamWorks update notification list or to submit comments or suggestions, please contact us at TRUTeamWorks@wipp.ws.

