

Standard waste boxes and seven packs stacked in Panel 1, Room 7 of the WIPP repository.

Closing the Circle on Transuranic Waste

ome 225 million years ago, the area around Carlsbad, New Mexico was a barren salt bed more than 2,000 feet thick.

Dinosaurs had not yet roamed the Earth, and the first humans were in the distant future. The area had been covered by the Permian Sea, which by this time had repeatedly evaporated, leaving behind the salt bed that would eventually be buried more than 1,000 feet beneath the sands and cacti of the Chihuahuan Desert.

Today that salt formation houses the Waste Isolation Pilot Plant (WIPP)— an underground repository certified by the Environmental Protection Agency and permitted by the New Mexico Environment Department—that is our nation's solution to the risks posed by temporary storage of transuranic radioactive waste. Modern technology and engineering have turned a minute part of this enormous salt formation into a tomb for radioactive wastes, such as those generated during the Cold War.

After more than 25 years of study and evaluation, the first shipment of transuranic waste arrived at the gates of the WIPP at 4:00 a.m. on March 26, 1999. Despite the early hour and low temperature, several hundred employees, local officials, and private

citizens turned out to greet the shipment. When the unique TRUPACT-II

shipping containers on the back of the truck emerged from the pre-dawn darkness, the crowd erupted into applause, whistles, and cheers. Many there had worked on the WIPP project for years, and some had spent their

careers wait-

ing for this moment.

By isolating this waste from people and the environment, the U.S. Department of Energy (DOE) is closing the circle on the generation, management, and disposal of transuranic waste. But the WIPP story is not just about radioactive waste. It is also a story about people, commitment, federal legislation, government agencies, environmental regulations, and engineering challenges.

