

NM Transportation Infrastructure Revenue Subcommittee

Waste Isolation Pilot Plant

Reinhard Knerr Manager, DOE Carlsbad Field Office

October 5, 2021

OFFICE OF ENVIRONMENTAL MANAGEMENT

What is WIPP?

The Waste Isolation Pilot Plant (WIPP) is America's only deep geologic repository for the permanent disposal of defense-generated transuranic (TRU) radioactive waste from research and production of nuclear weapons.



The WIPP Team

U.S. Department of Energy Office of Environmental Management Carlsbad Field Office

- Leads the Transuranic Waste Program
- Science Program
- National TRU Program





Nuclear Waste Partnership LLC

- Manages and operates the WIPP facility
- Manages transportation logistics and packages
- Manages waste retrieval, characterization and certification



Los Alamos National Laboratory

- Scientific advisor for waste characterization
- Mobile loading



Aleut Aerospace Engineering, LLC – TRANSCOM

Satellite Tracking



Sandia National Laboratories

Scientific advisor for repository recertification



CBFO Technical Assistance Contractor

 Technical and Quality Assurance support for the Carlsbad Field Office



CAST Specialty Transportation

Transportation carrier

WIPP's Critical Mission

- Received first shipment from Los Alamos National Laboratory in 1999 and has now operated for more than 20 years
- Enabled clean up of 22 legacy TRU waste sites throughout the U.S.
- Remains a cornerstone of DOE's ongoing cleanup efforts and supports NNSA's ongoing mission



FY21 Accomplishments



- Shipments: 199
- Shipments from Los Alamos National Laboratory (LANL): 56
- Loaded miles: 224,304
- Mining in panel 8 complete
- 120,791 tons of salt mined
 - Installation of Fire Water Tanks, Construction of the Pumphouse and North, East and West Water Mains
- Lightning Array upgraded
- New Air Compressors

Shipments

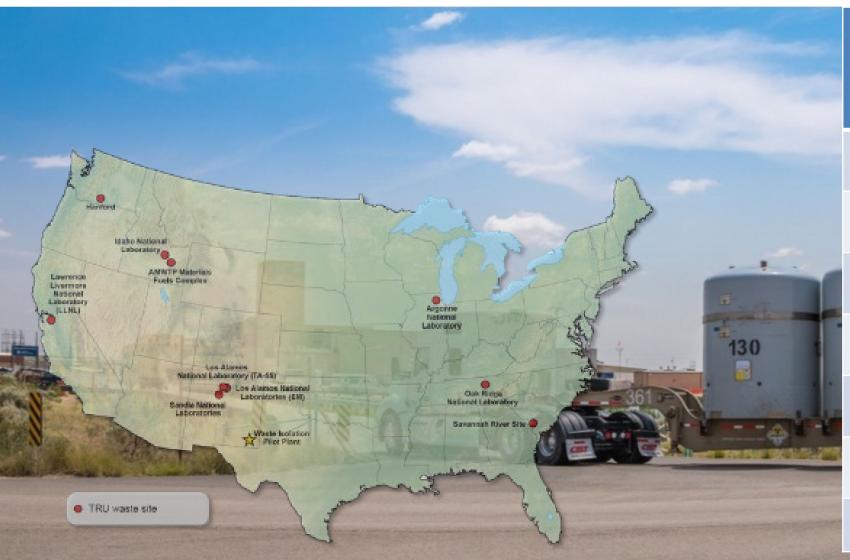
(as of 10/04/2021)

- First shipment March 26, 1999
- Safely completed over 12,970 shipments
- Transporting over 262,000 containers
- Over 15.5 million safe loaded miles



OFFICE OF ENVIRONMENTAL MANAGEMENT

Semi-Annual Notification Letter Shipment Projections



Site	Projected Shipments (up to)
INL	240
LANL	110
ORNL	26
SRS	28
LLNL	3
ANL	3
SNL	3

WIPP and Commercial Truck Traffic

- Largest shipping years for WIPP (up to 27 shipments/week)
 - 2010 1,168 shipments
 - 2011 1,037 shipments
- US 285 North comparison (2010)
 - WIPP Shipments 955
 - Commercial Shipments 180,104
 - .53% of commercial traffic were WIPP shipments
- US 285 South Comparison (2010)
 - WIPP Shipments 173
 - Commercial Shipments 134,699
 - .13% of commercial traffic were WIPP shipments
- Currently up to 10 shipments/week
- WIPP shipments account for less than 1% of total truck traffic on NM highways



WIPP Land Withdrawal Act (Funding 1998-2011)



PUBLIC LAW 102-579
THE WASTE ISOLATION PILOT PLANT
LAND WITHDRAWAL ACT
LAND WITHDRAWAL ACT

as amended by Public Law 104-201 (H.R. 3230, 104th Congress)

SECTION 15. ECONOMIC ASSISTANCE AND MISCELLANEOUS PAYMENTS

(A) 14-YEAR AUTHORIZATION.— THERE ARE AUTHORIZED TO BE APPROPRIATED TO THE SECRETARY FOR PAYMENTS TO THE STATE \$20,000,000 FOR EACH OF THE 14 FISCAL YEARS BEGINNING WITH FISCAL YEAR 1998. THE AUTHORIZATION OF APPROPRIATIONS FOR FUNDS FOR PAYMENTS TO THE STATE UNDER THE PRECEDING SENTENCE SHALL BE SEPARATE FROM ANY AUTHORIZATION OF APPROPRIATIONS OF FUNDS FOR WIPP.

A ONE TIME PAYMENT OF \$20,000,000 TO THE STATE OF NEW MEXICO WAS AUTHORIZED IN 1997 PRIOR TO APPROVAL OF THE ADDITIONAL 14 PAYMENTS.

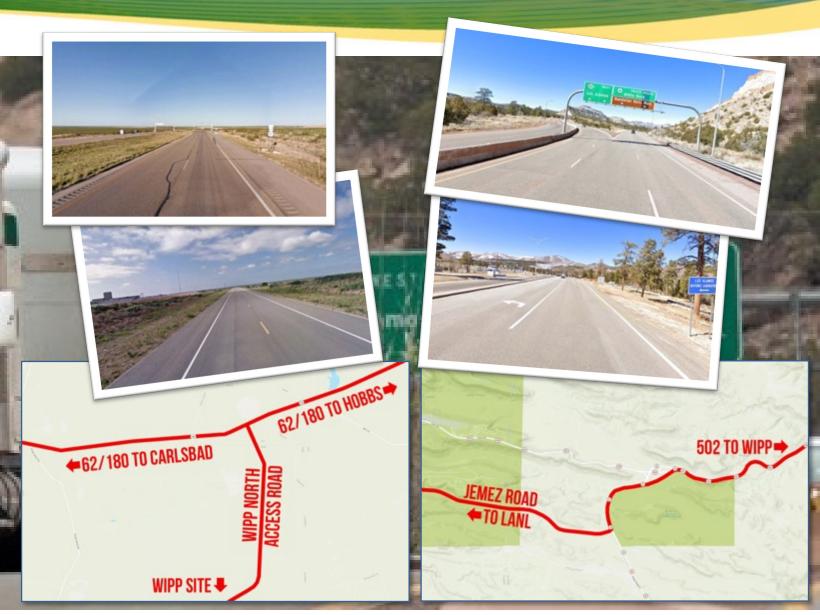
Projects Completed

- Santa Fe bypass (1999)
 - NM 599
 - 14 miles
 - ~\$34 million
- Roswell bypass (1996)
 - 15 miles
 - ~\$20 million
- Carlsbad bypass (1999)
 - NM 200
 - 8 miles
 - ~\$11 million
- 51 projects scheduled and completed (1995-2012)
 - Totaling over \$482 million



2014 Settlement Agreement

- \$34 million to help the NM Department of Transportation to make necessary repairs to roads in southeastern New Mexico
 - WIPP North Access Road
 - US 62/180
- \$12 million to improve DOE-owned transportation routes at LANL used for TRU waste transportation to WIPP
 - Jemez Road
 - NM 502



Additional Projects

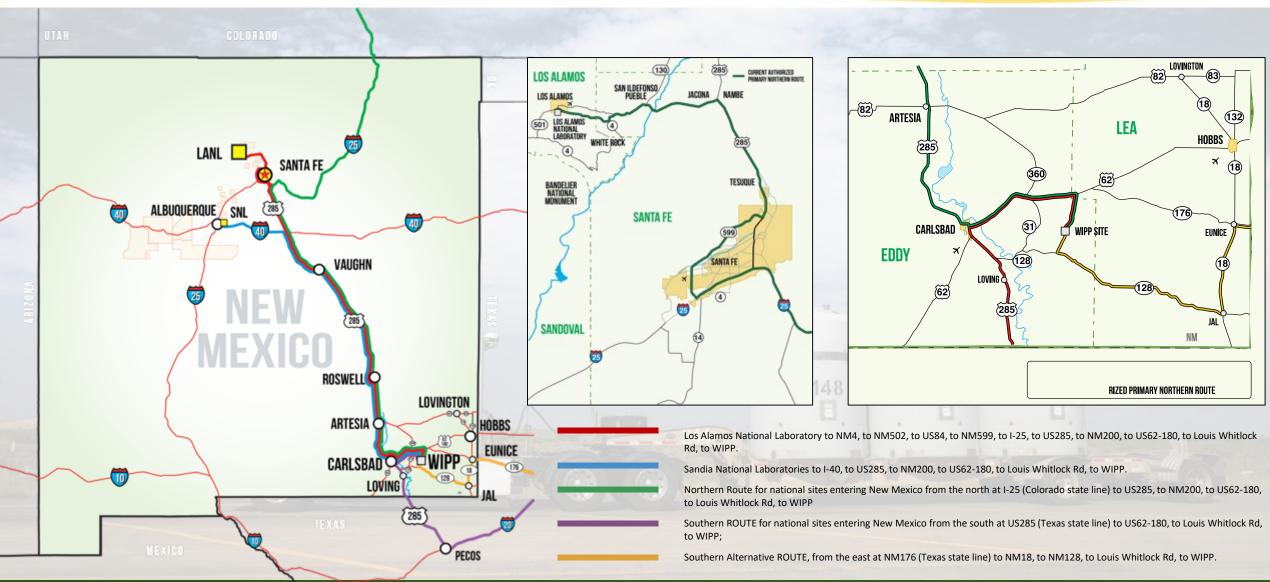
- Additional Projects funded as part of the settlement agreement include:
 - NM State Road 176
 - NM State Road 18







New Mexico Routes



Additional Transportation Support

- Collaborate with 19 states, 6 tribes and governing jurisdictions
- Cooperative agreements
- Financial Assistance
 - FY2022 ~\$6.5 million to states and tribes
 - ~\$1.3 million to New Mexico (20%)
- Emergency Response training and equipment
- Commercial Vehicle Safety Alliance Level VI Inspections
- Roadshows



