



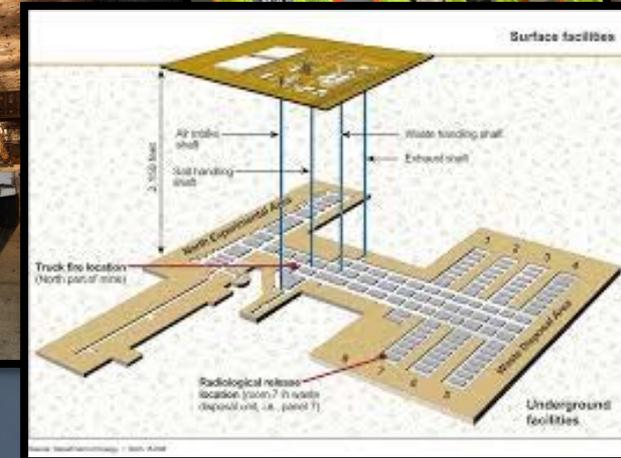
New Mexico Environment Department

Regulatory Update: Waste Isolation Pilot Plant
Water and Natural Resources Committee Meeting
Stephanie Stringer, Resource Protection Division Director
September 6, 2019



Waste Isolation Pilot Plant

- 26 miles SE of Carlsbad
- Delaware Basin salt beds
- Salado Formation: 2,000-foot-thick salt bed below the surface
- WIPP is a geologic repository mined 2,150 feet underground near the middle of the bedded salt formation.



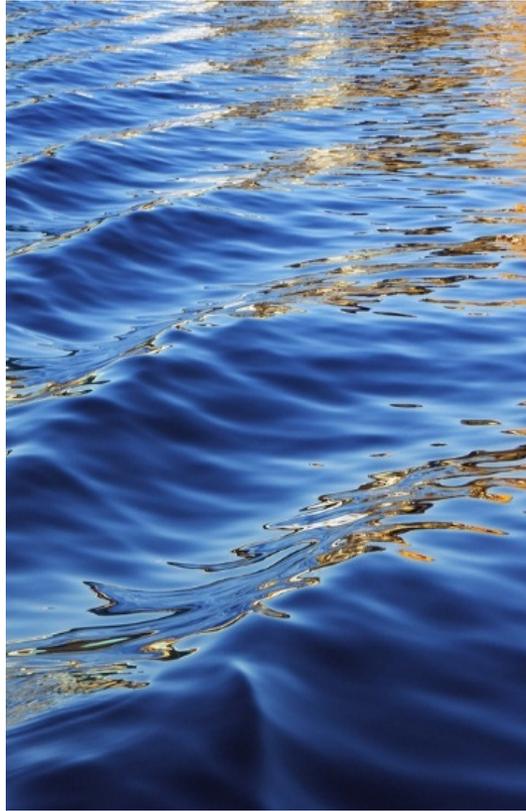
Type of Waste Accepted

Transuranic (TRU) Waste

- Contact-handled (CH) waste
- Remote-handled (RH) waste
- As of August 2019:
 - 12,555 shipments received
 - 96,700 cubic meters emplaced

Received first shipment of TRU waste in March 1999 from Los Alamos National Laboratory





Regulatory Authority

NMED's Regulatory Authority



- **NM Hazardous Waste Act**
NMSA 1978 §74-4-1 to -14
- **Resource Conservation and Recovery Act (RCRA)**
U. S. Environmental Protection Agency granted NMED primacy of RCRA Hazardous Waste Program
- **Transuranic mixed waste is regulated under NMED's RCRA authority**
- **NMED issued Permit on October 27, 1999**
Renewed November 30, 2010

<https://www.env.nm.gov/hazardous-waste/wipp/>

NMED Responsibilities



- Ensuring compliance with existing rules
- Reviewing and issuing Permit Modifications and Renewal Applications
- Observation, review and approval of generator site audits





EPA Regulatory Authority

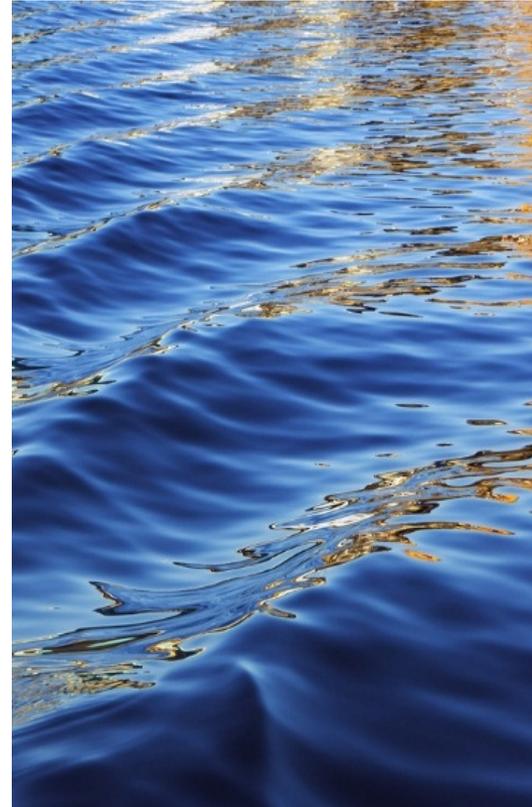
Radiation Protection Program Responsibilities

- **Certification Authority**
 - *WIPP certified May 13, 1998*
 - *Recertified July 13, 2017*
 - *Next recertification application due to EPA March 2019*
- **Oversees Radiological Aspects**
 - Waste characterization
40 CFR 194
 - Radioactive Waste Disposal Standards
40 CFR 191

Number of Waste Shipments to WIPP by Facility per Calendar Year (CY)

Generator Sites	Location	CY 2017	CY 2018	CY 2019 (-August 20, 2019)	TOTAL
Argonne National Laboratory (ANL)	Chicago, Illinois	0	2	0	2
Hanford Site (Hanford)	Hanford, Washington	0	0	0	0
Idaho National Laboratory (INL)/ Advanced Mixed Waste Treatment Project (AMWTP)	Idaho Falls, Idaho	88	243	176	507
Los Alamos National Laboratory (LANL)	Los Alamos, New Mexico	1	5	14	20
Oak Ridge National Laboratory (ORNL)	Knoxville, Tennessee	17	47	18	82
Sandia National Laboratories (SNL)	Albuquerque, New Mexico	0	0	0	0
Savannah River Site (SRS)	Aiken, South Carolina	9	1	2	12
Waste Control Specialist (WCS) (Waste from LANL)	Andrews, Texas	18	13	2	33
TOTAL		133	311	212	656

Since 1999 WIPP has received over 12,000 shipments from facilities around the country. Shipments to WIPP were suspended in February 2014 because of a fire and unrelated radiological release in the underground. Shipments resumed in April 2017.



Current Regulatory Activities

Class 3 Modification: Modify Excluded Waste Prohibition

- Submitted 2013
- Modifies prohibition of excluded waste in Permit to exclude certain waste from shipment to WIPP facility
- Waste exclusion for waste ever managed as high level waste and waste from tanks specified in the Permit unless approved through Class 3 permit modification request
- Significant opposition
- Put on hold due to 2014 fire and radiological release
- Not currently priority for NMED or DOE





Class 3 Modification: Above Ground Concrete Overpack Container Storage Unit

- Submitted 2016
- Proposes to construct a concrete pad for container storage at the surface, providing the Permittees have the ability to store waste on the surface for up to one year
- Necessary when facility is undergoing maintenance or when an event delays waste emplacement or shipments
- Significant opposition
- Not currently priority for NMED or DOE

Class 3 Modification: Clarification of TRU Mixed Waste Disposal Volume of Record (VOR) - Appealed

- Submitted January 2018
- Purpose was to distinguish between the RCRA waste volume and TRU waste volume
- Volume based on physical capacities of disposal units in the underground and the Land Withdrawal Act waste volume
- Congress limited volume to 6.2 million ft³ of TRU waste
- Hearing October 2018; Issued December 2018
- Currently before Court of Appeals





Class 3 Modification: Excavation of a New Shaft and Associated Connecting Drifts

- Submitted December 2017 for class determination; resubmitted as Class 3 August 2019
- Proposes to install shaft to support an upgrade to underground ventilation system

10 Year RCRA Permit Renewal

- Current Permit expires December 2020
- Renewal Application due July 2020
- Scope in development by DOE
- Anticipated submittal date in Spring 2020



QUESTIONS?

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