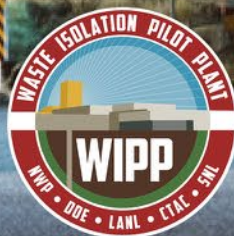




U.S. DEPARTMENT OF
ENERGY

LEGISLATIVE UPDATE WASTE ISOLATION PILOT PLANT

January 31, 2022





2021 WIPP YEAR IN REVIEW

NWP President & Project Manager
Sean Dunagan

WIPP'S CRITICAL MISSION

- WIPP opened 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
- Recapitalization and critical infrastructure upgrades are underway
- More than 69,928 m³ of waste disposed
- More than 184,856 waste containers underground



○ TRU waste site
● TRU waste site cleaned up of legacy TRU waste





2021 Accomplishments video. Click the forward button to play video



SAFETY FIRST!

SAFETY IS THE CORNERSTONE OF ALL WE DO

- Safety remains our highest value and number one priority
- Recently surpassed 1 Million hours without an injury causing days away from work.
- Flexibility throughout COVID, utilizing teleworking and increasing remote learning
- Recently updated our Conduct of Operations program in order to ensure safety in the workplace
- Currently reviving our VPP Zone Safety Committees as we start bringing employees back to in office work



ACCOMPLISHMENTS

INSPIRE OF THE CONTINUING PANDEMIC WIPP:

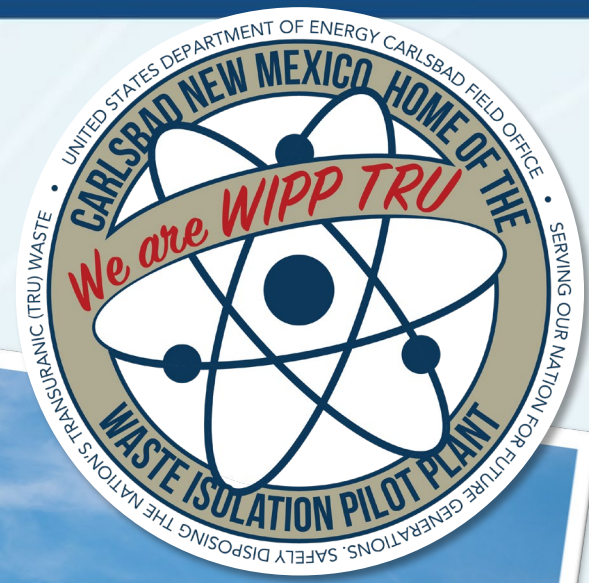
- Completed Panel 8 mining to create additional waste disposal space
- Completed construction of the Salt Reduction Building, a key component of the Safety Significant Containment Ventilation System (SSCVS) to improve air quality in the underground portion of the site
- Continued multiple infrastructure upgrades including a fire water system
- Completed testing of the 700-C ventilation fan which was put into operation in January 2022
- Completed 97 major and minor maintenance projects during a two-month-long outage



SHIPMENTS

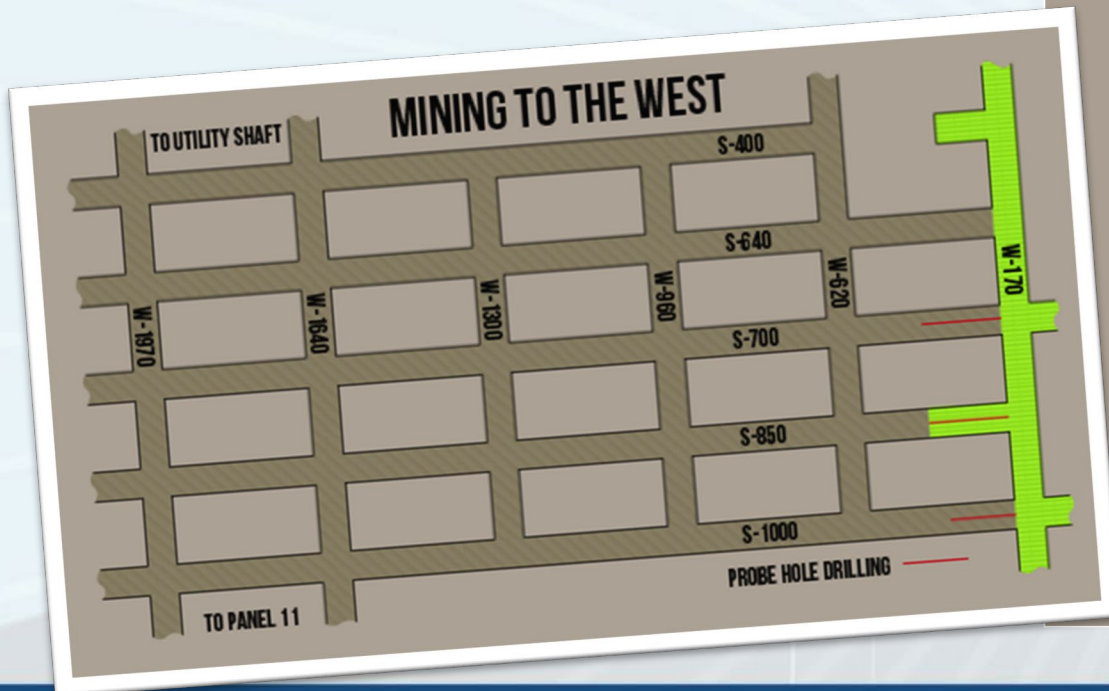
AS OF THE END OF 2021

- Total shipments received: **13,832**
- Total loaded miles traveled: **15,590,706**
- Total CH waste containers emplaced since 1999: **264,108**
- Total RH waste containers emplaced since 1999: **719**
- Shipments received in FY20: **199**
- Shipments from LANL: **56**
- Loaded miles in FY20: **224,304**



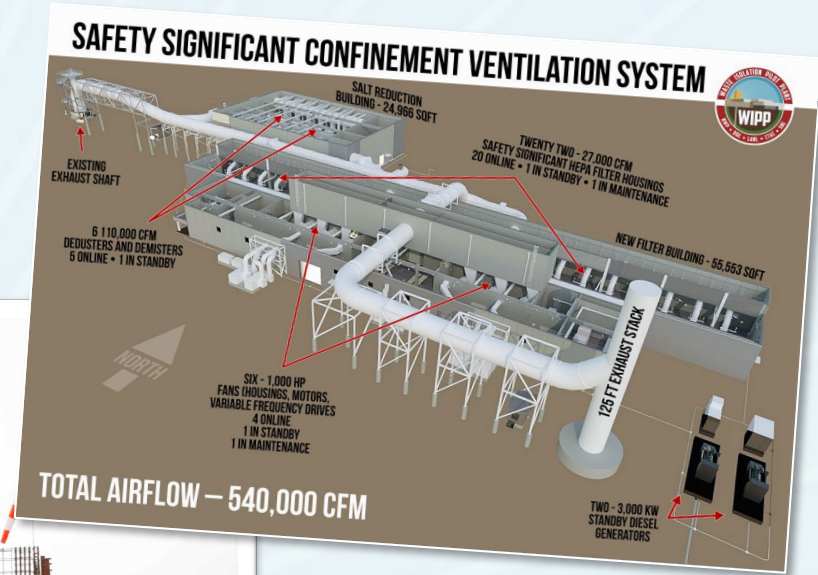
MINING UPDATE

- Panel 8 mining is Complete
- Outfitting and Certification of Panel 8 is scheduled to be completed by mid 2022
- Began mining to the West for Panels 11 and 12 as well as Shaft 5



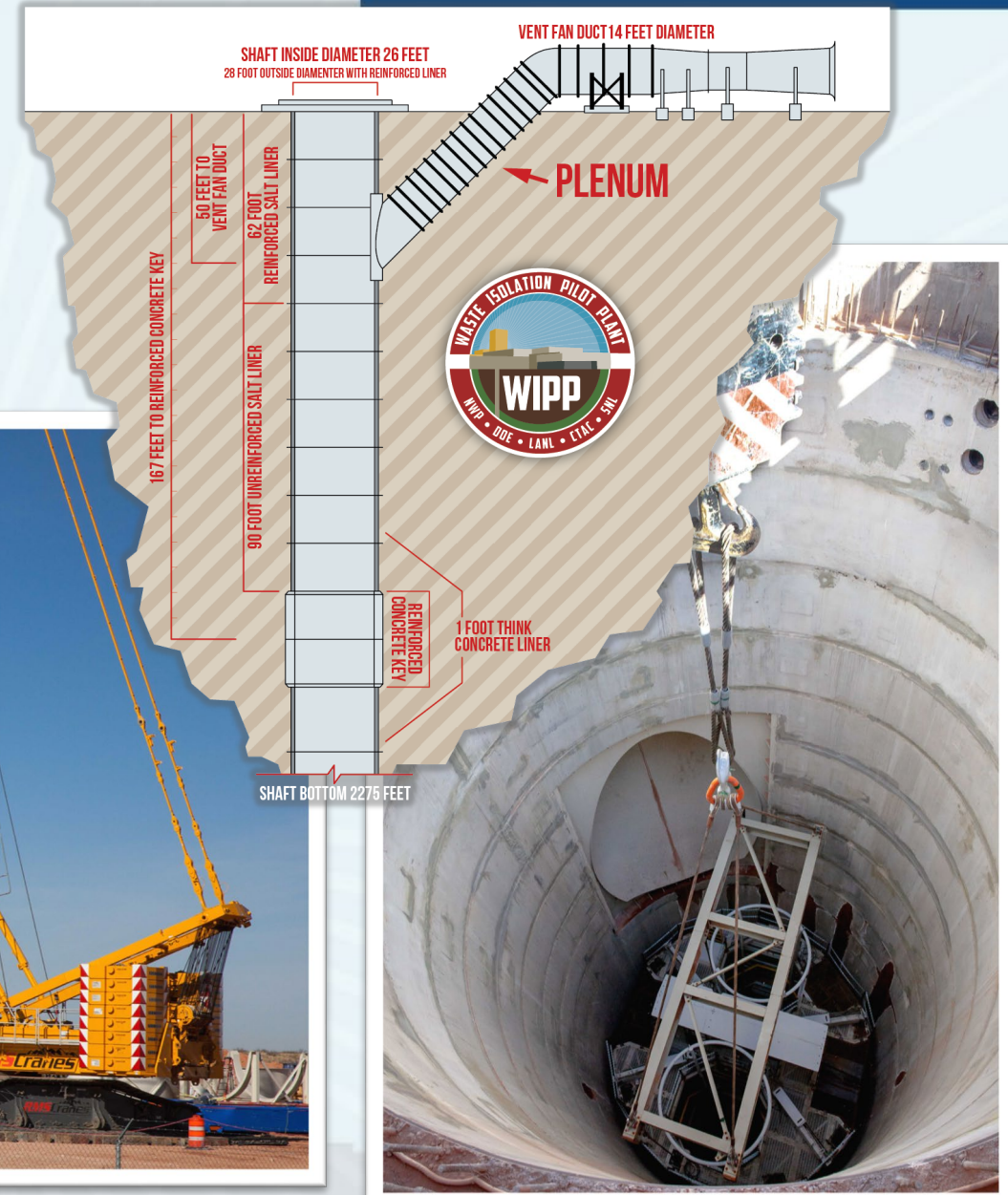
SAFETY SIGNIFICANT CONFINEMENT VENTILATION SYSTEM (SSCVS)

- The SSCVS will increase high efficiency filtered air (HEPA) to the WIPP underground, increasing worker safety throughout the mine
 - Underground utilities installed
 - Fabrication building completed
 - Support trailer complex completed
 - We are receiving long lead items
 - All 22 filtration units are on site



UTILITY SHAFT

- Class III Permit Modification Request approved by the State of New Mexico -November 2021
- Excavation to 116 feet, with plenum emplaced, Galloway multi-level work platform placed, awaiting construction of headframe
 - Joint venture (Harrison Western-Shaft Sinkers)
 - 2,275 feet deep at completion
- 30-foot diameter shaft (26-foot diameter after liner)
- Construction underway



INFRASTRUCTURE PROJECTS

Numerous General Plant Projects (GPP) are underway to upgrade WIPP infrastructure and plant systems

- Original design – plant expected to operate for 30 - 35 years beginning in late 1980's so many systems are the near end of their planned service life
 - Updates to Fiber Optic lines
 - Site Electrical Substations
 - Facility Refurbishment, Upgrade & Modernization



ECONOMIC BENEFITS

Subcontract dollars awarded to New Mexico Businesses

	Total Awarded FY21\$	Total FY13- FY21
NE New Mexico	\$956,618	\$2,954,604
NW New Mexico	\$11,922,261	\$74,143,976
SE New Mexico	\$7,840,925	\$207,683,736
SW New Mexico	\$390,040	\$1,871,123
	\$21,109,846	\$286,653,440

Small Business Support

During Fiscal Year21, NWP awarded **\$80,447,898** to small businesses

For FY13 – FY21 NWP awarded **\$506,881,068** to small businesses



COMMUNITY INVOLVEMENT

- Over \$500,000 in financial contributions
 - More than \$10,000,000 over the last 10 years
 - More than 2,500 volunteer hours
 - Over 25,000 hours over the last 10 years
 - Events include
 - STEM days at area schools
 - Volunteering at area organizations including Boys & Girls Club, Rotary, Literacy Center, United Way, Transitional Housing, Night to Shine and many more
 - 15 Scholarships for local high school students



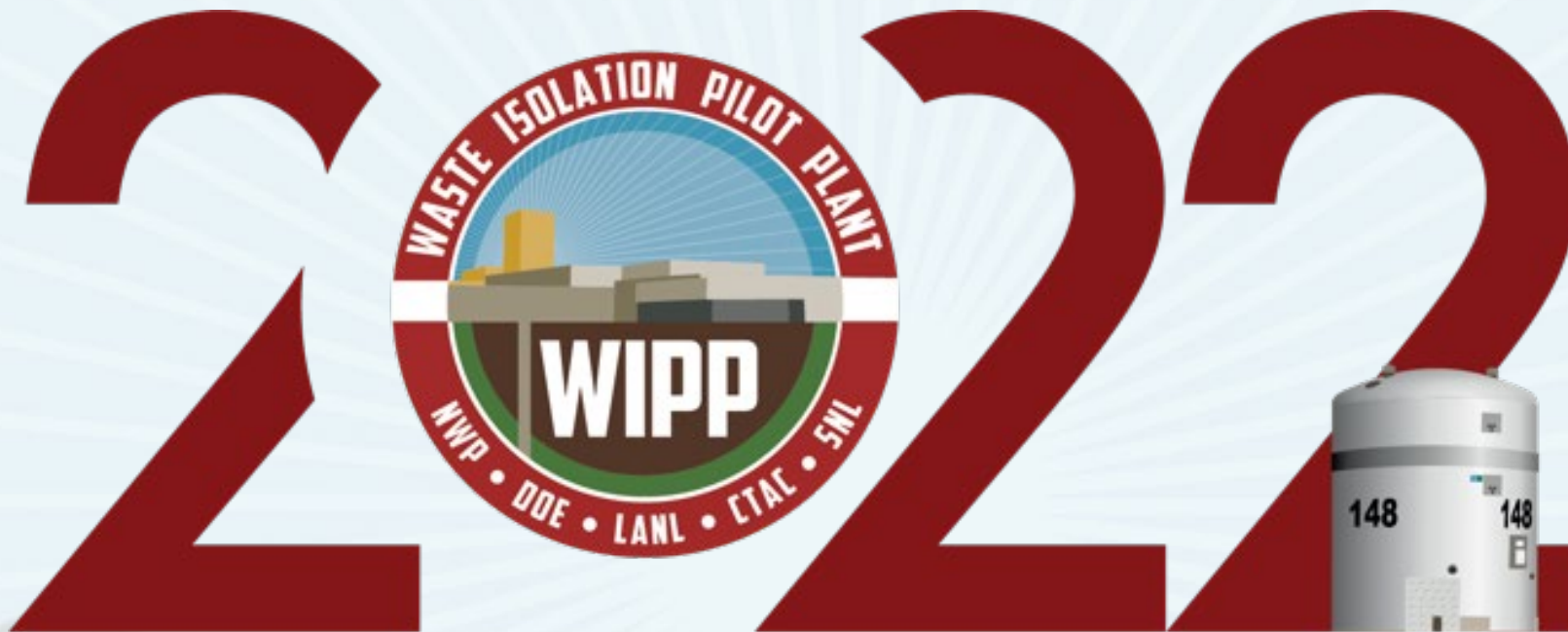


U.S. DEPARTMENT OF
ENERGY

2022: A LOOK AHEAD

U.S. Department of Energy,
Carlsbad Field Office Manager
Reinhard Knerr

WELCOME TO



SAFELY DISPOSING THE NATION'S TRU WASTE SINCE 1999

Budget FY20-FY22

	Base Operational \$	Capital Project \$	Total
Budget FY20 Enacted	\$304,045,000	\$102,554,000	\$406,599,000
Budget FY21 Enacted	\$320,066,000	\$100,000,000	\$420,066,000
Budget FY22 Request	\$357,230,000	\$80,073,000	\$437,303,000

ECONOMIC IMPACTS FOR NEW MEXICO

XS	FY20	FY21	FY22
NMED*	\$ 1,484,164	\$ 614,155	\$ 203,194
EMNRD**	\$ 1,306,273	-	-
CEMRC***	\$ 2,925,085	\$ 1,000,000	\$ 600,000
Total	\$ 5,715,522	\$ 1,614,155	\$ 803,194

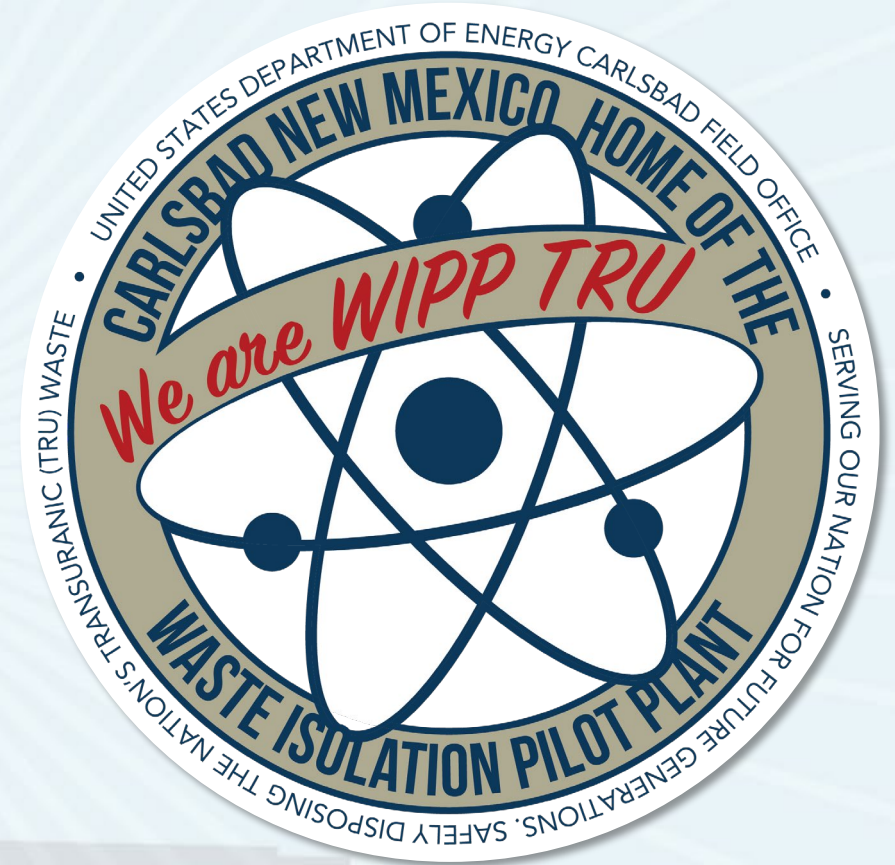
*New Mexico Environment Department **Energy, Minerals and Natural Resources Department *** Carlsbad Environmental Monitoring & Research Center

Tesuque Pueblo	\$ 50,964	\$ -	-
San Ildefonso Pueblo	\$ 50,000	\$ 50,000	
Pojoaque Pueblo	\$ 57,246	\$ -	
Nambe Pueblo	\$ 50,000	\$ 50,000	
Total Tribal Govts	\$ 208,210	\$ 100,000	

FY2021 funds were not provided to some entities due to COVID and unutilized carryover from the prior year. Funds have not been provided in FY2022 to date for NM state agencies and Tribal Agreements.

CONTRACTORS at WIPP

- M&O – Nuclear Waste Partnership LLC
 - October 2021 – March 2022; six-month option remains Apr 2022 through September 2022
 - \$2.8 Billion
- WIPP TRANSPORTATION – CAST Specialty Transp. Inc.
 - June 2017 – May 2022
 - \$112 million
- CTAC – Navarro Research & Engineering Inc.
 - July 2021 – June 2031
 - \$100 million
- DOE TRANSCOM Tech Support Services– Aleut Aerospace Engineering, LLC
 - July 2019 – July 2024
 - \$9 million



SHORT TERM OPERATIONAL GOALS

- Ramp up shipments to 10-12 per week early in 2022
- Continuing to work with LANL to increase the number of shipments to WIPP
- Complete emplacement of TRU waste in panel 7- mid 2022
- Complete Panel 8 outfitting and certification
- Begin emplacement of TRU waste in panel 8
- Begin mining West access drifts with a target of 50% completion in CY22
- Procurement of additional battery-electric equipment for WIPP underground. A forklift, three haul trucks and an electric bolter are currently in the procurement process for delivery in Q1 and Q2 of 2022



FY22 SHIPMENT PROJECTIONS



Site	Projected Shipments in FY 2021	Actual Shipments in FY 2021	Projected Shipments in FY 2022
LANL (EM and NNSA)	82	56	115
INL	150	100	257
OREM	8	22	30
SRS (EM and NNSA)	8 (EM only)	6 (EM only)	32
SQS (SNL, LLNL, ANL)	10	14	10
WCS	--	1	--
Total	258	199	444

* FY22 projections are based on availability of certified TRU waste for shipment

INFRASTRUCTURE INVESTMENTS

Infrastructure improvement projects targeted for completion in 2022 include:

- Installation of new Fiber Optic Networks for site computer and communications networks
- Recapitalization of Public Address Systems to ensure plant coverage for general and emergency announcements
- Fire Water Loop recapitalization (phases 1 and 2) including construction of new storage tanks and replacement of fire water piping throughout the site
- Complete connection of new pumphouse and fire water loop to existing buildings (Phase 3)
- Replacement of surface & underground electrical substations that are near the end of service life
- Sandblasting, repairs and repainting of the Salt shaft headframe



CAPITAL ASSET PROJECTS

The SSCVS project is essential to the future of the WIPP site. By the end of CY22 we should have major construction and equipment installation completed including:

- Completed construction of the New Filter Building (NFB)
- Completed construction of the Salt Reduction Building (SRB) with installation of all lighting, electric utilities, fire suppression and security systems
- Complete installation of the Salt Reduction Units (de-dusters and misters) in the SRB



CAPITAL ASSET PROJECTS (continued)

The Utility Shaft (US) project is essential to the future of the WIPP site. Project Objectives for 2022 include:

- Installation of the galloway and head frame for shaft 5 that is required for further mining of the shaft
- Resumption of mining/excavation of the Utility Shaft by Harrison Western - Shaft Sinkers. By the end of CY22 they expect to have reached a depth of 1550 ft.
- Procurements for design and fabrication of an additional set of fans for installation on the surface for shaft 5
- Complete Air Intake Shaft (AIS)/Exhaust Shaft project including construction of new concrete plenum preparing the AIS for future use as an exhaust shaft



REGULATORY OUTLOOK

A number of permit modification requests (PMRs) were submitted to NMED in FY21 or will be submitted in FY22. Some of the significant requests include:

- Class 3 Permit Modification Request (PMR) for Excavation of New Shaft and Associated Drifts – approved 10/21
- Class 3 PMR for Construction and Use of Hazardous Waste Disposal Units 11 and 12
- 10-year Permit Renewal Application (now combined with construction and use of panels 11/12)
- Class 2 PMR Update for Volatile Organic Compounds (VOCs) Room-based limits for Panel 8
- Class 2 PMR for New Shielded Container Assemblies (SCA's) following NRC approvals

EPA Regulatory activities -

- November 26, 2021 - The CRA-2019 “Completeness Decision” from the EPA was published in the Federal Register
- Submit Planned Change Notice to EPA for new shielded containers after NRC approval of the shielded containers



STAKEHOLDER ENGAGEMENT

During 2022 CBFO will seek public input on National Environmental Policy Act (NEPA) actions and updating information for a third Supplemental Environmental Impact Statement (SEIS). The SEIS-III will:

- Include an analysis of the impacts of the excavation and use of additional disposal panels, beyond panel 12, needed to dispose of (TRU) waste up to the Congressionally authorized volume capacity limit specified in the WIPP Land Withdrawal Act.
- Develop a list of a reasonable alternatives for WIPP
- Align future needs with the WIPP strategic vision





Questions?