

Stop “Forever WIPP”

Radioactive and Hazardous
Materials Committee

July 14, 2021

Carlsbad, NM

Don Hancock

Southwest Research and Information Center

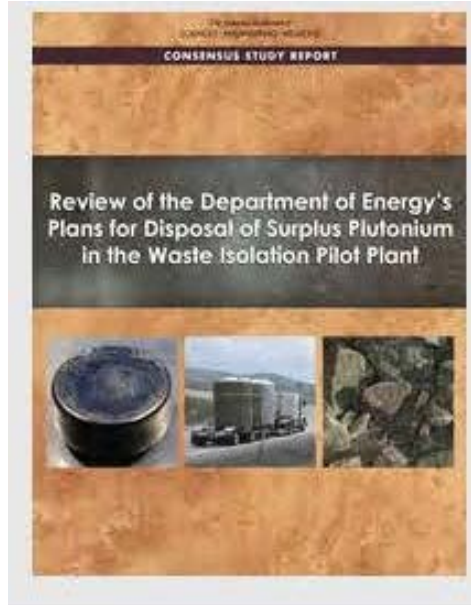
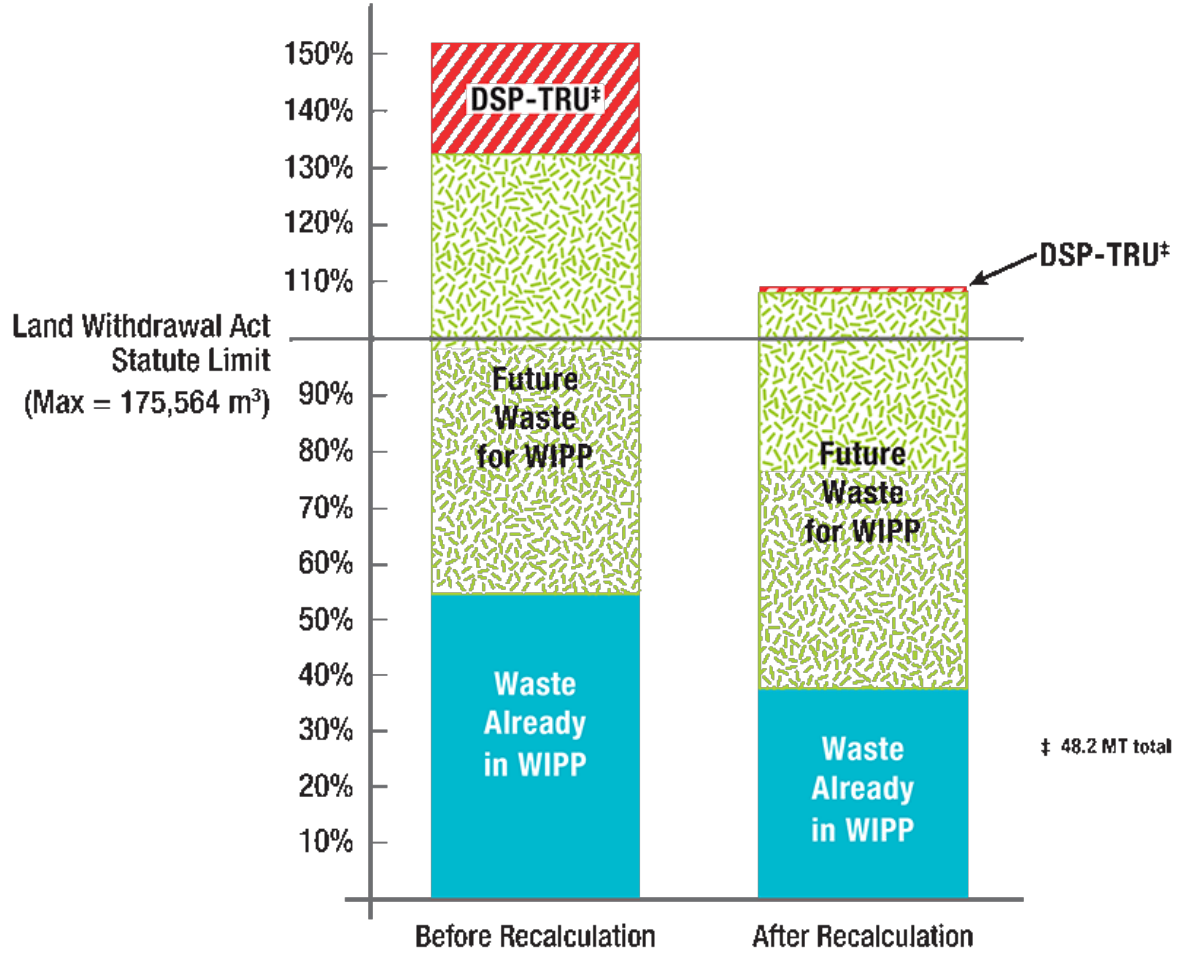
WIPP's Mission

- “Start Clean, Stay Clean” to dispose of up to 175,564 m³ of defense transuranic (TRU) waste – 99,537 m³ as of 7/3/2021
- Safely transport waste by truck through more than 20 states without serious accidents or releases
- Safely remove TRU waste from DOE sites
- Safely close, decontaminate, and decommission the WIPP site beginning in 2024 – DOE wants no disposal end date

Other repositories are necessary for legal and technical reasons

- WIPP 1979, 1992, 1996 laws
- Nuclear Waste Policy Act of 1982 & 1987
- Future waste generation, as there is no policy to stop production
- Reduce transportation risks and costs
- No state, including New Mexico, is willing to host the only repository

DOE Needs Bigger “Forever WIPP”



DSP-TRU Waste
 Future Waste for WIPP
 Waste Already in WIPP

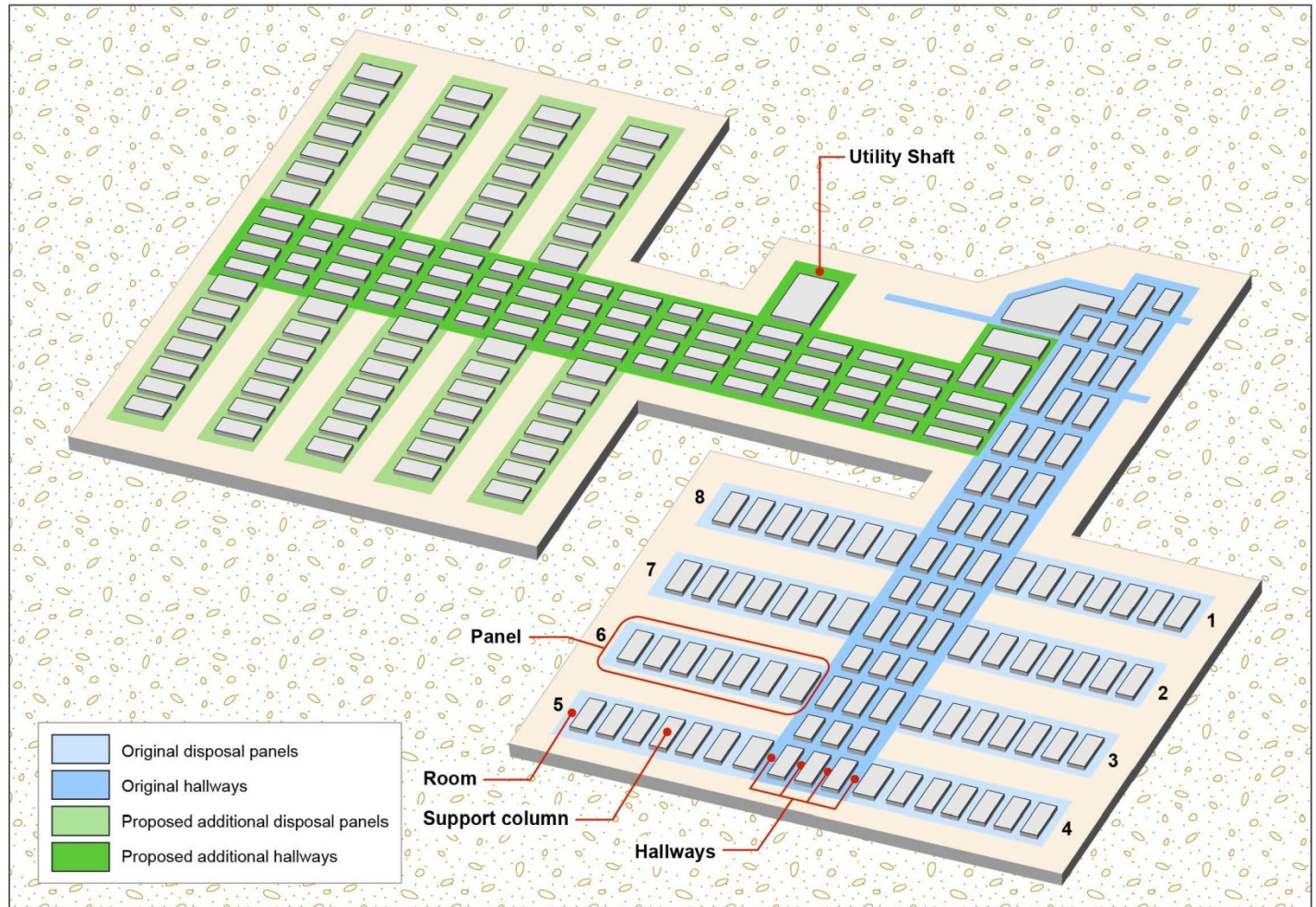
DSP-TRU is diluted surplus plutonium transuranic waste that was generated by defense program activities.

October 23, 2020 NMED says to suspend new shaft construction



Figure 4: Draft Conceptual Design for Additional Waste Disposal Physical Space at the Waste Isolation Pilot Plant (WIPP)

Proposed Doubling of WIPP'S Under-ground capacity



Source: GAO analysis of Department of Energy information. | GAO-21-48

Note: This figure does not include northern portions of the original WIPP underground area, which were mined during DOE's research and development phase for constructing WIPP, because these are not intended for use in transuranic waste disposal. A panel is an area in the underground area that consists of seven rooms where waste is disposed of.

Two Additional Panels

March 2021,
DOE's
Supplement
Analysis
for two
"replacement
panels"

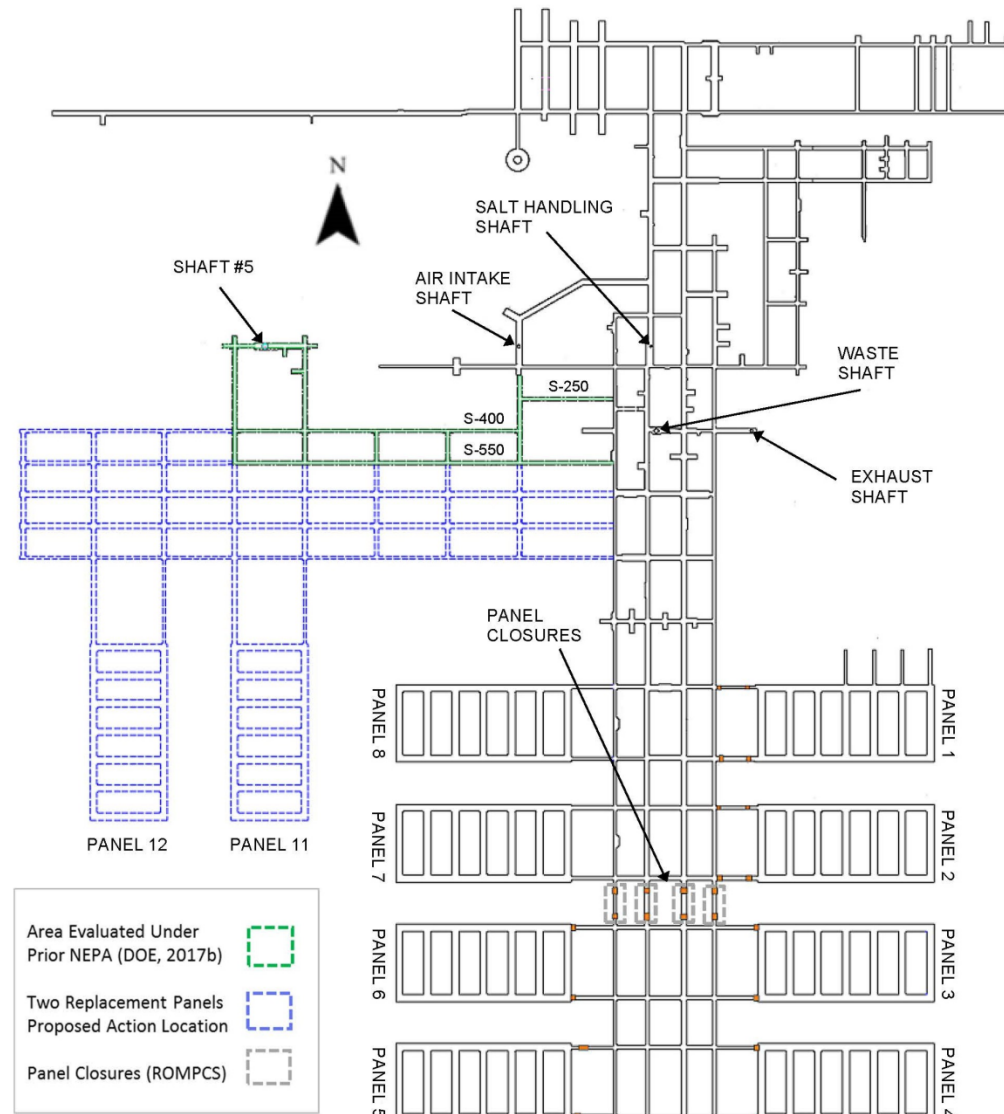


FIGURE 2-1, PROPOSED LOCATION FOR REPLACEMENT PANELS 11 AND 12



UNITED STATES ENVIRONMENTAL PROTECTION
AGENCY
Washington, DC 20460

April 20, 2021,
EPA's letter on
new panels:
“...require prior
EPA approval....
Rulemaking
could take at
least two years.”

April 20, 2021

OFFICE OF
AIR AND
RADATION

Mr. Reinhard Knerr
Manager
Carlsbad Field Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

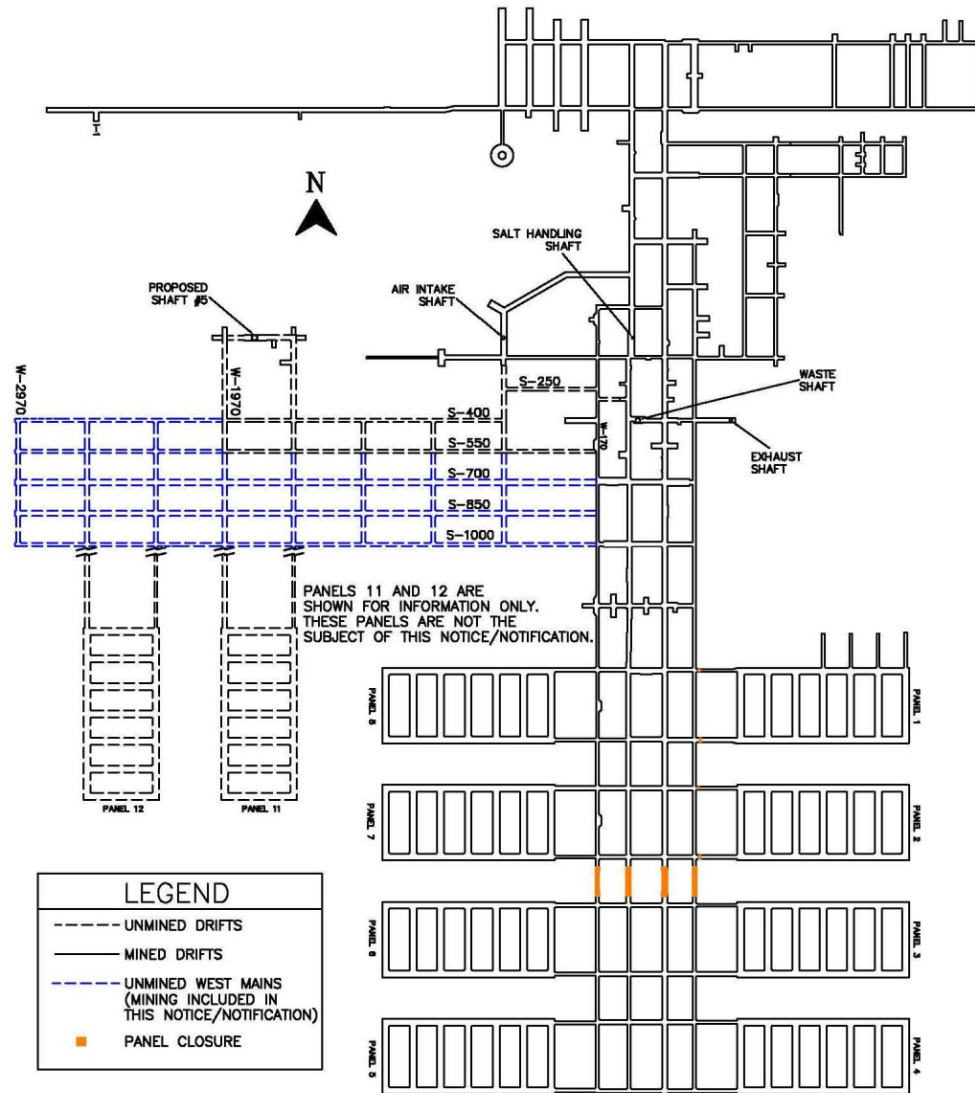
Dear Mr. Knerr:

The U.S. Environmental Protection Agency understands that the U.S. Department of Energy (DOE) anticipates developing additional waste emplacement capacity at the Waste Isolation Pilot Plant (WIPP) to replace two lost waste panels in the current design and will likely develop new waste panels that could provide for sufficient disposal space for the additional waste more recently identified for disposal by the National Nuclear Security Administration (NNSA) (National Academy of Sciences “Review of the Department of Energy’s Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant,” 2020). Physical changes of this nature to the repository require prior EPA approval. As DOE moves forward with planning additional panels to increase the physical capacity or footprint of the repository, I would like to share some of EPA’s expectations for the approval process.

EPA’s oversight role at WIPP focuses on the long-term performance of the disposal system. As such, DOE should, to the best of its ability, submit for EPA review information that represents the anticipated state of the repository at the time of closure. Given that DOE is going through procedural steps and public engagement relating to disposal of additional waste volumes at WIPP, it appears that DOE will need to add multiple panels by the time of closure, beyond the two replacement panels for existing waste as identified in the recent “Supplement Analysis for the Waste Isolation Pilot Plant Site-Wide Operations” [DOE/EIS-0026-SA-12]. The paragraphs below provide some perspective on the Agency’s process for reviewing DOE’s plans for new panels.

Under 40 CFR 194.4(b)(3), DOE must give EPA prior notice of “any planned . . . changes in activities or conditions pertaining to the disposal system that differ significantly from the most recent compliance application.” If the Administrator determines that the proposed changes differ significantly from the most recent compliance application, such that modification or revocation of the certification may be appropriate, section 194.65(a) provides that EPA will publish a Notice of Proposed Rulemaking in the Federal Register and solicit public comment. EPA staff interpret the information available so far as indicating that new waste disposal panels constructed in previously undeveloped areas likely would depart significantly from the most recent compliance application and would likely require a rulemaking. If EPA were to undertake a rulemaking action that requires the opportunity for public notice and comment, EPA anticipates that the process could take at least two years, assuming DOE provides sufficient, appropriate information to EPA. Clarity on the full extent of DOE’s plans for the WIPP would help EPA determine its path forward, provide for scheduling of required activities and improve coordination of activities with DOE.

June 23, 2021,
DOE Planned
Change notice
to NMED
showing 5 new
mains; 2 in
new shaft
PMR and 3 in
forthcoming
new panels
PMR.



DOE & NMED should move forward on the Permit Renewal

- 10-year Permit expired 12/30/2020
- DOE has proposed dozens of changes
- SRIC has proposed changes
- The required public comment on the draft permit has not begun
- Venue to discuss past problems, address waste management needs, and minimize the number of future permit modifications

Needed Public Participation

- Many people should be involved
- DOE discusses the plans for existing waste at sites, future waste generation, surplus plutonium, plutonium pit waste, and other repositories
- DOE follows 2020 NAS Report recommendations, not segmented approach
- NMED proceeds with the Permit Renewal
- Governor/Legislature engage & provide direction

Contact Information

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