

Amended Record of Decision

SUPPLEMENT ANALYSIS FOR THE PROPOSED ACTION TO EXCAVATE AND USE ADDITIONAL DISPOSAL PANELS AT THE WASTE ISOLATION PILOT PLANT FACILITY (DOE/EIS-0026-SA-13)

United States Department of Energy

Office of Environmental Management

PUBLIC AVAILABILITY AND CONTACT INFORMATION:

- This Amended Record of Decision (AROD) and the associated National Environmental Policy Act (NEPA) Documents are available at: <https://www.energy.gov/nepa/office-nepa-policy-and-compliance> and <https://wipp.energy.gov/>.

For further information on this project or the AROD, contact:

- Michael Gerle
NEPA Document Manager
Carlsbad Field Office
Waste Isolation Pilot Project
U.S. Department of Energy
4021 National Parks Hwy
Carlsbad, NM 88220
email: michael.gerle@cbfo.doe.gov

For further information on the Department of Energy (DOE) – Office of Environmental Management (EM) NEPA process, contact:

- Shavaun Jenkins
NEPA Compliance Officer
Office of Environmental Management
US Department of Energy
1000 Independence Ave, SW
Washington, DC 20585
Email: shavaun.jenkins@em.doe.gov

DECISION: The DOE is amending its *Record of Decision for the Department of Energy's Waste Isolation Pilot Plant Disposal Phase* (WIPP ROD), 63 FR 3624 (Jan. 23, 1998), pursuant to Section 7.9 of its NEPA Implementing Procedures (DOE NEPA Implementing Procedures) (<https://www.energy.gov/nepa/doe-nepa-implementing-procedures>). Under the WIPP ROD, DOE's decision was to dispose of up to 175,600 cubic meters (m³) (6.2 million

cubic feet) of transuranic (TRU) waste generated by defense activities at WIPP after treatment to meet WIPP's waste acceptance criteria. DOE issued the 1998 WIPP ROD after assessing the potential environmental impacts of the phased development of the WIPP Site, a mined repository located 2,100 feet below the surface in an ancient salt deposit near Carlsbad, New Mexico, as a geologic repository for the safe disposal of TRU waste. The DOE analyzed these environmental impacts in the 1997 SEIS-II impacts in its 1997 Supplemental Environmental Impact Statement DOE/EIS-0026-S-2 (1997 SEIS-II), followed by the issuance of the WIPP ROD.

Under this amendment to the WIPP ROD, DOE intends to excavate and use seven additional disposal panels (Panels 13-19) to continue to dispose of defense TRU waste up to the WIPP Land Withdrawal Act (LWA)-defined total TRU waste volume capacity limit in accordance with the preferred alternative decision in the WIPP ROD. The Proposal to excavate Panels 13-19 is in addition to Panels 11-12, which were evaluated in DOE/EIS-0026-SA-12.

Transuranic waste disposal would occur until approximately 2083, which is 50 years longer than the 35 years evaluated in the 1997 SEIS-II Preferred Alternative. DOE would also implement associated site infrastructure changes associated with these activities, including: (1) the excavation of seven additional underground panels and construction of surface structures and facilities to support the new panel development, including a new salt pile and pond; (2) Hoisting Capability Project; (3) new support facilities; and (4) proposed solar arrays.

In accordance with Sec. 3.9 of DOE's NEPA Implementing Procedures, DOE prepared a supplement analysis (SA) *Supplement Analysis For the Proposed Action to Excavate and*

Use Additional Disposal Panels at the Waste Isolation Pilot Plant Facility (DOE/EIS-0026-SA-13 or 2026 WIPP SA). With the 2026 WIPP SA, the DOE is not revisiting the 1998 ROD to dispose of up to 175,564 m³ of TRU waste generated by defense-related activities, and is only evaluating a Proposed Action that continues to support the implementation of the DOE decisions documented in the 1998 WIPP ROD.

DIFFERENCES FROM PROPOSED ACTION AND ENVIRONMENTAL IMPACTS EVALUATED IN 1997 SEIS-II/WIPP ROD

The Proposed Action in this 2026 WIPP SA differs from the Preferred Alternative evaluated in the 1997 SEIS-II in the assumed number of panels and in the amount of operational time of the WIPP site for TRU waste disposal. TRU waste disposal would occur until approximately 2083, which is 50 years longer than the 35 years evaluated in the 1997 SEIS-II Preferred Alternative. Although the number of panels required to carry out operations is greater than in the Preferred Alternative, the assumed volume capacity is the same. DOE evaluated action alternatives in the 1997 SEIS II that considered evaluated a greater number of panels than those considered in the Proposed Action of this 2026 WIPP SA.

While there have been programmatic and infrastructure changes at the WIPP facility since the issuance of the 1997 SEIS-II, the transportation of TRU waste and the disposal operations of the WIPP facility have not substantially changed since the preparation of the 1997 SEIS-II; however, the affected environment may change. Three types of changes pertinent to support the continuation of WIPP operations are: (1) the region of influence (ROI) associated with the 1997 SEIS-II environmental analyses, (2) the WIPP underground repository layout (excavation and use of seven additional panels), and (3) the addition of 50 years to the life of the operations at WIPP, such that the facility would be decommissioned

in 2083 instead of 2033.

The 2026 WIPP SA evaluated land use and management; visual resources, geology and soils, water resources, air quality, noise, biological resources, cultural and paleontological resources, socioeconomic, infrastructure, transportation, human health and waste management impacts; including normal operations and accidents and intentional destructive acts.

DOE found that 173 acres (or one percent of the WLWA) would be disturbed due to the additional panels and facility modifications, including potential new solar arrays. The WIPP facility's remote location mitigates significant effects to visual resources. DOE's examination of geology and soils showed that excavation and construction of a berm and permanent markers over the underground disposal area would not effect notable changes compared to the impacts analyzed in 1997 SEIS-II for the Preferred Alternative. DOE anticipates that development of a stormwater pollution prevention plan and complying with stormwater management requirements in section 438 of the Energy Independence and Security Act of 2007 would mitigate impacts to water resources.

DOE projects that air quality may be affected by temporary increases in dust and other criteria air pollutants, but that there will be no substantial long-term impacts. The 2026 SA-13 determined that additional noise impacts would be similar to the impacts presented in the 1997 SEIS-II for the Preferred Alternative. Potential impacts to biological resources would be minimized through implementation of protective measures and continued biological monitoring; overall, any additional impacts to biological resources would be similar to the impacts presented in the 1997 SEIS-II for the Preferred Alternative (DOE 1997).

DOE expects to avoid sites that are eligible for the National Register of Historic Places and will mitigate where avoidance is impossible, under the Joint Powers Agreement with the State of New Mexico. DOE considered population changes and employment rate, among other things, and determined that although decommissioning of the WIPP facility would occur at a later date, impacts would not differ substantially from those presented in the 1997 SEIS-II. Infrastructure impacts from decommissioning and closure of the WIPP facility under the Proposed Action would be essentially the same as described in the 1997 SEIS-II for the Preferred Alternative, although it would occur at a later date.

DOE evaluated effects of the Proposed Action on transportation, preparing a report titled, “Waste Isolation Pilot Plant Supplement Analysis Transportation Analysis Technical Report.” The Report concluded that the anticipated shipping projections through 2083 from all generator sites, on an annualized basis, are less than the 1997 SEIS-II’s annualized shipping projections. Additionally, DOE considered potential truck accidents, incorporating population changes and updated dose-risk factor. DOE found only a minor increase in impacts from potential radiological accidents and a minor decrease in impacts from potential non-radiological accidents.

DOE found that mining, waste handling, and waste disposal operations for Panels 13-19 would not substantively deviate from current facility practices, and that TRU waste would continue to meet waste acceptance criteria. The additional 50 operational years of the Proposed Action would result in 143 percent more waste generation than originally analyzed in the 1997 SEIS-II. However, because annual quantities of waste generated would be the same, those wastes would be managed in the same way, and impacts would be similar as those evaluated in the 1997 SEIS-II.

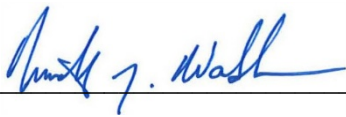
In the Human Health Impacts analysis of the 2026 SA-13, DOE evaluated impacts within the 50-mile population surrounding the WIPP facility, the maximally exposed individual (MEI), and workers. DOE found that under the Proposed Action, approximately 4.0×10^{-7} latent cancer fatalities could occur in the 50-mile population from operations over the next 60 years; which is about 1,000 times less than the impacts presented for the Preferred Alternative in the 1997 SEIS-II. For a maximally exposed individual, while the longer operational period would increase the lifetime risk, that risk would remain below the estimated value in the 1997 SEIS-II. DOE estimates that worker dose estimates from the Proposed Action are below estimates for the Preferred Alternative in the 1997 SEIS-II.

With regard to non-radiological accidents, potential annual impacts would likely be similar to the impacts previously analyzed in the 1997 SEIS-II for the Preferred Alternative because annual operations would be similar. Any accident impacts from decommissioning and closure of the WIPP facility under the Proposed Action would be essentially the same as described in the 1997 SEIS-II for the Preferred Alternative, although it would occur at a later date.

With respect to intentionally destructive acts, DOE found that the potential impacts from the implementation of the Proposed Action would result in a negligible change to the public maximally exposed individual compared to the impacts previously evaluated in the 1997 SEIS-II for the Preferred Alternative, considering the worst accident scenario of a hoist lift failure, after applying updated dose-risk factor changes. DOE evaluated the radiological impacts to the aggregate population and found a moderate risk compared to the impacts previously analyzed in the 1997 SEIS-II for the Preferred Alternative, after adjusting for population changes and updated dos-risk factors.

In the 2026 WIPP SA, DOE concluded that the changes to the proposed action are not a substantial change relevant to environmental concerns, nor are there substantial new circumstances or information about the significance of the adverse effects; as described in NEPA and the DOE NEPA Implementing Procedures (<https://www.energy.gov/nepa/doe-nepa-implementing-procedures>). No further NEPA documentation is required.

Signed in Washington, D.C., on August 18, 2026.



Timothy J. Walsh
Assistant Secretary
for Environmental Management