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Stop “Forever WIPP”

Statement of Don Hancock

before the

New Mexico Radioactive and Hazardous Materials Committee

July 14, 2021

Carlsbad, New Mexico

Mister Chair and Members of the Committee:

Thank you for this opportunity to make a presentation and answer your questions. I greatly appreciate your attention to important issues regarding radioactive and hazardous wastes.

I am Don Hancock, Nuclear Waste Program Director at Southwest Research and Information Center (SRIC). The 50-year-old nonprofit organization has been involved in a variety of environmental health, environmental justice, and natural resources issues throughout its history. Involvement with the Waste Isolation Pilot Plant (WIPP) began in 1972 when the Atomic Energy Commission (AEC) announced in Carlsbad that it would develop a “pilot project” for waste from commercial nuclear power plants “by about 1979 or 1980.”¹ Since that time, SRIC has been involved in many aspects of WIPP, including research, public information, legislative testimony and lobbying, litigation, and active participation in all aspects of the WIPP Hazardous Waste Act Permit. For 40 years, SRIC also has responded to requests from citizen groups, tribes, and states regarding proposed consolidated storage and repository sites, as well as addressing Department of Energy (DOE) weapons and waste sites.

I last testified about WIPP before this Committee at the virtual meeting on October 21, 2020.² That testimony included a focus on public opposition to “Forever WIPP” and some suggestions for what can be done to prevent such a future expansion that is contrary to existing federal and state laws, the WIPP Permit, the New Mexico-DOE Consultation and Cooperation (C&C) Agreement, and decades of promises made to the public – a social contract.

My comments today will focus on recent additional activities related to WIPP expansion over the past nine months. The next 18 months are likely to include significant actions and decisions that will affect New Mexico and the nation for literally generations. So I greatly appreciate the Committee’s interest in WIPP expansion, as there is a great need for more public information and involvement before decisions are made.

I hope that DOE and state officials, including members of the Committee and my colleagues on this panel, will engage in serious public information efforts so that those decisions will reflect the concerns of New Mexicans and compliance with the laws, the WIPP Permit, the C&C Agreement, and the social contract. I welcome the WIPP Site Manager’s willingness to take steps in that public information process in the next several weeks.

¹ *Albuquerque Journal*, August 15, 1972, p. A-1.

² <https://www.nmlegis.gov/handouts/RHMC%20102120%20Item%202%20Southwest%20Research%20and%20Information%20Center.pdf>;

<https://www.nmlegis.gov/handouts/RHMC%20102120%20Item%202%20Statement%20of%20Don%20Hancock.pdf>

WIPP's Mission and Accomplishments

An appropriate starting point is WIPP's four-part mission, as provided by the C&C Agreement and enacted in the WIPP Land Withdrawal Act.

- “Start Clean, Stay Clean” to dispose of up to 6.2 million cubic feet (175,564 cubic meters) of defense transuranic (TRU) waste. The “Start Clean, Stay Clean” standard has been violated because of the radiation release and resulting contamination since 2014. As of July 3, 2021³, container volume disposal was 99,537 m³ or 56.7 percent of the capacity limit.
- Safely transport the waste by truck to WIPP through more than 20 states without serious accidents and releases. Except for routine operational releases, there is no reported serious accident with any radiation release.
- Safely remove TRU waste from more than 20 DOE sites. WIPP has received waste from 12 DOE sites, two of which (Rocky Flats and GE Vallecitos) will ship no more waste. Additionally, some Los Alamos National Lab (LANL) waste was shipped to Waste Control Specialists (WCS) in 2014, some of which has since arrived at WIPP, while some remains at WCS. DOE also counts 13 other sites has being “de-inventoried” of TRU waste, and at least 16 sites that still have TRU waste to come to WIPP.⁴
- Safely close, decontaminate, and decommission WIPP, beginning in 2024. In Fiscal Year 2006, WIPP received 1,128 shipments and disposed of 10,556 m³ of contact-handled (CH) waste. At that peak rate, the legal capacity limit of 168,485 cubic meters of CH waste would be achieved in 16 years. However, in its WIPP Permit Renewal Application of March 2020, DOE proposes to eliminate any end date for disposal operations.⁵

That WIPP would not fully using the design capacity has been known since 2003 when disposal ended in Panel 1 with less than 60 percent of the permitted capacity used. Since WIPP opened, it also has been apparent that the full remote-handled (RH) waste capacity would not be used, as the first RH waste shipment did not arrive at WIPP until January 23, 2007.⁶ By that time, Panels 1-3 had been filled and closed.

Using less than the full volume capacity is certainly allowed by the C&C Agreement, the WIPP Permit, the Environmental Protection Agency (EPA) certification, and the Land Withdrawal Act. All of those provide for up to 175,564 cubic meters. Of course, since there will be remaining

³ <https://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf>

⁴ https://wipp.energy.gov/Library/TRUwaste/ATWIR-2020_CBFO_Final.pdf at 13 of 410.

⁵ <https://wipp.energy.gov/2020-renewal-application.asp> at 63.and Attachment G.

⁶ <https://www.energy.gov/management/january-23-2007-wipp-receives-first-shipment-waste>

TRU waste at some sites, especially Hanford, WA, much existing waste remains that was intended for WIPP but has not been sent because of mismanagement at WIPP and other priorities at some sites. Further, there is no policy to stop generating TRU waste, so there is a need for additional repository(ies) or better long-term storage at the DOE sites. There also are tons of surplus plutonium from past nuclear weapons development that were never part of the WIPP mission that need safe storage and disposal. My October 2020 statement provided additional information about the need for other repositories, including what other states have done to show that **no state is willing to be the only disposal site.**

Some recent activities

* On April 30, 2020, the National Academy of Sciences (NAS) released its Final Report⁷ that Congress requested on the proposed “dilute and dispose” method proposed for 34 metric tons or more of surplus plutonium from nuclear weapons. The Report includes Figure S-5 that shows that without the Volume of Record (VOR), waste proposed for WIPP is more than 150 percent of the legal limit and that the waste will exceed the legal limit even with the VOR recalculation.

* On October 23, 2020, the New Mexico Environmental Department (NMED) told DOE to suspend construction of the new shaft, which is an essential part of WIPP expansion. On November 18, 2020, NMED formally denied the request to reissue the Temporary Authorization (TA) under which construction had been allowed. The TA was opposed by hundreds of people commenting on the new permit modification request (PMR). SRIC had sued to overturn the TA decision.

* In November 2020, the Government Accountability Office (GAO) released a report, *Nuclear Waste Disposal: Better Planning Needed to Avoid Potential Disruptions at Waste Isolation Pilot Plant*, GAO 21-48.⁸ After looking at the NAS Report and various DOE documents, GAO produced a conceptual design of the future WIPP, which would more than double the underground disposal panels. It was GAO, not DOE, that provided this first public look at the proposed WIPP physical expansion to try to accommodate that greatly increased WIPP inventory.

* In March 2021, effective April 8, 2021, DOE released the Supplement Analysis for the Waste Isolation Pilot Plant Site-Wide Operations, DOE/EIS-0026-SA-12.⁹ That document includes two

⁷ <https://www.nap.edu/catalog/25593/review-of-the-department-of-energys-plans-for-disposal-of-surplus-plutonium-in-the-waste-isolation-pilot-plant>

⁸ <https://www.gao.gov/products/gao-21-48>

⁹ https://wipp.energy.gov/library/seis/DOE_EIS-0026-SA-12_SA_for_WIPP_Site-Wide_Operations_Rev0_Final_Sig_on_File.pdf

new panels – 11 and 12 – to the west of the existing disposal panels, where no previous waste panels had been proposed.

* On April 20, 2021, the Environmental Protection Agency (EPA) sent a letter to WIPP Manager Reinhard Knerr regarding the two new panels and other new waste panels for the additional waste described in the 2020 NAS Report.¹⁰ The letter states: “Physical changes of this nature to the repository require prior EPA approval.” Further, “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.” Emphasis in original. SRIC agrees that DOE needs to provide more information to EPA for the required public processes.

* On June 23, 2021, DOE submitted a Planned Change notice to NMED.¹¹ The letter states: “The Permittees plan to submit a Permit Modification Request (PMR) for two replacement panels in the near future. This planned PMR will include a description of the West Mains, Panels 11 and 12, address applicable regulatory requirements, and request changes to the waste transfer routes.” The figure enclosed shows that two of the five mains are the “associated drifts” that are part of the new shaft PMR. The additional three mains are essential for the to-be-submitted PMR for two new disposal panels. SRIC’s view is that mining of all of those mains must await approval of the PMRs.

However, both WIPP and DOE Headquarters have made a high priority to start mining those drifts. At the February 9, 2021 WIPP Legislative Briefing, Mr. Knerr listed “Begin mining to the west of the existing mine,” as a 2021 priority.¹² DOE Headquarters then released its 2021 Mission & Priorities, including “Begin mining of the West Access Drifts at the Waste Isolation Pilot Plant.”¹³

In SRIC’s view, DOE is creating unnecessary work and conflict with NMED and the public by again taking action before receiving regulatory approval, including required public participation. We would all be better served by an inclusive public process to discuss DOE’s TRU waste disposal need and WIPP expansion plans. Such discussion could also include the various regulatory processes and their schedules and sequences.

¹⁰ <https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/210417.pdf>

¹¹ <https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/210620.pdf>

¹² https://wipp.energy.gov/Library/documents/2021/Final_2021_Legislative_Update_Presentation.pdf at 21.

¹³ <https://www.energy.gov/em/downloads/em-cy21-mission-priorities>

WIPP Permit Renewal

A fundamental regulatory matter is that the ten-year WIPP Permit expired on December 30, 2020. It has been administratively extended until the next permit renewal is approved. But the renewal process has moved very slowly, primarily in SRIC's view, because DOE and NMED have made permit modifications related to WIPP expansion a higher priority. SRIC has urged DOE and NMED to give the renewal process priority for more than two years.¹⁴ The permit renewal is the venue to discuss the problems of the past decade and to address all upcoming waste management needs and minimize the number of permit modifications that will be required over the next 10 years.¹⁵

In its 1,371-page March 2021 Permit Renewal Application, DOE proposes hundreds of changes to the Permit.¹⁶ Among the very significant ones is to not only change the 2024 date for the end of disposal operations, which has always been in the Permit, but to eliminate any end date for disposal operations. DOE states: "The Disposal Phase will last until the disposal objectives of the DOE are reached, i.e., disposal of the nation's TRU waste per the WIPP Authorization Act of 1980 (PL 96-164). at 65.

SRIC has also proposed changes to the Permit.¹⁷ On the draft application, numerous people participated in the public meeting and proposed other changes to the Permit, as well as comments about some of DOE's proposed changes. Renewal Application at 80-111. There will be an additional public comment period, once NMED issues a draft renewal permit. There will then be negotiations on the draft permit, a public hearing, with additional public comments.

New WIPP Operating Contractor

The existing operating contract of Nuclear Waste Partnership, that began on October 1, 2012, expires on April 1, 2022, or September 30, 2022, if all options are exercised. DOE has issued a Request for Proposals (RFP) for a new WIPP operating contractor.¹⁸ The contract will include a four-year base period that could start on July 15, 2022 and six one-year option periods. The total estimated contract value is \$3 billion over the 10-year period of performance, including all option periods.¹⁹ Proposals are due by August 3, 2021.

¹⁴ <https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/190408.pdf>

¹⁵ <https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/210624.pdf>

¹⁶ <https://wipp.energy.gov/2020-renewal-application.asp>

¹⁷ <https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/200514.pdf>

¹⁸ <https://www.emcbc.doe.gov/SEB/WIPPContract/index.php>

¹⁹ <https://www.energy.gov/em/articles/doe-issues-final-request-proposal-waste-isolation-pilot-plant-management-and-operating>

Needed public participation

Nuclear waste disposal is very difficult for many reasons. One indication of that fact is that WIPP is the world's only operating geologic repository. As important decisions about WIPP are made over the next 18 months, the public must be informed and engaged.

DOE and other federal officials should provide information about the plans for current waste, future waste generation, surplus plutonium, plutonium pit production waste, and future repositories, at least for defense TRU waste. DOE and NMED should prioritize proceeding with the WIPP Permit Renewal process.

National Environmental Policy Act processes should be followed. The 2020 NAS report recommended:

RECOMMENDATION 5-5: The Department of Energy should implement a new comprehensive programmatic environmental impact statement (PEIS) to consider fully the environmental impacts of the total diluted surplus plutonium transuranic waste inventory (up to an additional 48.2 metric tons) targeted for dilution at the Savannah River Site and disposal at the Waste Isolation Pilot Plant (WIPP). Given the scale and character of the diluted surplus plutonium inventory, the effect it has on redefining the character of WIPP, the involvement of several facilities at several sites to prepare the plutonium for dilution, a schedule of decades requiring sustained support, and the environmental and programmatic significance of the changes therein, a PEIS for the whole of surplus plutonium that considers all affected sites as a system is appropriate to address the intent and direction of the National Environmental Policy Act and would better support the need for public acceptance and stakeholder engagement by affording all the opportunity to contemplate the full picture.

SRIC and others fully support that recommendation. But DOE has not yet taken any public action to follow the recommendation.

The NAS Report further recommended:

RECOMMENDATION 5-6: The Department of Energy's (DOE's) National Nuclear Security Administration, DOE's Office of Environmental Management, and DOE higher-level officials should take additional actions beyond those defined by the National Environmental Policy Act toward transparency and stakeholder engagement on the whole of the potential scope of surplus plutonium under consideration (48.2 metric tons) for disposal at the Waste Isolation Pilot Plant. Such actions include completing and publicizing the outcome of relevant safety analyses and cost estimates.

Given that the NNSA's surplus plutonium and pit production programs are a strong impetus to expand WIPP, the NAS recommendation is very much needed. The WIPP Manager and DOE EM

Headquarters are clearly not the only decision makers about WIPP expansion. SRIC agrees that DOE, New Mexico government officials, and the public should have a robust engagement process, regardless of DOE's actions under NEPA.

SRIC also strongly agrees with NAS's Finding 5-7.

FINDING 5-7: A segmented and incremental approach to revealing the full inventory under consideration for disposal as diluted surplus plutonium transuranic waste in the Waste Isolation Pilot Plant (WIPP) (initially 6 metric tons [MT], then 7.1 MT, and 34 MT, and so on) obfuscates the total anticipated inventory expected for WIPP and its consequences. An incremental approach inhibits a comprehensive review by regulators and the public of the full impact of the proposed dilute and dispose program on a future WIPP. The punctuated (5-year) Environmental Protection Agency compliance recertification schedule and limited scope of the New Mexico Environment Department's reviews (which exclude nuclear material) add to these challenges.

Nonetheless, DOE has continued that piecemeal approach with the new shaft PMR, mining the West Drifts, the impending replacement panels PMR, and delaying the Permit Renewal process. EPA's April 20, 2021 letter was another indication of how that piecemeal process is inadequate, and further supports the NAS Finding.

My organization and many others look forward significant public participation opportunities in the next several months, including DOE discussing its plans for existing waste, future waste generation, surplus plutonium, plutonium pit production and plans for other repositories through stakeholder engagement and the NEPA process. We will also actively participate in the WIPP Permit Renewal process and EPA rulemaking and re-certification processes.

I greatly appreciate that this Committee is examining WIPP expansion. I hope that the Governor and Legislature provide leadership so that the C&C Agreement, Hazardous Waste Act, and State and Federal laws are followed.

Again, thank you for the opportunity to make this presentation. I will be pleased to respond to your questions.