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Stop "Forever WIPP"

Statement of Don Hancock

before the

New Mexico Radioactive and Hazardous Materials Committee

In Hobbs, NM

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Statement and Support for SRIC Presentation

Madam Chair and Members of the Committee:

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

I am Don Hancock, Nuclear Waste Program Director at Southwest Research and Information Center (SRIC). The 53-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 commercial nuclear power plants waste "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 more than 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.

My last three appearances before this Committee were the August 5, 2022 meeting in Clovis,[2] July 14, 2021 meeting in Carlsbad, [3] and the October 21, 2020 virtual meeting.[4] My statements included a focus on public opposition to "Forever WIPP" and the range of issues related to WIPP 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. That's the social contract that DOE has broken and needs to be addressed.

My comments today will focus on recent activities related to WIPP expansion, the need for the DOE to significantly improve its public information about WIPP expansion, and related state activities. Last year was an important one, and the next few years will be a period of significant actions and decisions that will affect New Mexico and the nation for literally generations. I

[1] *Albuquerque Journal*, August 15, 1972, p. A-1.
[2] https://nmlegis.gov/handouts/RHMC%20080522%20Item%201%20SRIC%20Testimony.pdf; https://nmlegis.gov/handouts/RHMC%20080522%20Item%201%20SRIC%20presentation.pdf
[3] https://nmlegis.gov/handouts/RHMC%20071421%20Item%202%20Don%20Hancock%20presentation.pdf; https://nmlegis.gov/handouts/RHMC%20071421%20Item%202%20Southwest%20Research%20and%20Information%20Center.pdf
[4] 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

greatly appreciate the Committee's continuing interest in WIPP expansion. I continue to 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.

2023 WIPP Renewal Permit

The more than three year process related to renewal of the WIPP Hazardous Waste Permit was notable in that the 11 parties that were involved in negotiations in June 2023 agreed on the new Permit, without the need for what would have been days of technical testimony and hearings. The parties included NMED, DOE and SIMCO as the Permittees, the Carlsbad Department of Development, six non-government organizations - Citizens for Alternatives to Radioactive Dumping, Concerned Citizens for Nuclear Safety, Conservation Voters New Mexico, Nuclear Watch New Mexico, Southwest Alliance for a Safe Future, and Southwest Research and Information Center – and Steve Zappe, as an individual. I will discuss some of the important provisions of the Permit and their implementation.

WIPP's Mission, Failures, and "Forever WIPP"

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. That standard has been violated because of the radiation release and resulting contamination since 2014.
- 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. I'll be discussing the progress of removing the Cold War Legacy Waste and DOE's WIPP expansion plans to bring substantial amounts of new waste that was not supposed to come to WIPP.
- Safely close, decontaminate, and decommission WIPP, beginning in 2024. DOE now wants WIPP to continue to receive waste until at least 2083, and in reality indefinitely. Hence, the accurate description of DOE wanting "Forever WIPP."

Major DOE TRU waste sites

The six major sites that have generated and stored substantial amounts of TRU waste include the Rocky Flats Plant in Colorado, which produced waste by manufacturing the plutonium pits for nuclear weapons for about 35 years, and the Idaho National Lab (INL), where Rocky Flats

large amounts of Rocky Flats waste was shipped. Also in the West, Hanford's reactors in Washington produced much of the plutonium and resulting waste for those pits, and Los Alamos National Lab (LANL) designed many of the warheads and generated TRU waste. In the southeast, the Savannah River Site reactors in South Carolina also produced plutonium for weapons and generated TRU waste, and the Oak Ridge Plant in Tennessee handled some plutonium and TRU waste, though its primary mission was and is for the highly enriched uranium for those Cold War nuclear weapons.

During the past 25 years and six months since WIPP received its first waste shipment on March 26, 1999, 52 percent of the volume of waste emplaced at WIPP has come from INL. About 14.7 percent has come from each of Rocky Flats and SRS, 10 percent from LANL, 2 percent from Oak Ridge and about 1.5 percent for other sites.[5] An important provision of the renewed WIPP Permit requires DOE to submit to NMED by November 3, 2024, the "Legacy TRU Waste Disposal Plan."[6] The Plan should provide the definition and amounts of the remaining legacy TRU waste at DOE sites and, at a minimum, the plans for reserving Panel 12 for legacy waste.

The Plan is necessary because DOE has not accomplished or updated its 2010 plan for disposing of its TRU legacy waste at WIPP.[7] That Plan included the Goal of "Complete disposition of 90 percent of the legacy transuranic waste by the end of 2015."[8] The Plan and the TRU waste disposition goal were specifically included as a key performance measure in the 2012 Management and Operations (M&O) contract for Nuclear Waste Partnership.[9]

The WIPP Permit now requires DOE to annually certify that there is sufficient capacity in permitted panels for the LANL legacy waste and to prioritize waste from LANL cleanup activities.[10]

<u>Non-Legacy Waste</u>

a. New Plutonium Pits.

While WIPP has always been for legacy waste, the National Nuclear Security Administration (NNSA) of DOE has plans to generate a lot of new waste and has no place to put it. Over the next 60 years, DOE plans to produce at least 2,500 new plutonium pits for new nuclear weapons at SRS and 1,500 new plutonium pits for new nuclear weapons at LANL. In March

[5] https://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf provides weekly updates on shipments and amounts of waste from each site and waste in each Panel.
[6] https://wipp.energy.gov/Library/Information_Repository_A/Searchable_Permit_4itemClass1_Aug2024.pdf Permit Part 4.2.1.5.
[7] https://www.energy.gov/sites/prod/files/2014/03/f8/Roadmap_Journey_to_Excellence_2010.pdf
[8] *Id*. at 12.
[9] https://wipp.energy.gov/library/foia/NWP_M&OContract/Section_C.pdf Section C.2.3 at C-2 and C-3.
[10] Permit Part 4.2.1.4.

2024, DOE disclosed to the U.S. Environmental Protection Agency (EPA) that TRU waste from new pit production would constitute 25 percent of the total waste volume in WIPP in 2083.[11]

b. "Surplus Plutonium"

The U.S. has at least 48.2 metric tons of weapons-grade plutonium-239, the majority still in plutonium pits stored at the Pantex Plant in Texas, that has been declared "surplus." DOE has plans over the next 25 years or more to ship pits from Pantex to LANL, where they would be turned into plutonium oxide. The plutonium oxide would then be shipped to SRS, where it would be diluted with a classified adulterant, sometimes called "stardust." The "diluted surplus plutonium" would then be shipped to WIPP. DOE has told EPA that waste would contain more than 41 percent of the total radioactivity in WIPP by 2083.[12]

Another Repository Is Necessary

That non-legacy waste is not what the State agreed to in the C&C Agreement, nor was it considered by Congress during the five years of debate on the WIPP Land Withdrawal Act from 1987 to 1992. That waste should not come to WIPP. The reason DOE proposes to send that waste to WIPP is because there is no other repository and no plans for another repository.

As I've described in previous statements to the Committee, there are legal and technical reasons to have other repositories. The non-legacy waste should go to another repository.

The WIPP Renewal Permit has a provision to require DOE to submit annually a Repository Siting Report, describing its efforts toward siting a repository in another state.[13] SRIC expects that this provision will encourage DOE to take actions to site another repository that it should have started years ago. If DOE doesn't show progress in siting another repository, the State of New Mexico should take additional measures to limit waste in WIPP.

Other states have taken such actions in the past. Colorado insisted that much TRU waste had to leave the state, and the waste was taken to Idaho. Idaho insisted that the waste couldn't stay in Idaho, and forced (through litigation and other actions) the waste to go to a repository – WIPP. South Carolina has insisted that plutonium cannot stay in that state, which has resulted in DOE's plans to have more than 60 percent of the total radioactivity in WIPP in 2083 to be from new plutonium pit production and diluted surplus plutonium at SRS.

[11] https://www.epa.gov/system/files/documents/2024-03/24-0168-wipp-pcr-panels-letter-enclosures.pdf at PCR Enclosure 2, Table 4-2.
[12] *Ibid. at PCR* Enclosure 2, Table 4-3.
[13] Permit Part 2.14.3.

New Permit Provision Regarding Action Against WIPP Expansion

The renewed Permit has another new provision to discourage increasing the volume capacity or adding other waste types.[14] In case of such action, the NMED Secretary shall issue a notice of revocation and reissuance within 30 calendar days. Such reissuance could prohibit additional waste coming to WIPP and require the closure plan to be implemented.

WIPP Closure Date

During the permit renewal process, NMED required DOE to "propose an operating period closure date (i.e., month, day, year)."[15] In response, the Permittees stated: "final facility closure could begin no earlier than CY 2083."[16]

In the current WIPP Planned Change Request process with the EPA, DOE also includes a 2083 closure date because that is "the latest date a generator site plans to generate TRU waste.[17]

The 2083 closure date is not credible

DOE has provided no details to NMED, EPA, or the public about how WIPP would operate for the next six decades. But the date is not credible for many reasons. Among them are that in the first 25 years of operations, slightly more than 43% of the volume capacity has been emplaced.[18]

That rate includes a three-year ramp up of small amounts of waste being emplaced and a three-year period of no waste emplacement in 2014-2017 because of the February 2014 radiation release. At that rate, the volume capacity would be reached in 2057. At that rate by 2083, waste amounting to about 145% of WIPP's capacity would be emplaced.

The Proposal for 9 additional panels is not credible

In its responses to NMED and EPA, DOE has also provided a conceptual design for additional panels 11-19 that would extend about a mile to the west. Those panels would be needed for the waste to be emplaced through 2083. Here again, that is not a credible proposal. The original design (8 panels + 2 in drifts) was for the full capacity to be filled in 25 years, an average of three years to fill a panel. In practice, several panels were used for less than three years.[19] In 2024, DOE has told EPA that panels will normally fill up with waste in 30 months.[20] To NMED,

[14] Permit Part 1.3.1.
[15] https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220512.pdf at 3.
[16] https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220626.pdf at 2.
[17] PCR Enclosure 2, Table 4-2.
[18] http://www.sric.org/nuclear/docs/Status%20Report%20as%20of%20033024.pdf
[19] https://www.env.nm.gov/hazardous-waste/wipp-permit-page/ WIPP Permit Attachment G, Table G-1.
[20] PCR Enclosure 1 at 5.

DOE states that panels normally fill up with waste in 36 months, which is the rate incorporated into the Permit.[21]

But from 2025 to 2083 at 3 years per panel, there would be 20 more panels, more than twice the 9 panels DOE has described. To use nine panels during the next 59 years would be about 6.5 years per panel. Among other things, there would be major ground control problems with keeping panels open for more than six years, a major reason that such a long period of operations has not been previously been the plan.

The Public Asks DOE to take action

DOE should fully comply with the provisions of the Permit. DOE must implement a public engagement plan that clearly explain what its waste emplacement operations would be for the next 60 years, including how many years there would be no shipments and no disposal. The operational plan should show the expected operational period for each panel and how that could be done safely, while also complying with the legal volume limit.

The Public Asks the State to take action

NMED must ensure that DOE fully complies with the provisions of the Permit. The State should ensure implementation of the public engagement plan, including compliance with the Legacy Waste Disposal Plan, including prioritization of LANL clean up waste. The State should provide regular updates of the actions that it is taking to ensure that a repository is being developed in another state.

Worker safety

While DOE and SIMCO stress the importance of worker safety, they have not publicly addressed the increasing number of WIPP workers filing claims for compensation for radioactive or toxic chemical exposures. Since 2001, workers and contractors at DOE sites, including WIPP, are eligible for the Energy Employees Occupational Illness Compensation Program Act of 2000.[22] I discussed this issue in my 2022 presentation to the Committee. The current data show that 142 workers have filed claims. Approved claims have resulted in compensation payments of almost $8.7 million dollars and medical payments of more than $4.4 million, for a total of more than $13.1 million dollars paid out by taxpayers.

Comparisons over time show that between 2018 and 2022, there was a 50% increase in workers filing claims, from 57 workers in 2018 to 86 workers in 2022. In the past two years,

[21] Permit, Table G-1.

[22] Public Law 106-398, title XXXVI. https://www.govinfo.gov/content/pkg/GPO-CDOC-106sdoc30/pdf/GPO-CDOC-106sdoc30-1-14-3-1.pdf

there has been a 63% increase in the number of workers filing claims. The amount of compensation and payments of medical bills is also increasing.[23] Total payments as of August 2018 was $3,305,600. By July 31, 2022, total payments were $7,147,593.

Conclusion

My organization and many others look forward to significant public engagement opportunities in the next several months. We expect DOE to fully comply with Permit conditions and for NMED to ensure that compliance happens.

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.

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[23] https://www.dol.gov/agencies/owcp/energy/regs/compliance/Statistics/Statistics. Earlier data was from the same source accessed on the dates specified.