Mister 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 51-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 two appearances before this Committee were also with CBFO Manager Knerr. At the July 14, 2021 meeting in Carlsbad, ² the statement included a focus on recent events and recommendations from the National Academies of Sciences (NAS) 2020 Report³ regarding the need for improved public participation about DOE's plans for WIPP expansion. At the October 21, 2020 meeting,⁴ the statement included a focus on public opposition to "Forever WIPP" and some suggestions 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. The next year is 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 continues to be a great need for more public information and involvement before decisions are made.

²<u>https://nmlegis.gov/handouts/RHMC%20071421%20Item%202%20Don%20Hancock%20presentation.pdf;</u> <u>https://nmlegis.gov/handouts/RHMC%20071421%20Item%202%20Southwest%20Research%20and%20Information%20Center.pdf</u>

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

³<u>https://www.nap.edu/catalog/25593/review-of-the-department-of-energys-plans-for-disposal-of-surplus-plutonium-in-the-waste-isolation-pilot-plan</u>

⁴<u>https://www.nmlegis.gov/handouts/RHMC%20102120%20Item%202%20Southwest%20Research%20and%20Info</u> <u>rmation%20Center.pdf;</u>

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

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.

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. As of July 30, 2022,⁵ container volume disposal was 100,969 m³ or 57.5 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. In 2014, Los Alamos National Lab (LANL) waste was shipped to Waste Control Specialists (WCS), some of which has since arrived at WIPP, while some remains at WCS. DOE also counts 13 other sites as being "de-inventoried" of TRU waste, and has at least 19 sites that may have TRU waste to come to WIPP.⁶ Further, although Pantex is listed as "de-inventoried," the NAS 2020 Report describes how DOE plans to eventually ship up to 26.2 metric tons of surplus plutonium now at Pantex to WIPP.⁷
- 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. But in its WIPP Permit Renewal Application of March 2020, DOE proposes to eliminate any end date for disposal operations.⁸ The revised renewal application on March 17, 2022 had no end date.⁹ That position was reiterated in the responses of June 27, 2022¹⁰ and July 12, 2022¹¹ to the New Mexico Environment Department (NMED) Technical Incompleteness Determination (TID).

⁵ <u>https://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf</u>

⁶ <u>https://wipp.energy.gov/Library/TRUwaste/ATWIR-2021_CBFO_Final.pdf</u> at 13 of 424.

⁷ See footnote 3 at 46.

⁸ <u>https://wipp.energy.gov/2020-renewal-application.asp</u> at 63.and Attachment G.

⁹ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220321.pdf

¹⁰ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220626.pdf

¹¹ <u>https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220709.pdf</u>

The fact that WIPP would not fully use 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, 2007.¹² By that time, Panels 1-3 had been filled and closed.

Using less than the full volume capacity is allowed by the C&C Agreement, the WIPP Permit, the Environmental Protection Agency (EPA) certification, and the Land Withdrawal Act. All of those provide a limit of <u>up to</u> 175,564 cubic meters. Congress has known that there would be a need for other repositories, since existing and future TRU waste exceeds that limit. Further, there 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 for unlimited amounts of waste. 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**.

DOE has "no plan" for other TRU waste repositories

DOE has issued no public plans for other TRU waste repositories, nor has it taken any action to even start such a siting process, including identifying the standards that it would use for such a site. Moreover, in WIPP documents and DOE Environmental Impact Statements (as discussed in my October 2020 Statement on page 4), there is no discussion of another repository other than WIPP for future TRU wastes. On May 17, 2022, at a virtual meeting of the Alliance for Nuclear Accountability with William "Ike" White, DOE Senior Advisor for Environment Management, I asked Mr. White what was the plan for a TRU waste repository other than WIPP. He responded that there is "no plan" for such a repository.

All current and proposed TRU waste will exceed the WIPP legal capacity limit

The NAS 2020 Report includes Figure S-5 and Table 3-2 that show 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. DOE has provided no public written response to that Report.

¹² <u>https://www.energy.gov/management/january-23-2007-wipp-receives-first-shipment-waste</u>

Recent events

On March 1, 2022, a petition with signatures of more than 1,100 New Mexicans was delivered to Governor Michelle Lujan Grisham.¹³ The petition signers included people from throughout New Mexico.

On April 8, 2022, Governor Lujan Grisham sent the petitions to DOE Secretary Jennifer Granholm. The Governor wrote: "The petition reflects ongoing frustration among New Mexicans regarding the lack of meaningful and transparent public engagement from the DOE on waste clean-up, shipments, and long-term plans for the WIPP.... As Governor, I take these concerns seriously and request that the Department of Energy take action to address the issues raised by New Mexicans."¹⁴

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 three years.¹⁵ 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.¹⁶

On May 13, 2022, NMED issued a Technical Incompleteness Determination (TID).¹⁷ The TID includes 39 items that must be provided before NMED can proceed with the renewal process.

The first item is: "Please propose an operating period closure date (i.e., month, day, year) to be added to the Permit to realistically portray the operating period of the WIPP facility based on waste projections and within volume limits set by the Land Withdrawal Act (LWA)." The June 27, 2022 response (footnote 10) stated: "Based on the potential category waste stream inventory estimates in the 2021 ATWIR, final facility closure could begin no earlier than CY 2083."

Item 3 of the TID is: "Please provide a schematic of the conceptual plan for the anticipated final facility footprint." In the July 12, 2022 response (footnote 11), DOE included a schematic that

¹³ <u>https://stopforeverwipp.org/current-news</u>

¹⁴ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220403.pdf

¹⁵ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/190408.pdf

¹⁶ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/210624.pdf

¹⁷ https://hwbdocuments.env.nm.gov/Waste%20Isolation%20Pilot%20Plant/220512.pdf

shows the original eight panels and nine additional panels, which would more than double WIPP's underground capacity.

Part of that Item 3 response on July 12 is: "The Permittees object to any inclusion or reference to a final facility footprint beyond Panels 11 and 12 in the Administrative Record." There were also objections to an inclusion or reference to seven other items of the TID, including:

(4) the most current anticipated physical capacity (Final TRU Mixed Waste Volume) needed for underground hazardous waste units, above and beyond Panels 11 and 12, both over the next ten years and at final [WIPP] facility closure;

(6) a plan and budget for WIPP transportation routes through the operating period closure date of WIPP;

(7) how the proposed end date of the operating period for the WIPP facility will impact the public along WIPP transportation routes;

(9) documentation of DOE's engagement with other states regarding the construction and operation of another geologic repository for transuranic waste;

(10) documentation of feasibility studies conducted by DOE relating to the construction and operation of another geologic repository for transuranic waste;

(16) DOE documents that govern the prioritization of generator site waste cleanup and generator site waste shipments to WIPP; and

(19) a chronology of public engagement and tribal consultation meetings conducted to date, as well as a list of associated public materials (i.e., presentations, factsheets, etc.), regarding the "dilute and dispose" program for surplus plutonium waste streams from the Savannah River Site (SRS) in South Carolina.

TID Item 14 is "Please describe the role the Consultation and Cooperation Agreement has in DOE's plans for WIPP's present and future operations." The response is: "The C&C Agreement has no current role in DOE's present or future plans for the WIPP." Of course, that Agreement is legally binding on the State and DOE. SRIC also believes that it and other third party beneficiaries can enforce it.

SRIC and other groups are very concerned about those DOE responses. Under the NMED Permit Procedures, the "Administrative Record" is:

all public records used by the Division in evaluating the application or petition, including the application or petition and all supporting data furnished by the applicant or petitioner, all materials cited in the application or petition, public

comments, correspondence, and, as applicable, the draft permit and statement of basis or fact sheet, and any other material used by the Division to evaluate the application or petition.

20.1.4.7.A.(2) NMAC.

Thus, excluding the TID, responses to the TID, and other materials related to those eight issues is clearly contrary to regulatory requirements. It is unfortunate that DOE apparently wants to spend time, effort, and money on disputes about the Administrative Record, which will delay the permitting process and cause unneeded conflict among those participating in that process.

However, excluding such information from the public and NMED is an ongoing practice by DOE. Public participation problems were discussed in my October 2020 and July 2021 statements. Such practice is also contrary to the Governor's April 8, 2022 letter that stated her concern about "the lack of meaningful and transparent public engagement from the DOE."

Two Safety issues that DOE also does not want to publicly discuss

<u>Oil and gas resources</u>. SRIC and many others have long been concerned about the safety of the WIPP site because of the enormous oil and gas resources in the surrounding area and even within the boundaries of the 16-square-mile WIPP site. The WIPP Land Withdrawal Act (LWA), Section 4(b)(5)(A) provides: "...no surface of subsurface mining or oil or gas production, including slant drilling from outside the boundaries of the Withdrawal, shall be permitted at any time (including after decommissioning) on lands on or under the Withdrawal."

In recent years, oil and gas production has dramatically increased within two miles of the WIPP site boundary, including numerous wells adjacent to that boundary. In the May 20, 2022 issue of the *Nuclear Intelligence Weekly*, a detailed map of drilling is provided.¹⁸ The proposed doubling of the underground disposal area would move future waste emplacement closer to drilling on the western edge of the WIPP boundary. Current and future drilling include additional hydraulic fracturing, which can affect surrounding hydrology and the geologic stability. While the LWA prohibits mining or drilling within the boundary, except as DOE approves, DOE has no control over drilling outside of the WIPP site boundary.

<u>Worker safety</u>. DOE officials frequently mention the great importance of worker safety at WIPP. But specific metrics to support those statements are often absent. Unfortunately, the record is cause for concern. There were 86 workers in the underground when the February 5, 2014 fire happened. All of the workers had to be evacuated. Six workers were transported to the Carlsbad

¹⁸ <u>https://www.energyintel.com/00000180-b8f8-d58a-ab86-f8f9d3b40000</u>

Medical Center (CMC) for treatment for smoke inhalation and an additional seven workers were treated on-site.¹⁹ In addition, one worker filed suit, claiming permanent disability from the fire.²⁰

Because of the fire, no workers were underground when the radiation/toxic chemical release occurred on February 14, 2014. But the 13 workers on the surface all tested positive for internal radiological contamination, "predominantly americium-241."²¹ Nine additional workers who came to the site later also tested positive for internal contamination.²²

Since 2001, workers and contractors at DOE sites, including WIPP, are eligible for the Energy Employees Occupational Illness Compensation Program Act of 2000.²³ The Act includes Part B compensation and medical payments for radiation exposures causing cancer and Part E providing compensation and medical expenses for illnesses due to exposures to toxic substances.²⁴

As of July 31, 2022, 86 WIPP workers had filed 188 claims.²⁵ Nationally, covid has slowed the number of expected claim filings, but an additional 29 WIPP workers filed claims since August 5, 2018. Thus, a concerning trend is the increasing number of WIPP workers filing claims – one third of all WIPP workers that have ever filed claims did so in the past four years. The claims are handled by the Department of Labor, not DOE. So WIPP officials historically have little information about the workers filing claims. But SRIC has long suggested that WIPP officials need to pay attention to claims and compensation with the goal of addressing safety problems and concerns of workers.

<u>The Public Asks</u>

In addition to SRIC and many other members of the public asking for more information and engagement from DOE about their future plans for WIPP, the NAS 2020 Report recommended specific engagements with the public and state officials, as discussed in more detail in my 2021 Statement (pages 6-7). DOE has not carried out such activities. Governor Lujan Grisham's April 8, 2022 letter asked for "meaningful and transparent public engagement," which has not occurred. Such engagement regarding plans for existing waste, future waste generation, surplus plutonium, plutonium pit waste, and other repositories should start now and continue into the future.

¹⁹ <u>https://www.energy.gov/sites/default/files/2016/06/f32/2-5-2014_Final_WIPP_Underground_Fire_Report.pdf</u> at ES-1.

²⁰ https://www.abgjournal.com/445530/wipp-worker-sues-over-health-

issues.html?paperboy=loggedin630am&utm_source=Albuquerque+Journal+Newsletters&utm_campaign=140dd13 d26-paperboy_daily_north_140814_063801&utm_medium=email&utm_term=0_2dcf4c82cd-140dd13d26-108016885

²¹ <u>https://www.wipp.energy.gov/Special/CBFO_Mgr_Letter.pdf</u>

²² https://www.wipp.energy.gov/Special/WIPP%20Update%205 15 14.pdf

²³ Public Law 106-398, title XXXVI. <u>https://www.govinfo.gov/content/pkg/GPO-CDOC-106sdoc30/pdf/GPO-CDOC-106sdoc30-114-3-1.pdf</u>

²⁴ https://www.dol.gov/agencies/owcp/energy/regs/compliance/progbenefits

²⁵ <u>https://www.dol.gov/owcp/energy/regs/compliance/statistics/WebPages/WASTE_ISO_PILOT.htm</u>

NMED should reject the DOE proposed limits to the Administrative Record and issues included in the renewal permit. The renewal Permit should include requirements to limit the time period of WIPP disposal operations, improve safety requirements, and limit future expansion.

Other state officials should take actions to ensure that WIPP limits are upheld and to promote DOE's planning for and implementation of other repositories. A near term measure will be whether DOE begins the siting process for another TRU waste repository.

My organization and many others look forward to significant public participation opportunities in the next several months. We will also actively participate in the WIPP Permit Renewal process.

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.