nuclear watch new mexico

August 11, 2019

Mr. Ricardo Maestas
New Mexico Environment Department
Hazardous Waste Bureau
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Santa Fe, New Mexico 87505

Via email to Ricardo.Maestas@state.nm.us

Comments on a proposed Class 3 modification to the Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant - Excavation of a New Shaft and Associated Connecting Drifts, June 2020

Dear Mr. Maestas:

Nuclear Watch NM (NukeWatch) appreciates the opportunity to provide comments on the proposed WIPP Class 3 permit modification - Excavation of a New Shaft and Associated Connecting Drifts.

Nuclear Watch New Mexico seeks to promote safety and environmental protection at nuclear facilities; mission diversification away from nuclear weapons programs; greater accountability and cleanup in the nation-wide nuclear weapons complex; and consistent U.S. leadership toward a world free of nuclear weapons.

General Comments

We strongly oppose the "WIPP Forever" plans that a new shaft would afford. Originally billed as a replacement exhaust shaft to help WIPP recover from the 2014 exploding drum event that shut down WIPP for three years, a proposed new shaft is now designed to increase WIPP's capacity without full public disclosure. Federal laws, agreements with the State of New Mexico, and the WIPP Permit all provide that WIPP has a limited mission for up to 175,564 cubic meters of transuranic (TRU) waste and to operate for a limited lifetime. Other repositories and improved on-site storage must be developed for other wastes and newly generated TRU waste. These operations do not need a new shaft in order to be completed.

We also object to the New Mexico Environment Department (NMED) authorizing the construction of the shaft seven weeks before the draft permit was issued. It is clear there

is no emergency requiring NMED to issue a temporary authorization for shaft construction. In fact, the New Filter Building will provide over 100% of the air required for the workers in the partially contaminated WIPP facility in the next year or so. This Class 3 PMR fails to mention the need for all the extra ventilation capacity. It has been stated many times that after the New Filter Building comes online, WIPP will have regained its pre-2014 ventilation capacity of 425,000 cubic feet per minute (cfm) without the new shaft. The future of just using the 425,000 cfm setup must be explained. What happens? Does it take longer to reach WIPP's capacity? Please explain exactly what adding the new shaft and increasing the ventilation to 540,000 cfm really gains versus 425,000 cfm.

The Permittees must explain the reasons for the new shaft proposed location. The Permittees must explain the reasons for the new drifts' proposed locations. The fact sheet and PMR both limit themselves to speaking primarily of the technological advancements in repository ventilation, without providing any insight into what "physical plant configurations" the Permittees considered in locating Shaft #5 roughly 1200 feet west of the existing Air Intake Shaft. The public is left in the dark as to the Permittees' true intent in locating Shaft #5 so far away from the existing repository footprint, and as a result can only surmise that a significant expansion of WIPP's mission and waste disposal capacity is in the works.

Please describe the advantages and disadvantages of a polymeric spray coating on the shaft wall versus grout. What are the environmental implications of a polymeric spray coating? What was used on the other shafts? Is this the first use of this at WIPP?

Please explain the effects of basting to construct the new shaft on the existing underground, especially the ceilings.

Call Expansion What It Is - Expansion

The purpose and need of the new shaft are not specifically given. The new shaft actually is for new underground rooms that could more than double the disposal area because the existing, permitted panels will be filled in a few years.

The whole picture must be considered. The new shaft is all about expanding WIPP for more waste, including:

- High-level radioactive waste from Hanford, Washington and other sites
- Weapons-grade plutonium from the Savannah River Site in South Carolina
- Commercial waste from West Valley, New York
- 50 years or more of waste from building new nuclear weapons.

The impacts of these national programs on WIPP must be addressed.

This PMR must include all the planned and ongoing Permit Modification Requests, and ongoing operations that will be affected by a new shaft. NukeWatch remains concerned about the number of proposed permit modification requests (PMRs) that are waiting in the wings. These include Panel 10 (2019), Panel 11 (fall 2020), and perhaps many others.

Yet this PMR would lead one to believe that the shaft would stand alone. Where are the PMRs for the new Panels? The public deserves the whole picture. This segmented approach to modifying the WIPP permit leaves the public feeling like part of the future of WIPP is being hidden from view. The Permittees can envision complicated ventilation schemes in the underground using different fans, blocking drifts, and directing the air to different shafts, but the Permittees refuse to share their integrated plans for the future panels. Until we receive the plans for the whole future of WIPP, NMED must deny this new shaft request.

Despite the fact that the New Mexico Environment Department has not permitted the new shaft, in gross predetermination last month DOE awarded a $75 million contract to construct the 30-foot in diameter shaft to a depth of 2,150 feet below ground surface. We respectfully request that NMED not be inclined to approve this PMR just because public tax dollars have already been spent.

We request a full National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) of the new shaft and any future panels. We demand a Supplement Analysis of the new shaft and any future panels. In addition to the environmental benefits, a NEPA action would stop the spending of irretrievable resources on an unapproved modification.

The new shaft will require a new closure plan. But what would there be to actually close? Now it seems like only a shaft, but a closure plan should include the entire facility, including any new panels. DOE/WIPP has plans to more than double the operational lifetime of the WIPP facility. The reasons must be stated in this PMR.

This new shaft PMR must be included in the 10-year WIPP permit renewal. To have parallel processes going at the same time is a huge complication.

Specific Comments

The New Shaft Is Proposed To Be Used Forever, Yet Gets a Temporary Authorization

We oppose NMED's draft permit because the department improperly approved the Permittees' temporary authorization (TA) request to start construction of the new shaft prior to any public involvement or comment on the draft permit – in fact, NMED didn't issue the draft permit for public comment until seven weeks after the TA approval. The Permittees slanted the TA process by proposing (and NMED slanted it by approving) an activity that was neither necessary nor able to achieve the stated objectives to "facilitate other changes to protect human health and the environment" or "provide improved management of hazardous wastes" at the facility within the time limitations of the TA approval. The TA approval simply provided the Permittees a head start in excavating Shaft #5, with no environmental benefit achieved during that time, and allowed a practically irreversible activity – construction of a 2100' deep, 26' diameter shaft – to

commence without prior public notice and comment. The "Memo to File – NMED Temporary Authorization Analysis" was non-persuasive.

NMED has not explained:

- Why, if the new shaft is "important for current underground operations and worker safety," did the agency not reach the conclusion during its consideration of the December 22, 2017 PMR?
- Why, if the new shaft is "important for current underground operations and worker safety," did the agency delay for 239 days from the end of the comment period on the class 3 request on October 16, 2019 until issuing the draft permit on June 12, 2020?
- Why, if the new shaft is "important for current underground operations and worker safety," does NMED allow the site to continue to operate without the new shaft, including allowing dozens of workers to go underground on a daily basis?
- Why, if the new shaft is "important for current underground operations and worker safety," does NMED allow underground operations even though the agency stated to the New Mexico Court of Appeals and the New Mexico Supreme Court that current workers in the underground are an "imminent health concern, and improved ventilation at the facility is a necessity."?
- Why, if the new shaft is "important for current underground operations and worker safety," is the site allowed to continue underground operations during the 37 months of scheduled construction of the new shaft and associated underground drifts?
- Why is the new shaft "important for current underground operations and worker safety," when it is scheduled to be in operation for little more than a year before the permit states that waste disposal operations will end in 2024?

The New Mexico Environment Department should withdraw its temporary authorization to build the ventilation shaft and deny the Department of Energy's modification request until such time as DOE:

1) Corrects its deficiencies noted by the NMED's own technical comments on the National Nuclear Security Administration's (NNSA's) April 2020 *Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site*; and

2) Completes a programmatic environmental impact statement on surplus plutonium disposition as recommended by the National Academy of Sciences.

DOE Deficiencies Noted by NMED's Own Technical Comments

The underlying critical issue is future capacity at WIPP and demands on disposal by programs that remain ill-defined (if not intentionally obscured) by DOE, specifically future plutonium pit production and plutonium disposition. For starters, NNSA stated on the record in December 2019 that:

> The combined TRU waste (1,151 m^3) generated over 50 years [from expanded plutonium pit production] would be 57,550 m^3, which would account for 53 percent of the projected available capacity at WIPP. In addition, use of WIPP capacity for national security missions such as pit production would be given priority in the allocation process.[1]

There are a number of problems with this statement, included NNSA's major assumption that WIPP will be available for the next half-century to dispose of plutonium-contaminated wastes from expanded nuclear weapons production (the need for and extreme expense of which is highly debatable but outside the scope of these comments). This conflicts with the fact that WIPP is currently permitted by NMED to operate only until 2024, a mere 3 years-plus from now. NMED's temporary authorization to build the shaft is at best unseemly until such time as WIPP's closure date is formally extended, and the accompanying required full public participation process is completed.

This also conflicts with NMED's statement:

> The total volume of emplaced and future waste shipments is expected to exceed the legislated volume capacity for WIPP (National Academy of Sciences Review of Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, April 2020). The Idaho Settlement allocates fifty-five percent (55%) of all TRU waste shipments received at WIPP for Idaho. Depending on how the DOE prioritizes future waste shipments across the complex, other facilities around the U.S., including LANL, will need to store remediated legacy waste and/or delay remediating legacy waste. The State of New Mexico objects to the DOE prioritizing defense waste over remediating and emplacing legacy contamination at the WIPP, particularly in the state that hosts and regulates the WIPP.[2]

This is more of things just not adding up under DOE's sketchy plans. First, WIPP's capacity is bound to be exceeded one way or another. But things also don't add up under that overarching issue. Times frames are not made clear, but as a general rule things take longer than DOE claims, the most dramatic example being the abrupt three year shut down of operations at WIPP after LANL sent a faulty radioactive waste barrel that ruptured, costing the American taxpayer at least $1.5 billion to reopen.

The Idaho settlement allocates 55% of all TRU waste shipments received at WIPP for Idaho and NNSA prioritizes 53 percent of the projected available capacity at WIPP for wastes from future plutonium pit production. We are being facetious here, but in theory that only allocates 2% of WIPP's future capacity for cleanup of all of the other

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1 *Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement*, NNSA, page 65, December 2019, https://www.energy.gov/nepa/downloads/doeeis-0236-s4-sa-02-final-supplement-analysis

2 *Comments on Savannah River Site Draft Environmental Impact Statement for Plutonium Pit Production*, NMED, May 18, 2020, page 3, https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-18-NEPA-EIS-Savannah-River-Plutonium-Pits-Final.pdf

DOE/NNSA sites. How does that treat "the state that hosts and regulates the WIPP"? Our response is DOE does not treat New Mexico well! NMED should quit condoning DOE's poor behavior, better protect New Mexicans and withdraw the temporary authorization to build the ventilation shaft.

Moreover, we assert that NMED has a moral obligation to better protect New Mexicans, especially after the Susanna Martinez Administration. Specifically, we are referring to NMED's granting of more than 150 milestone extensions to the LANL cleanup Consent Order, then claiming that the CO did not work and re-issuing a mostly unenforceable 2016 Consent Order conditioned on the whims of DOE's preferred budget.[3] As NMED own formal comments observe, "The DOE and NNSA failed to disclose, discuss and/or quantify various environmental legal matters that will have a material impact on legacy contamination and risk to communities." [4] NMED should quit condoning DOE's failures to disclose, which we believe are intentional on the part of top Energy Department leadership,[5] which means in this instance to withdraw temporary authorization to build the ventilation shaft.

NMED's formal comments to DOE list a number of other reasons why NMED should withdraw the temporary authorization to build the ventilation shaft, as follows:

- "The DOE submitted a request to modify the NMED WIPP Hazardous Waste Facility Permit to differentiate between the way waste volumes was defined versus the way the WIPP Land Withdrawal Act (LWA) waste volume (175,564 cubic meters) was calculated and tracked. In December 2018, the NMED approved the DOE's request to modify the existing WIPP Hazardous Waste Facility Permit and in January of 2019 the DOE fully implemented the change in the method of tracking, reporting, and recording the volumes of generated waste. The DOE used this approved Volume of Record method to calculate the estimated shipments and emplacement in WIPP from SRS in the Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina (EIS). It is important to note that also in January 2019 this modification to the WIPP Permit was appealed. There has been no action on this appeal by the courts. Should the approval of the permit modification be overturned by the courts, the volume of waste shipped from SRS for emplacement at the WIPP would constitute a greater percentage of the LWA volume."
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[3] Which resulted in DOE's proposed $100 million cut to LANL cleanup while the Lab's nuclear weapons programs that caused the mess to begin with get a $900 million increase.

[4] Ibid.

[5] We are specifically pointing to DOE/NNSA refusals to compete a nation-wide programmatic environmental impact statement on expanded plutonium pit production (which should include analysis of radioactive wastes streams bound for WIPP) and a new related site-wide environmental impact statement (SWEIS) for LANL.

[6] *Comments on Savannah River Site Draft Environmental Impact Statement for Plutonium Pit Production*, NMED, May 18, 2020, page 2, https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-18-NEPA-EIS-Savannah-River-Plutonium-Pits-Final.pdf

The point to be drawn is that NMED should withdraw the temporary authorization to build the ventilation shaft until the courts rule on this matter. Moreover, that volume recalculation, hastily approved by NMED in the last days of the Martinez Administration, is just more evidence of DOE's incremental expansion of WIPP. NMED should not allow that until there is complete, unsegmented review of that expansion, including time extension of the operating permit.

- "The DOE and NNSA must make available the volumetric contribution of all defense waste and environmental legacy waste estimated for the WIPP for SRS and all other DOE and NNSA sites around the U.S. which plan to utilize the WIPP. The DOE and NNSA must update this information on a periodic basis (i.e., quarterly)." [7]

NMED should withdraw the temporary authorization to build the ventilation shaft until DOE makes that information available.

- "To mitigate risk, the DOE and NNSA must reinstate funding to the State of New Mexico as authorized in Section 15 of the LWA and provide an annual appropriation of $31.5 million in federal fiscal year 2021 and subsequently indexed for inflation for the remaining useful life of the WIPP. This LWA funding is a necessary infrastructure investment to minimize risk of radiological and hazardous waste releases that could impact public health and safety of New Mexicans, as well as the environment." [8]

NMED should withdraw the temporary authorization to build the ventilation shaft until DOE reinstates that funding. When the State of New Mexico has leverage over DOE it should use it.

- "Prior to implementing the Proposed Action and increasing shipments on New Mexico on designated WIPP highways, the State of New Mexico requests the DOE and NNSA conduct such an analysis and share the results with the Governor of New Mexico, Secretary of the New Mexico Department of Transportation, the Secretary of the Energy, Minerals and Natural Resources Department, and the Secretary of the NMED." [9]

NMED should withdraw the temporary authorization to build the ventilation shaft until DOE "conduct[s] such an analysis and share[s] the results with the Governor of New Mexico, Secretary of the New Mexico Department of Transportation, the Secretary of the Energy, Minerals and Natural Resources Department, and the Secretary of the NMED."

- "Given the disproportionate burden of public health and environmental risks that the State of New Mexico bears related to nuclear energy and weapons programs, every aspect of the Proposed Action [WIPP waste from pit production at SRS] must provide the

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7 Ibid, page 3.
8 Ibid.
9 Ibid, page 4.

highest level of protection to New Mexico citizens, including use of best available technology in these safeguards." [10]

We admire this rhetoric. But we fear it is just that, rhetoric. NMED should help ensure "the highest level of protection to New Mexico citizens," in this instance by withdrawing the temporary authorization to build the ventilation shaft until such time as all issues mentioned in these comments are resolved.

- "The draft EIS fails to demonstrate that the Proposed Action will achieve environmental justice for the high percentage of minority and low-income populations in the State of New Mexico that have already suffered disproportionately high adverse human health and environmental effects of U.S. Department of Energy programs… In accordance with Executive Order 12898, every aspect of the Proposed Action must provide the highest level of protection to New Mexico citizens, including use of best available technology in these safeguards." [11]

Concerning environmental justice, NMED should practice what it preaches. NMED should view the temporary authorization to build the ventilation shaft as just another step in the incremental expansion of WIPP's mission that will impact "the high percentage of minority and low-income populations in the State of New Mexico that have already suffered disproportionately high adverse human health and environmental effects of U.S. Department of Energy programs." NMED should withdraw its temporary authorization to build the ventilation shaft at least until such time as WIPP's operating permit is extended past 2024.

- "The disposal of SRS TRU waste at the WIPP site must conform to the following requirements:
  a. Future waste streams must meet requirements in the DOE WIPP Waste Acceptance Criteria, the WIPP Hazardous Waste Facility Permit Waste Analysis Plan, and the WIPP Transportation Safety Plan Implementation Guide;
  b. DOE must adhere to the limits on types and quantity of waste imposed by the 1992 WIPP Land Withdrawal Act, as amended by Public Law No. 104–201 (1996); and
  c. Legacy waste, particularly from LANL, must remain a high priority for disposal at the WIPP." [12]

We assert that is true of all future TRU wastes to be disposed of at WIPP. Concerning the quantity of TRU wastes we refer back to the fact that a court must still rule on the quantity re-calculation issue. Also concerning quantity, we assert that the temporary authorization to build the ventilation shaft is another incremental step toward WIPP exceeding its legislative cap of 6.2 million cubic feet of transuranic waste.[13]

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[10] Ibid.
[11] Ibid, page 5.
[12] Ibid.
[13] "3) CAPACITY OF WIPP.— The total capacity of WIPP by volume is 6.2 million cubic feet of transuranic waste", PUBLIC LAW 102-579 THE WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT as amended by Public Law 104-201 (H.R. 3230, 104th Congress),

Concerning types of wastes we note DOE's repeated attempts to reclassify high level wastes at the Savannah River Site and the Hanford Reservation as TRU wastes for disposal at WIPP. Again, the temporary authorization to build the ventilation shaft is an incremental step towards WIPP expansion in both quantity and types of wastes. The temporary authorization to build the ventilation shaft should be withdrawn until there is comprehensive, unsegmented review of WIPP's future and extension beyond 2024.

Concerning NMED's assertion that "Legacy waste, particularly from LANL, must remain a high priority for disposal at the WIPP", it is clear that DOE and NNSA have completely other ideas. First is the aforementioned allocation of 55% of WIPP's future capacity for Idaho. Second is NNSA's prioritization of future plutonium pit production wastes, with up to 53% of WIPP's future capacity to be held in reserve for that. Our recommendation is that NMED quits being subservient to DOE. NMED should withdrawß the temporary authorization to build WIPP's new ventilation shaft until such time as DOE demonstrates that it is truly committed to genuine, comprehensive cleanup at LANL which would permanently protect our irreplaceable water resources and provide numerous high-paying jobs.

NAS Review of DOE Plans for Disposal of Surplus Plutonium at WIPP

As NMED notes, "The total volume of emplaced and future waste shipments is expected to exceed the legislated volume capacity for WIPP (National Academy of Sciences Review of Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, April 2020)." [14]

In different formal comments NMED also stated:

> "In the National Academies of Sciences Engineering and Medicine (NAS) Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant (2020), the report identifies 48.2 metric tons of surplus plutonium that is under consideration or slated for disposition at the WIPP. Based on the current LWA statute limit and on the waste volume decision (currently under appeal in the New Mexico Court of Appeals) the waste exceeds the authorized volume of waste allowed in the WIPP." [15]

The National Academies of Sciences Engineering and Medicine Review made a number of final recommendations, three of which we believe are germane in these comments:

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https://wipp.energy.gov/library/CRA/CRA%202019/T%20-%20W/USC%20%201996%20%20LWA%20Public%20Law%20102-579.pdf.

[14] *Comments on Savannah River Site Draft Environmental Impact Statement for Plutonium Pit Production*, NMED, May 18, 2020, page 3, https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-18-NEPA-EIS-Savannah-River-Plutonium-Pits-Final.pdf

[15] *Comments on Los Alamos National Laboratory, Sitewide Environmental Impact Statement, Supplemental Analysis*, NMED, May 9, 2020 page 6, https://www.env.nm.gov/wp-content/uploads/2020/05/2020-05-09-OOTS-NEPA-Review-LANL-Sitewide-EIS-Supplemental-Analysis-Final.pdf

RECOMMENDATION 5-7: The Environmental Protection Agency, the Department of Energy, and the State of New Mexico should engage in developing a mutually agreed-upon strategy for vetting the effects of the dilute and dispose inventory, in its entirety (and as added to the rest of the projected and emplaced inventory), on the Waste Isolation Pilot Plant. This vetting could be through a special demonstration of compliance and certification, or other means all agree to, but should occur before committing the substantial resources that will be needed to implement an integrated (48.2 metric tons of surplus plutonium) dilute and dispose program.

RECOMMENDATION 5-3 (updated Interim Report RECOMMENDATION 3): If the Department of Energy's (DOE's) National Nuclear Security Administration's dilute and dispose plan moves forward, DOE should reinstate the Environmental Evaluation Group (EEG), representing the concerns of the State of New Mexico, throughout the lifetime of processing up to 48.2 metric tons of surplus plutonium material. The independence of the EEG should be supported through mechanisms similar to those established in its original founding.
Members of the technical review organization should be technically qualified to address the health and safety issues and a subset should have access authorizations that will allow thorough review of classified aspects of the plans and their implementation.

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.[16]

Concerning RECOMMENDATION 5-7, we believe the new ventilation shaft is part of "the substantial resources that will be needed to implement an integrated (48.2 metric tons of surplus plutonium) dilute and dispose program." We assert that "The Environmental Protection Agency, the Department of Energy, and the State of New Mexico should engage in developing a mutually agreed-upon strategy for vetting the effects of the dilute and dispose inventory" before the ventilation shaft is approved. Temporary authorization to build the ventilation shaft should be withdrawn until then.

Concerning RECOMMENDATION 5-3, we believe the Environmental Evaluation Group should be reinstated throughout the whole incremental expansion of WIPP, including and before any authorization to build the ventilation shaft. Temporary authorization to build the ventilation shaft should be withdrawn until then.

Concerning RECOMMENDATION 5-5, we strongly agree that "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)."

We note NMED's previous statements that DOE does not adequately disclose needed information. Programmatic review is needed to sort out WIPP's remaining capacity, the future demands on it and prioritization of those demands (e.g., cleanup vs. waste disposal for renewed industrial scale nuclear weapons production).

Further, NNSA should prepare both a programmatic environmental impact statement on its plans for expanded plutonium pit production followed by a new site-wide environmental impact statement for LANL. As connected actions both processes should clearly depict and analyze future TRU waste streams bound for WIPP and the time frames involved. NMED should withdraw the temporary authorization to build WIPP's

[16] *Review of the Department of Energy's Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant*, National Academy of Sciences, download at https://www.nap.edu/download/25593

ventilation shaft until all of this is made clear by DOE, an obligation on its part that is already arguably legally required under the National Environmental Policy Act.

For all these reasons, NMED should withdraw its temporary authorization to build the new ventilation shaft at the Waste Isolation Pilot Plant.

Too Much Is In the Air

The Volume of Record issue has not been concluded. The new shaft must not continue until all court decisions are made. DOE made not need the new shaft if the courts rule against the Volume of Record. As we have stated before, Congress established that the WIPP waste volume is calculated based on container volumes, and total capacity is 850,000 drums. The Land Withdrawal Act capacity limits were based on the volume of 55-gallon drums (or drum equivalents): 850,000 drums times 7.3 ft3 (55-gallon drum volume) equals 6,205,000 ft3 (175,564 cubic meters).

The operational advantages of the new ventilation system were touted endlessly.
From page 1 of the Class 3 PMR:

> "The PVS [Permanent Ventilation System] restores the WIPP underground to its pre-2014 condition by providing significantly increased ventilation flow, unfiltered exhaust for the construction activities, and filtered exhaust for the disposal circuit."

The PVS actually greatly enhances the pre-2014 conditions at WIPP. This wording must be changed to reflect reality.

> From page 3 of the Class 3 PMR:
> "…the current UVS [UG ventilation system] does not have the capability of automatically adjusting to changes in temperature, barometric pressure, and relative humidity. This inability to automatically adjust increases the susceptibility of the UVS to changes in airflow quantity. The PVS [Permanent Ventilation System] upgrades, consisting of both the NFB [New Filter Building] and S#5, will provide a technologically advanced capability to automatically adjust the intake fan and exhaust fan flow, thereby enhancing operational control of the ventilation system.

Basically this says that automatically adjusting the control will enhance the operational control. Setting the circular logic aside for a moment, when has the lack of automatic ventilation control ever been a problem? The Permittees must describe all the times that the old system endangered the UG workers.

The DNFSB Must Be Heard

But A 2019 report from the Defense Nuclear Facilities Safety Board (DNFSB) explains the DNFSB's calculations on the proposed new safety significant confinement ventilation system (SSCVS, estimated at nearly $300 million). The DNFSB is concerned that the final design of the WIPP ventilation system may not adequately perform its intended safety functions due to the use of potentially inadequate performance criteria for damper

closure time and unspecified design requirements for the underground safety significant continuous air monitors (CAM) and related support systems.

As far back as March 2018, the Board expressed concern "that the final design documentation for the WIPP SSCVS does not adequately address design requirements for the full integration of the underground safety significant continuous air monitoring system (CAM)."
All DNFSB concerns must be met before the new shaft PMR is approved.

The current permit requires WIPP to close in 2024. It's time for NMED to support the promises DOE made to the People of New Mexico for closure of WIPP in 2024. The construction for the new shaft must be stopped. NMED must withdraw the temporary authorization to build the shaft and deny the modification request.

If NMED Approves This PMR,
NukeWatch Requests a Hearing Concerning this PMR

In summary, our objections to the draft Permit:

- We object to approval of the draft Permit in the absence of a clearer explanation by the Permittees of future expansion plans, either conceptual or actual, for the repository.
- We further object to approval of the draft Permit as long as NMED's April 24 TA approval remains in effect and/or any construction activities authorized under the TA approval proceed.

Our Issues proposed for consideration at the hearing.

- The absence of contextual information regarding the role of Shaft #5 in the expansion of WIPP construction and future national waste management activities.
- The request and approval of the Permittees' TA request to commence construction of Shaft #5 prior to approval of the draft Permit.

For the above reasons and others, NukeWatch requests that NMED deny this Permit Modification Request. Should NMED approve this PMR, NukeWatch requests a hearing concerning this proposed new shaft Permit Modification Request.

Thank you for your careful consideration of our comments.

Sincerely,

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