

## **SOUTHWEST RESEARCH AND INFORMATION CENTER**

**P.O. Box 4524 Albuquerque, NM 87196 505-262-1862 FAX: 505-262-1864 [www.sric.org](http://www.sric.org)**

March 8, 2019

John Kieling, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department (NMED)  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

via email

RE: March 4, 2019 Permittees' Response to NMED Information Request of 1/25/19

Dear Mr. Kieling:

Southwest Research and Information Center (SRIC) hereby reiterates its request that NMED issue a notice of Class 3 determination for the permit modification request for a new shaft and underground drifts that was dated December 22, 2017. Attached is our February 2, 2018 letter regarding this matter so that we do not have to reiterate all of the points made in that letter.

The facts remain that the permit modification request for a new shaft and associated drifts can properly only be considered as a class 3 request. As described in our February 2, 2018 letter, the modification cannot be a class 1 request, does not meet any of the requirements for a class 2 request, and it does meet the requirements for a class 3 request because it substantially alters the facility or its operation. 20.4.1.900 NMAC (incorporating Title 40 CFR §270.42(d)(2)(iii)). Further, the request must be considered as a class 3 modification because there is significant public concern. 20.4.1.900 NMAC (incorporating Title 40 CFR §270.42(b)(6)(i)(C)(1)).

The Permittees' continuing efforts to submit multiple permit modification requests and not discuss their future plans for WIPP and required permit modifications has been objected to by SRIC and other parties for several years. We believe that NMED should convene meeting(s) of the Permittees, NMED, and other interested parties to discuss those plans and the permit modifications that would be required. The result would at a minimum be greater understanding of what could be proposed and what the sequence that requests would be submitted.

An even better result would be agreement on which of the modification requests could be included in the permit renewal application that must be submitted in early 2020 and which could be submitted at an earlier date. Such a result would help all parties understand the timing and resource needs for the substantial changes that would be required to address the Permittees' Vision of WIPP in 2022. Attached from August 2, 2018 WIPP Town Hall -

[https://wipp.energy.gov/library/documents/2018/Compressed\\_WIPP\\_Town\\_Hall\\_8-2-19\\_FINAL.pdf](https://wipp.energy.gov/library/documents/2018/Compressed_WIPP_Town_Hall_8-2-19_FINAL.pdf)

To reiterate, the submitted modification request must be determined to be Class 3 modification. As an additional matter, we also request the opportunity to discuss the process in order to better understand and manage other WIPP permit modification requests and the permit renewal process.

Thank you very much for your careful consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Hancock". The signature is fluid and cursive, with the first name "Don" being more prominent than the last name "Hancock".

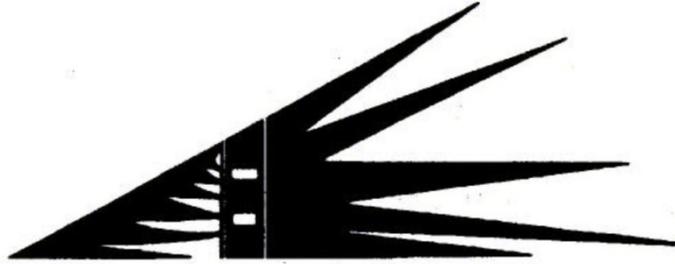
Don Hancock

cc: Secretary James Kenney, Deputy Secretary Jennifer Pruett, Ricardo Maestas

Attachments: WIPP 2022 Slide, SRIC February 2, 2018 letter to John Kieling

# Conceptual Vision for WIPP (concept for future)





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February 2, 2018

John Kieling, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department (NMED)  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

via email

RE: December 22, 2017 DOE WIPP Request for a Determination of Class

Dear Mr. Kieling:

Southwest Research and Information Center (SRIC) hereby requests that NMED issue a notice of Class 3 determination for the proposed permit modification requesting approval of a new shaft and underground drifts. At the November 9, 2017 pre-submittal meeting on that and other draft modification requests, SRIC and other citizen organizations urged the permittees to not submit the shaft modification request or that if they did so, that it must be a class 3 request.

20.4.1.900 NMAC (incorporating Title 40 CFR §270.42(d)) provides:

“(1) In the case of modifications not explicitly listed in appendix I of this section, the permittee may submit a Class 3 modification request to the Agency, or he or she may request a determination by the Director that the modification should be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, he or she must provide the Agency with the necessary information to support the requested classification.

(2) The Director shall make the determination described in paragraph (d)(1) of this section as promptly as practicable. In determining the appropriate class for a specific modification, the Director shall consider the similarity of the modification to other modifications codified in appendix I and the following criteria:

(i) Class 1 modifications apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the Director may require prior approval.

- (ii) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to,
  - (A) Common variations in the types and quantities of the wastes managed under the facility permit,
  - (B) Technological advancements, and
  - (C) Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.
- (iii) Class 3 modifications substantially alter the facility or its operation.”

The permittees do not claim that the proposed modification is a Class 1, so NMED’s determination must be that it is a Class 2 or Class 3 modification.

None of the criteria of CFR §270.42(d)(2)(ii) related to Class 2 modifications is met by the request. There is no variation claimed in the types and quantities of the wastes managed (though this matter will be discussed further below on page 3).

The request states:

“Technological advancements, applies to the extent that when Shaft #5 becomes available to the Permittees, it will advance the Permittees’ ability to control the underground ventilation and enhance control over the differential pressures maintained between the Construction Circuit and the North, Waste Shaft, and Disposal Circuits.” at 8.

On the contrary, the shaft #5 and the associated drifts are not technological advancements. The request states: “Shaft #5 will be the primary source of intake air for the underground facility.” at 4. That is the same purpose as the existing Air Intake Shaft, which will continue to be used. The control of ventilation and differential pressures result primarily from other parts of the Underground Ventilation System, including the New Filter Building and appurtenances, including a Salt Reduction Building, which are not included in the request. Combining the New Filter Building and the New Shaft in the same request would be a class 3 modification request.

Regarding new regulations, the request states: “This criterion does not apply to this proposed Modification.” at 9. The request then includes a paragraph describing why the changes that result from the new shaft and connecting drifts are not “substantial.”

On the contrary, the modification request would substantially alter the facility and its operations, so it clearly is a Class 3 request, and that is the required determination.

The real purpose of the new shaft and associated drifts is to expand the underground footprint of WIPP beyond the ten panels that have been the design and have been described in the permittees application and renewal application and in the Permit.

For example,

“The geological repository has been divided into ten discrete hazardous waste management units (HWMU) which are being permitted under 40 CFR Part 264, Subpart X....

“The process design capacity for the miscellaneous unit (composed of ten underground HWMUs in the geologic repository) shown in Section XII.B. is for the maximum amount of waste that may be received from off-site generators plus the maximum expected amount of derived wastes that may be generated at the WIPP facility.” WIPP RCRA Part B Permit Application, DOE/WIPP 91-005, Revision 7, May 1996, at A-5.

Figure D-12 of that application clearly shows four shafts and “Panels 1 through 10 (Hazardous Waste Management Units).” A similar figure has always been in the Permit, and is currently Figure A2-2.

So the new shaft and connecting drifts have never been part of the WIPP design or Permit. Thus, they are a totally new design of the facility and a very substantially alter the facility and its operations, which is a Class 3 modification.

The new design is necessary because how WIPP has been managed and operated does not allow for the total capacity of 175,564 cubic meters of waste to be emplaced. SRIC has pointed out this deficiency many times for many years, including the December 5, 2011 (Class 2 Shielded Containers Comments, May 20, 2013 (Class 3 Modification Comments), and others.

The Government Accountability Office’s September 2017 report confirms that lack of capacity. “DOE does not have sufficient space at WIPP to dispose of all defense TRU waste.” *PLUTONIUM DISPOSITION: Proposed Dilute and Dispose Approach Highlights Need for More Work at the Waste Isolation Pilot Plant*. GAO 17-390, September 2017, at Highlights page. See detailed discussion on pages 32-44. <https://www.gao.gov/assets/690/686928.pdf>

Thus, in actual fact, the underlying purpose of the new shaft and connecting drifts is to expand the underground footprint as essential components to substantially increase the underground capacity in order to dramatically increase the amount of waste that could be disposed. As shown in Permit Table 4.1.1, Panels 1-6 contain 90,243 cubic meters of Contact-Handled (CH) waste and 625 cubic meters of Remote-Handled (RH) waste. Panel 7 can handle about 8,000 cubic meters of CH waste and 16 cubic meters of RH waste. If Panel 8 would be filled to capacity of 18,750 cubic meters of CH waste and 650 cubic meters of RH waste, there would be about 117,000 cubic meters of CH waste and 1,291 cubic meters of RH waste. Thus, the remaining capacity would be about 51,485 cubic meters of CH waste (168,485 – 117,000) and 5,788 cubic meters of RH waste (7,079 – 1,291). Very little waste would fit into Panel 10, should it be used, and Panel 9 will have no waste.

Thus, there is about a 30 percent capacity shortfall for CH waste and 81 percent capacity shortfall for RH waste. Consequently, the modification request must also be a Class 3 because the additional capacity is greater than a 25 percent increase in the facility’s container storage capacity. CFR §270.42, Appendix I.F.1.a.

DOE does not wish to publicly discuss the “lost” capacity and the reasons that it has occurred. But the permittees cannot deny the actual facts and numbers. It is disturbing, however, that the permittees’ submitted the request and stated: “the information submitted is, to the best of our knowledge and belief, true, accurate, and complete.” Clearly, regarding the actual purpose, the information is not true, accurate, and complete.

An additional reason that there must be a class 3 determination is because the new shaft is extremely controversial, and there is significant public concern. SRIC and other organizations are strongly opposed to the proposed expansion, and many people will strongly object to the request and request a public hearing, pursuant to Class 3 requirements. According to CFR §270.42(b)(6)(i)(C)(1), the request also is a class 3 modification because of that significant public concern.

To reiterate, the submitted modification request must be determined to be Class 3 modification.

Thank you very much for your careful consideration of these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Hancock". The signature is cursive and somewhat stylized, with a large initial "D" and "H".

Don Hancock

cc: Ricardo Maestas