



January 29, 2018

Todd Shrader and Anthony Stone Carlsbad Field Office Carlsbad, NM

VIA EMAIL to: WIPP.EA@WIPP.ws and todd.shrader@cbfo.doe.gov

RE: Draft Environmental Assessment - EA-2064: ABOVE GROUND STORAGE CAPABILITY PROJECT AT THE WASTE ISOLATION PILOT

Dear Todd, Anthony and others,

The Natural Resources Defense Council ("NRDC") and Southwest Research and Information Center ("SRIC") are two environmental organizations that have decades of involvement in the proposal, planning, design, construction, and operation of the Waste Isolation Pilot Plant ("WIPP"). We also have commented extensively on WIPP National Environmental Policy Act ("NEPA") documents.

We appreciate that Department of Energy ("DOE") Carlsbad Field Office ("CBFO") made this draft Environmental Assessment ("EA") available for public comment. However, both organizations continue to be very concerned about how DOE and WIPP are not fully complying with NEPA's requirements. We renew our requests of November 21, 2016 and February 15, 2017 for a meeting to discuss and reach consensus about the nature of NEPA analysis required for the various proposed significant changes in WIPP's mission. The Above Ground Storage Facility ("AGSF") is one of those changes, along with a new shaft, expanding the underground design, and changing the disposal volume calculation.

Our fundamental conclusion is that the AGSF is to contrary to the legal provisions of the WIPP Land Withdrawal Act and that the proposal should be abandoned. Further, for adequate NEPA compliance, a supplemental WIPP environmental impact statement is required.

These comments are in addition to the SRIC January 2, 2018 request for an extension of the public comment period. We appreciate that the two references were provided and that the requested two-week extension of the comment period was granted.

1. <u>WIPP is legally for deep underground disposal of up to 175,564 cubic meters of defense transuranic waste, not for the significant amount of long-term surface storage proposed.</u>
The original WIPP authorization stated:

"Notwithstanding any other provision of law, the Waste Isolation Pilot Plant is authorized as a defense activity of the Department of Energy, administered by the Assistant Secretary of Energy for Defense Programs, for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States exempted from regulation by the Nuclear Regulatory Commission." P.L. 96-164, § 213(a).

That law has no provision for long-term surface storage.

The original WIPP Final Environmental Impact Statement ("FEIS," DOE/EIS-0026, October 1980) included geologic disposal options at WIPP or other sites or the no action alternative of continued storage at the existing sites. There was no consideration of long-term surface storage at WIPP, nor was there any mention of the kind of AGSF now proposed.

The initial WIPP Record of Decision stated:

"The U.S. Department of Energy (DOE) has decide to proceed with the WIPP project at the Los Medanos Site in the Delaware Basin of southeast New Mexico as directed by the U.S. Congress in Public Law 96-164 'Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980'. The WIPP project, which is described as Alternative 2 in the Final Environmental Impact Statement (FEIS), DOE/EIS-0026, October 1980, will be developed 'as a defense activity of the DOE for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States' Public Law 96-164." 46 Federal Register 9162 (January 28, 1981).

There is no mention of a surface storage mission for WIPP or an AGSF.

Public Law 96-164 also provided for a Consultation and Cooperation ("C&C") Agreement between DOE and the State of New Mexico. The original C&C Agreement was filed in U.S. District Court in New Mexico on July 1, 1981 as part of a Stipulated Agreement. The C&C Agreement included no provision for an AGSF, nor has any such facility been included in any subsequent modification of the C&C Agreement.

In 1992, Congress passed the WIPP Land Withdrawal Act ("LWA," Public Law 102-579), which stated:

"The term "WIPP" means the Waste Isolation Pilot Plant project authorized under section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164; 93 Stat. 1259 1265) to demonstrate the safe disposal of radioactive waste materials generated by atomic energy defense activities." Section 2(19).

"RESERVATION.— Such lands are reserved for the use of the Secretary for the construction, experimentation, operation, repair and maintenance, disposal, shutdown, monitoring, decommissioning, and other authorized activities

associated with the purposes of WIPP as set forth in section 213 of the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980 (Pub. L. 96-164; 93 Stat. 1259, 1265), and this Act." Section 3(a)(3).

There are no provisions for an AGSF or long-term surface storage in the law.

The LWA also states:

"Nothing in this Act shall affect the Agreement or the Supplemental Stipulated Agreement between the State and the United States Department of Energy except as explicitly stated herein." Section 21.

The WIPP Disposal Phase FEIS (DOE/EIS-0026-S-2, September 1997) included no discussion of an AGSF, nor any other long-term surface storage.

Thus, there is no basis in law, nor in the WIPP EISs, for the AGSF, nor long term surface storage under any other name. The draft EA continues no discussion of those legal requirements.

## 2. For DOE to now propose an AGSF, it must be considered as part of a supplemental WIPP EIS.

As discussed in #1 above, the AGSF would be a significant new mission for WIPP with substantial environmental consequences. Thus, a supplemental EIS is required. 40 CFR §1502.9(c)(1)(i).

DOE must either stop the draft EA process and prepare a draft SEIS for public review and comment, or it must determine in the EA that an EIS is required.

# 3. The proposal for an AGSF and other significant proposed changes at WIPP require a supplemental EIS.

On November 21, 2016, these two organizations wrote to then DOE Secretary Ernest Moniz, stating that the existing WIPP EISs must be supplemented. Since that time, DOE has proposed other significant changes to WIPP, including constructing a new, fifth shaft, expanding the underground footprint, and substantially increasing the disposal capacity of WIPP by changing the method of calculating the LWA disposal volumes.

The appropriate NEPA consideration of these proposed changes is through a supplemental EIS so that the relationships between the actions can be analyzed, whether individually or collectively the actions are needed for WIPP's long-term operations, what are the reasonable alternatives, and what are the environmental consequences.

### 4. There is no adequate purpose and need.

An adequate NEPA document "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." 40 CFR § 1502.13.

The draft EA states:

"The purpose of the proposed action, which is described in detail in Chapter 2 of this Environmental Assessment (EA), is to enhance (i.e., provide additional above ground storage capability) the DOE's ability to store TRU waste above ground for up to one year. This enhanced storage ability will provide operational flexibility that is needed to reduce mission impacts from fluctuation in ship schedules and waste emplacement activities." at 1-4.

This purpose does not establish that there is a need for the proposed action. WIPP was initially authorized in 1979, and no one-year storage need was identified. WIPP began operating in March 1999 and until now there has been no need identified for up to one year storage. What has changed that now requires such storage? The draft EA does not answer the question.

One change is that shipments to WIPP were suspended from February 5, 2014 until April 10, 2017 because of the fire and radiation release events in February 2014. But that is more than three years, so a one-year storage timeframe would not address that situation.

The one-year timeframe also makes no sense from operational or enforcement requirements. Operationally, the one-year timeframe could be expanded by moving containers from the outdoor pad to the Waste Handling Building ("WHB") and then returned to the AGSF, thereby, starting a new one-year timeframe. The one-year, or any, timeframe would not be enforceable unless there is also a requirement that the generator site that sent the waste, or some other DOE site that operates throughout WIPP's lifetime, would receive the waste to ensure that the one-year timeframe is not exceeded.

Further, if the waste containers for any reason could not be disposed at WIPP and could not be shipped offsite, they would effectively be left for long-term surface storage at WIPP, which is contrary to the LWA requirements and the WIPP Permit.

The nature of the need for "operational flexibility" is not clearly described. The transuranic ("TRU") waste generator/storage sites have been storing waste for decades and have Resource Conservation and Recovery Act ("RCRA") or other required state permits for needed storage facilities. The draft EA does not discuss what has changed so that such storage facilities are not adequate.

The draft EA does not have an adequate purpose and need statement, which is required for an adequate NEPA document.

5. The draft EA does not consider all reasonable alternatives, as required by NEPA.

The alternatives analysis is "the heart of the environmental impact statement." 40 CFR § 1502.14.

The alternatives analysis must:

"Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

Devote substantial treatment to each alternative considered in detail including the

proposed action so that reviewers may evaluate their comparative merits." 40 CFR § 1502.14(a) and (b).

The draft EA includes two alternatives and the no action alternative.

"The proposed action is to add an above ground hazardous waste container storage unit at the WIPP facility for storage of 65,280 ft3 (1,836m3) of TRU mixed waste for up to one year. This CH TRU mixed waste storage capacity also includes RH TRU mixed waste in shielded containers that are managed and stored as CH TRU mixed waste." at 1-7.

Alternative 1 is the proposed action. Alternative 2 is the proposed action, plus adding a new TRUDOCK facility in a covered structure. The no action alternative is to not do the AGSF.

The alternatives analysis relates to the proposal, which must be "properly defined." 40 CFR § 1502.4(a). As discussed in #4 above, there is no such defined purpose and need.

Nevertheless, there are clearly other reasonable alternatives that are not discussed in the draft EA. At WIPP, the option of expanding the WHB and/or the Parking Area Unit could provide additional surface storage capability, if it is actually needed. At the generator/storage sites, there could be changes in the packaging and shipment schedules, changes in storage practices, changes in the timing and quantities of waste generation, among other options. It is highly unlikely that weather delays mentioned in the draft EA would affect all shipping sites simultaneously and long-term, so changes in shipping schedules among sites could provide "operational flexibility." None of those alternatives are discussed in the draft EA, but must be considered in an adequate NEPA document.

6. There are basic factual errors in the draft EA. Some examples:

A. Table 3-2 Worker Doses and Impact is inaccurate. For 2013 and 2015, the Average Worker and MEI are identical at "< 1 mrem/yr". However, the person-rem doses are substantially different 0.564 in 2013 and 0.161 in 2015. For 2014, the MEI and person-rem are identical. Some or all of those numbers cannot be accurate.

B. The facility design capacity is inaccurate. The draft EA states:

"The WIPP facility design is based upon the receipt and emplacement of 500,000 cubic feet (ft3) (14,158 cubic meters [m3]) of contact-handled (CH) TRU mixed waste per year (Design Criteria, Waste Isolation Pilot Plant (WIPP), Revised Mission Concept – IIA (RMC-IIA) WIPP-DOE-71-21 Rev.3)." at 1-2.

However, the WIPP FEIS states that the design capacity is more than twice that amount.

"The WIPP is designed to handle up to 1.2 million cubic feet of waste per year." DOE/EIS-0026, October 1980 at 3-15.

C. The number of Contact-Handled ("CH") waste shipments is inaccurate. The draft EA states:

"During the years 2000-2014, the WIPP facility received 11,763 shipments of CH TRU mixed-waste (or an average of 840 shipments per year)." at 1-2.

In fact, from WIPP's opening on March 26, 1999 until February 5, 2014, WIPP received 11,894 shipments, of which 11,175 were CH waste and 719 were Remote Handled ("RH") waste. So during the about 178 month period, therefore, the average was 753 CH shipments per year (11,175/178\*12). Excluding Fiscal Years 1999 and 2000, when 90 CH shipments were received, results in 11,085 CH shipments over 160 months (October 1, 2000 to February 5, 2014) or an average of 831 shipments per year.

However, the average is relatively meaningless, since the number of CH shipments per fiscal year from 2001 to 2014 ranged from a low of 249 in FY 2014 to a high of 1,128 in FY 2006. The fact that WIPP could receive 1,128 shipments in one fiscal year without any additional above ground storage reinforces that fact that the need for such additional surface storage has not been established. Further, WIPP has no plans to ever again have 1,128 shipments in a fiscal year, even if it operates until 2050. WIPP Strategic Plan Operations Through 2050, June 27, 2016 and WIPP Update August 8, 2017.

#### A fundamental purpose of NEPA is:

"NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 CFR §1500.1(b).

The draft EA does not have the required high quality information and accurate scientific analysis.

### 7. Required accurate scientific analysis is missing from the draft EA.

The AGSF would increase the outside storage capacity from the existing 251 cubic meters in the Parking Area Unit ("PAU") by adding 1,836 cubic meters of capacity, more than seven times the existing amount. In the PAU, waste containers are inside sealed TRUPACT-II, HalfPACT, or TRUPACT-III shipping containers and can be stored for no more than 59 days. Waste containers in the AGSF would not be inside sealed shipping containers, but inside the Concrete Overpack Container ("COC") and could be stored for at least one year. Unlike the shipping containers that must meet Nuclear Regulatory Commission requirements, the COCs have no such requirements.

Despite the more than seven times increase in the storage capacity and in the number of storage containers, the draft EA provides no quantitative analysis of the risks of radiation or hazardous chemical releases from the PAU compared with the AGSF.

Even though the AGSF would be much larger and more exposed to actions initiated outside the Property Protection Area ("PPA"), the draft EA states:

"The potential impacts of intentional destructive acts (i.e., acts of sabotage or terrorism) would be minimal and no greater than the impacts of a transportation or facility accident as analyzed in SEIS-II because the initiating forces and resulting quantities of radioactive or hazardous materials potentially released by an intentional destructive act would be similar to those for the severe accident scenarios as discussed in SEIS-II (DOE/EIS-0026-S-2); intentional destructive and accident scenarios both involve the same containers with the same radionuclide loadings." at 3-3.

Of course, the SEIS-II did not include any analysis of "the same containers" since the COC did not exist and was not included in the analysis, nor did it include any analysis of the AGSF, nor the increased exposure from the larger and extended boundary of the PPA.

The draft EA does not have the required high quality information and accurate scientific analysis.

#### Conclusion

To reiterate, NRDC and SRIC's fundamental conclusion is that the AGSF is contrary to the legal provisions of the WIPP Land Withdrawal Act and that the proposal should be abandoned. Further, for adequate NEPA compliance a supplemental WIPP environmental impact statement is required.

We renew our requests for a meeting to discuss and reach consensus about the nature of NEPA analysis required for the various proposed significant changes in WIPP's mission.

Thank you very much for your careful consideration of, and your response to, these comments and request for a meeting. Please advise me of your actions in this matter.

Sincerely,

Geoffrey H. Fettus Senior Attorney

Natural Resources Defense Council

Gethey H. Fettes

1152 15th St. NW, Suite 300 Washington D.C., 20005

(202) 289-2371

gfettus@nrdc.org

Don Hancock

On Hand

**Nuclear Waste Program Director** 

Southwest Research & Information Center

PO Box 4524

Albuquerque, NM 87196-4524

 $(505)^{2}262-1862$ 

sricdon@earthlink.net