

Thank you for the opportunity to provide comments to the WIPP permit on the defining of “Legacy TRU Waste” and the change to make Los Alamos TRU waste a priority for WIPP.

My initial request is for an extension to the comment period. There is a lot of homework needed to understand the positive impacts and the challenges posed by the modification.

SUMMARY

Legacy definition

On the Legacy definition there is an impact to the complex providing waste to WIPP as the definition should have no bearing. The purpose of WIPP through the Land Withdrawal Act (LWA) is to provide a safe place to dispose of Transuranic Waste from across the complex currently posing a risk to those workers, communities, and environment. There should be no added definitions other than those currently being utilized from the LWA and DOE 435.1. The WIPP is a national asset and should not be restricted from its purpose with definitions not supporting its mission. Generator sites need to continue with their approach and should not be monitored by a separate definition that could impact the priority for shipping waste to WIPP.

Priority of the Repository for LANL:

The priority for LANL does not meet WIPP’s mission to support the DOE/EM Complex. The DOE/EM Complex waste generation and preparation is tied to the mission of reducing the risk for the workers, communities, and the environment. The risk of having potential releases while waiting for shipment is unacceptable for those wastes that are already prepared and certified to make the trip for disposal. By implementing these proposed modifications the families in the communities where work has been ongoing will take an unacceptable risk. Currently in my community we are driving to have the site begin its shipment within the next year and then increase the year after. We plan to have 80 shipments per year which would be impacted to about 20 per year pushing out the lifecycle by several decades and increasing the risk of a release and impact to our workforce, community, and the environment.

SOME DETAILS

Legacy definition

Legacy waste definition can become an overburden as it would be added in both the WIPP waste inventory system and WIPP Data System (WWIS/WDS). The data entered here should match those at the generator sites which currently do not contain a common Legacy definition because there is no requirement and there has never been a need. The additional task will now add time per container as each container is what is certified to the WIPP criteria (WAC/WAP). The generator sites would have to perform periodic verifications to ensure all the containers continue to have the appropriate identifier as they go through any repackaging. For those sites who utilize outside resources it would also need to be added to their scope to ensure there are no changes to have the container mis-identified.

For the generator sites who are working multiple waste streams and many containers this unnecessary burden would impact the cost per container at no added value to the taxpayer.

The following are excerpts from DOE Order 435.1 and they do not have any definitions with the term Legacy. The importance of the waste is the radiological content and hazardous waste content to minimize the impact on the workforce, community and the environment:

- **Definition of Transuranic Waste.** Transuranic waste is radioactive waste containing more than 100 nanocuries (3700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for: (1) High-level radioactive waste; (2) Waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) Waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.
- **Management of Specific Wastes.** The following provide for management of specific wastes as transuranic waste in accordance with the requirements in this Chapter: (1) Mixed Transuranic Waste. Transuranic waste determined to contain both a hazardous component subject to the Resource Conservation and Recovery Act (RCRA), as amended, and a radioactive component subject to the Atomic Energy Act of 1954, as amended, shall be managed in accordance with the requirements of RCRA and DOE O 435.1, Radioactive Waste Management, and this Manual. (2) TSCA-Regulated Waste. Transuranic waste containing polychlorinated biphenyls, asbestos, or other such regulated toxic components shall be managed in accordance with requirements derived from the Toxic Substances Control Act, as amended, DOE O 435.1, Radioactive Waste Management, and this Manual. (3) Pre-1970 Transuranic Waste. Transuranic waste disposed of prior to implementation of the 1970 Atomic Energy Commission Immediate Action Directive regarding retrievable storage of transuranic waste is not subject to the requirements of DOE O 435.1, Radioactive Waste Management, and this Manual.
- **Waste Characterization.** Transuranic waste shall be characterized using direct or indirect methods, and the characterization documented in sufficient detail to ensure safe management and compliance with the waste acceptance requirements of the facility receiving the waste. (1) Data Quality Objectives. The data quality objectives process, or a comparable process, shall be used for identifying characterization parameters and acceptable uncertainty in characterization data. (2) Minimum Waste Characterization. Characterization data shall, at a minimum, include the following information relevant to the management of the waste: (a) Physical and chemical characteristics; III-4 DOE M 435.1-1 7-09-99 (b) Volume, including the waste and any stabilization or absorbent media; (c) Weight of the container and contents; (d) Identities, activities, and concentrations of major radionuclides; (e) Characterization date; (f) Generating source; (g) Packaging date; and (h) Any other information which may be needed to prepare and maintain the disposal facility performance assessment or demonstrate compliance with applicable performance objectives.
- **Waste Certification.** A waste certification program shall be developed, documented, and implemented to ensure that the waste acceptance requirements of facilities receiving transuranic waste for storage, treatment, or disposal are met. (1) Certification Program. The waste certification program shall designate the officials who have the authority to certify and release waste for shipment; and specify what documentation is required for waste generation,

characterization, shipment, and certification. The program shall provide requirements for auditability, retrievability, and storage of required documentation and specify the records retention period. (2) Certification Before Transfer. Transuranic waste shall be certified as meeting waste acceptance requirements before it is transferred to the facility receiving the waste. (3) Maintaining Certification. Transuranic waste that has been certified as meeting the waste acceptance requirements for transfer to a storage, treatment, or disposal facility shall be managed in a manner that maintains its certification status

- **NECESSARY AND SUFFICIENT PROCESS.** The sets of standards which are the product of the “Necessary and Sufficient Process” of DOE M 450.3-1. That process establishes the sets of agreed upon standards to ensure adequate protection of the safety and health of workers and the public and the protection of the environment against the hazards associated with performing the work of the Department of Energy. [Adapted from: DOE G 450.3-1]
- **TRANSURANIC WASTE.** Transuranic waste is radioactive waste containing more than 100 nanocuries (3700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for: (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61. [Source: WIPP Land Withdrawal Act of 1992, as amended]

The following are excerpts from 40CFR 191 and they also do not have any definitions with the term Legacy. The importance of the waste is knowing the radiological and hazardous waste content to minimize impact on the workers, general public and the environment:

191.03 Standards.

(a) Management and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at all facilities regulated by the Commission or by Agreement States shall be conducted in such a manner as to provide reasonable assurance that the combined annual dose equivalent to any member of the public in the general environment resulting from:

- (1) Discharges of radioactive material and direct radiation from such management and storage and
- (2) all operations covered by Part 190; shall not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other critical organ.

(b) Management and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at all facilities for the disposal of such fuel or waste that are operated by the Department and that are not regulated by the Commission or Agreement States shall be conducted in such a manner as to provide reasonable assurance that the combined annual dose equivalent to any member of the public in the general environment resulting from discharges of radioactive material and direct radiation from such management and storage shall not exceed 25 millirems to the whole body and 75 millirems to any critical organ.

Transuranic radioactive waste, as used in this part, means waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes, with half-lives greater than twenty years, per gram of waste, except for:

- (1) High-level radioactive wastes;

(2) wastes that the Department has determined, with the concurrence of the Administrator, do not need the degree of isolation required by this part; or

(3) wastes that the Commission has approved for disposal on a case-by-case basis in accordance with [10 CFR Part 61](#).

Conclusion on “Legacy” definition:

Adding a definition for legacy waste is not needed, not required, not currently used, and will cost taxpayers more for no added protection/benefit.

Priority of the Repository for LANL:

The proposed approach to make LANL the priority for waste emplacement is understandable with New Mexico hosting the National Asset (WIPP). What is not understandable is why the focus of retrieval, packaging and preparing the waste (certifying it for WIPP) is in the WIPP Permit modification proposed. The other generator sites have those agreements with their states such as Idaho, Tennessee, and Washington Not with WIPP. The Environmental Management/Carlsbad Field Office (CBFO) has the Responsibility and Authority to schedule and ship the waste to WIPP. The coordinated effort by CBFO with the generator sites produces the most efficient use of resources to get the waste to WIPP. The prepared (certified) waste inventory at each site is coordinated and planned to ensure the tractors, trailers, packages, and the drivers are all in synch for an efficient process. Each of those has specific criteria that impact their availability like preventive maintenance, corrective maintenance and drivers have qualifications, training, and rest requirements by Department of Transportation. When LANL becomes a 55% priority that means the remaining 45% goes to those remaining generator sites which could be a major impact. Key generator sites with impact are Hanford, Idaho, Oakridge, Savannah River, and a few small generator sites. The waste being generated by LANL is significantly less than that of the large generator sites and would cause a shipment curtailment if the proposed is followed. Example would be where LANL is only prepared to make 60 shipments that year (more than they are doing today I believe) that leaves 49 shipments for the rest of the complex. Current plans per year appear that INL would ship 110, Oakridge 25, SRS 30, Hanford 65 and small sites 10 (all approximates) which tallies to ~240 shipments per year. CBFO would now have to determine who gets the 49 available shipments for the 240 needed therefore in inefficiency of 191 shipments. I did not include the LANL NNSA production which includes 100 per year that I did not see accounted for on the permit. This will now pose a decades long risk challenge (currently not anticipated) to the generator sites as the assets for WIPP are not being used efficiently and WE taxpayers are not getting an appropriate return on investment including, **and of a higher priority**, the risk reduction in our communities in a timely manner. This will also generate a need for the generator sites with previously mentioned state agreements to be renegotiated and explain to the state residents, stakeholders (such as the tribes and adjoining states), and the business owners (such as farmers, ranchers, and businesses). Then the change goes on to state that in 2032 the allocation goes to 75% to LANL only leaving 25% for the remaining sites. This further exacerbates the situation causing an even longer lifecycle for cleanup and holding the risk at the generator sites. As with LANL these sites have potentials for natural phenomenon to impact the sites as well as fires. This is not the appropriate approach in making LANL a high priority as it penalizes the other generator sites trying to achieve the same goal in protecting their families, communities, stakeholders and businesses in their state.

The CBFO should remain in control of the shipping priorities as they manage that on an annual and down-to-daily basis to ensure key risk wastes are moved expeditiously and safely disposed of. This is done through various means of communication with the generator sites including LANL. Various meetings throughout the year provide the framework for the certification and shipping plan. CBFO manages the teams as efficiently possible,

understanding there are challenges that will be realized and need to be dealt with in a timely manner. Even when those occur CBFO engages with all the generator sites to communicate the need, the why and discuss potential path forward to remedy the challenge and follow on impacts.

Conclusion on LANL priority:

Placing LANL as priority at 55% (from 2027 - 2031) and then at 75% (from 2032 – 2035) is ill use of the taxpayer \$\$ and is injustice to the other generator sites especially since WIPP is a NATIONAL ASSET. This will add additional decades of waste management at the generator sites increasing the risk of an event impacting the workers, community, and the environment. Priority of shipments needs to remain controlled by the CBFO with no restrictions from the state.