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New Mexico Environmental Department
Hazardous Waste Bureau
Post Office Box 5469
Santa Fe, NM 87502-5469

Re: Sandia National Laboratory—Mixed Waste Landfill (Corrective Measure Implementation Plan)

Dear Regulators:

I urge the Department, in response to its 5-Year Review, to order that the contents of the Sandia Laboratory's Mixed Waste Landfill, located four miles east of Mesa del Sol, excavated and transported for off-site disposal.

Capping is not disposal ! The literature is replete with instances in which "engineered dirt" or asphalt caps, of radioactive and toxic materials, over the long term, deteriorated, breached, or otherwise failed to adequately prevent surface and sub-surface leakage of the materials that were placed seemingly placed "out of sight; out of mind" by capping. Capping may be relatively inexpensive and expedient; it is not an alternative to industry best practices handling, disposal, or more appropriate storage regimes. Capping is inconsistent with tenets of the Precautionary Principle for persistent toxic and radioactive chemicals such as those found in the landfill.

Sandia's 5-Year Review proposed that planning and implementation for excavation and offsite disposal of radioactive and toxic chemical wastes in the mixed waste landfill (MWL) is feasible and can be done safely. Sandia states that the process can begin by the NM Environmental Department issuance to Sandia of an Order to produce an excavation Corrective Measures Implementation Plan (CMI Plan). Sandia's 5-Year Plan Review provides the evidentiary basis for the NMED to go forward with an Order for Excavation and Evacuation.

Sandia states (Review Section 5.4) that the preferred alternative is excavation with offsite disposal as a remedy rather than the onsite disposal alternative. According to the Sandia's 5-Year Review: excavation with offsite disposal, as compared to onsite disposal, presents less cost, less risk to workers and the public, less time, a smaller footprint, less time devoted to regulatory matters and state that disposal pathways currently exist offsite for the disposal of all wastes along with available onsite processing facilities. Excavation could allow the current site of the dump to become available for industrial use. Excavation can be accomplished by conventional and remote controlled robotic equipment. Radionuclides such as Cobalt 60 and Tritium have decayed to levels that are acceptable for worker safety.

Additional reasons and justification for the excavation of the Mixed Waste Landfill include:

1. The Mixed Waste Landfill represents a permanent threat to the safety of the Albuquerque community. The MWL is located in close proximity to Albuquerque, Isleta Pueblo, the Sunport, and the growing urban area and children's park of Mesa del Sol.
2. The existing dirt cover installed above the wastes can not protect the public and Albuquerque's drinking water aquifer from the long-lived radionuclides and toxic chemicals.
3. The dump contains hundreds of solvents, heavy metals and radionuclides in unlined pits and trenches leaking to Albuquerque's drinking water aquifer. These are the most toxic types of waste on the planet from nuclear weapons production, nuclear reactor meltdown testing, and the military. It has been documented that substances such as: Plutonium-239, Americium-241, Cesium-137, U-235, mercury, lead, PCE, PCB's, beryllium, and Cadmium are found in the dump. Chlorinated solvents such as TCE are already leaking from the dump to Albuquerque's drinking water aquifer.
4. Canisters in the MWL that contain metallic sodium and high level spent fuel from nuclear reactor meltdown experiments can corrode and catastrophically explode, breaching the dump's dirt cover and spreading radiation into Albuquerque's air, soil, and water—the equivalent of a "dirty bomb". In October 2015, at Beatty, Nevada, such an explosion sent a radioactive cloud over four states, caused by rainwater leaking into radioactive waste with metallic sodium.
5. An independent study by the New Mexico State University affiliated WERC concluded:

“ the nature and amounts of hazardous and radioactive materials stored at the Mixed Waste Landfill, plus the location of the site next to a growing metropolitan city, represents a long-term potential hazard to both humans and the environment and unless excavated the site will be a permanent legacy issue to DOE.”
6. The radioactive wastes must be monitored forever, but there is no plan for that.
7. Sandia has experience excavating its dumps as evidenced by the Chemical Waste Landfill that was done without incident.
8. Sets a good precedent for other cleanups/excavation at other DOE facilities in New Mexico, including Los Alamos National Laboratory.

For the reasons stated in this appeal, I urge the Department to issue an Order to Excavate and Evacuate Solid Wastes and to Remediate the Mixed Waste Landfill of Sandia National Laboratory.

Respectfully,

A handwritten signature in blue ink, appearing to read "John E. Wilks, III". The signature is fluid and cursive, with a large initial "J" and "W".

John E. Wilks, III

cc: U. S. EPA Regional VI(Hazardous Waste Disposal)