

Dave Cobrain, Program Manager
Hazardous Waste Bureau
New Mexico Environment Department
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Re: Public Comments about Sandia National Laboratories' Mixed Waste Landfill Five-Year Report and Request for an *Immediate* Environment Department Order to Sandia to Proceed with Excavation and Off-site Disposal of Long-lived Toxic and Radioactive Chemical Wastes through an Corrective Measures Implementation Plan

Dear Mr. Cobrain:

Sandia National Laboratories' Five-Year Review proposes 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 says the process can begin by the New Mexico Environment Department (NMED) issuance to Sandia of an Order to produce an excavation Corrective Measures Implementation (CMI) Plan. Sandia's Five-Year Review provides the evidentiary basis for the NMED to go forward with an Order for excavation.

I am supportive of Sandia's recognition in the Five-Year Review that the best alternative for the MWL dump is excavation with offsite disposal. The Environment Department Secretary's 2016 Final Order specifies that the existing dirt cover "may not be the most appropriate long-term solution for the [MWL] site."

Sandia states that the preferred alternative is excavation with offsite disposal as a remedy rather than the onsite disposal alternative. Five-Year Review Section 5.4.

According to the Sandia 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;
- the disposal pathways currently exist offsite for the disposal of all the wastes along with available onsite processing facilities;
- excavation could allow the current site of the dump to become allowable for industrial use;
- excavation can be accomplished by conventional and remote controlled robotic equipment; and
- radionuclides, such as Cobalt 60 and Tritium, have decayed to levels that are acceptable for worker safety.

Some reasons for excavation of the MWL:

1. The MWL represents a permanent threat to the safety of the Albuquerque community. The MWL is located near 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 cannot 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. They include Plutonium-239, Americium-241, Cesium-137, U-235, mercury, lead, PCE, PCBs, beryllium, and cadmium. Chlorinated solvents, such as TCE, are already leaking from the dump to Albuquerque's drinking water aquifer.
4. These wastes must be monitored forever, but there is no plan for that.
5. 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. Watch such explosions that sent a radioactive cloud over four states, caused by rainwater leaking into radioactive waste with metallic sodium at Beatty, Nevada in October 2015: <https://tinyurl.com/BeattyExplosion>.
6. 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.*
7. Sandia has experience excavating its dumps as evidenced by the Chemical Waste Landfill that was done without incident.
8. Ordering excavation sets a good precedent for cleanups/excavation at other DOE facilities in New Mexico, including Los Alamos National Laboratory.

This letter calls on the New Mexico Environment Department to *immediately* issue an Order for Sandia National Laboratories to proceed with a Corrective Measures Implementation Plan for the excavation and offsite disposal of the long-lived toxic and radioactive chemicals contained in the Mixed Waste Landfill.

Thank you for your careful consideration of my comments.

Sincerely,


7/13/19

 Signature Date

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