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July 22, 2014

The Honorable Ernest Moniz
Secretary
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Moniz:

I am writing regarding two recent incidents at the Waste Isolation Pilot Plant (WIPP) in the State of New Mexico and a related issue of waste shipments. As you know, WIPP is the only operational nuclear waste repository in the world that has been solely accepting the Department of Energy (DOE or Department) defense-generated transuranic (TRU) wastes since 1998.

Fire: As I understand the facts, there was an underground salt hauler fire on February 5, 2014, followed just days later by an unrelated radiological release event. The Department has investigated the February 5 fire and deemed it an accident, albeit one that was serious and preventable.¹ There was no apparent radiological release associated with the fire, but a few workers suffered from smoke inhalation.

Radiological Release: I find the second incident particularly concerning. According to DOE, on February 14 – only nine days following the fire incident – a monitoring device detected a radiological release from the underground salt mine repository.² There were several individuals onsite at the time of the release, and 21 individuals tested positive for low level of internal contamination as of March 28.³ Some low level radiation was detected at the site and 0.6 miles away from the site the following day. As a result, most site operations, including the receipt of additional transuranic nuclear waste shipments, have been suspended pending the result of a full investigation of the incident. What is clear is that the radiological release from the mine itself could have been prevented, according to DOE's Phase 1 Report of the incident (April 22, 2014), which only examined the reasons for the release of radioactive material from the underground to the environment.

It is my understanding that the source of the release has been determined to be a specific waste drum in storage Panel 7, Room 7 and that this container originated in the Los Alamos National

¹ Accident Report on the Underground Salt Haul Truck Fire at the Waste Isolation Pilot Plant, DOE, March 2014.

² The transuranic radionuclide involved in this event was predominantly americium-241 – a material which is consistent with the waste disposed of at the WIPP (Jose R. Franco, Manager U.S. Department of Energy – Carlsbad Field Office, Feb 26, 2014). Trace amounts of americium and plutonium were also detected off-site (Phase 1 Report on the Radiological Release Event at the Waste Isolation Pilot Plant, DOE, April 2014).

³ Phase 1 Report on the Radiological Release Event at the Waste Isolation Pilot Plant, DOE, April 2014.

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Lab (LANL), where a new type of packing material (resembling an organic type of cat litter) may have caused the reaction that led to the radiological leak. This organic packing material replaced a previously used inorganic type material which DOE is now reviewing. According to the Department, there are more than 500 containers with the suspect organic cat litter packing material, all originating at LANL. Of the 500 containers, more than 350 are already stored at WIPP, 113 are at a temporary storage site in Andrews, Texas operated by the Waste Control Specialists LLC (WCS), and 57 remain onsite at LANL.

At the direction of New Mexico state agencies, the remaining containers at LANL have been placed in a special temperature-controlled concrete building that isolates those containers from the outside environment and continuously monitors their temperature. The containers at the WCS are stored in a trench 75 feet deep and covered with sand. Most of the remaining containers at WIPP are actually stored in Panel 6 and not in Panel 7, where the release occurred. While the Department reportedly plans to seal off Panel 6 at some point, there is no clear timeline for such action.

Status of Waste Shipments: I understand that all TRU waste shipments to WIPP have been suspended; this includes wastes from sites in Idaho, New Mexico and South Carolina. In late March, DOE and the WIPP site management and operating contractor decided temporarily to ship TRU waste to the WCS commercial low-level waste treatment, storage and disposal facility in Andrews, Texas. Weekly waste shipments took place in April because the Department contracted to remove 3,706 cubic meters of TRU waste from LANL by the end of June 2014. However, all shipments from LANL were halted when the waste container that leaked was identified as originating from there; consequently I presume that DOE has not met its contractual waste removal obligation.

Questions: While I appreciate the continuous updates DOE provides to the local communities in the vicinity of the WIPP site and the regular news releases on the on-going investigation, I remain concerned with the overall situation at WIPP. Specifically, I would appreciate answers to the following questions and any additional clarification that you can provide:

1. When does the Department plan to complete Phase 2 of its investigation, which would examine the root cause of the radiological release and follow-on actions? Are there any preliminary findings that DOE can share with me?
2. According to several media reports who cite officials close to the investigation, WIPP may be closed for up to 3 years.
 - a. Is this a realistic estimate?
 - b. Does DOE have a contingency plan to address potential violations of standing contractual agreements DOE has with generating sites for TRU waste removal that might lapse while WIPP is still shutdown?
3. I believe that most of the remaining waste drums at WIPP, which were packed in a

similar manner to the drum that leaked radiation, are stored in WIPP's Panel 6.

- a. Are there plans to permanently seal off and isolate the waste in Panel 6?
 - b. How concerned are you with the presence of so many other similarly packed and potentially unsecured drums?
 - c. Are the drums currently stored on location at LANL and those that were shipped to the WCS facility in Texas secure?
4. Are there other waste generating locations in addition to LANL that generated the specific waste stream and storage drums of concern? If so, what is being done to address this?
5. What is the cost estimate associated with the investigation and any remedial actions leading up to the reopening of WIPP?

I have been paying close attention to how the federal government – and specifically the Department – is handling the unfolding situation and related investigation at WIPP. Swift and well thought-out actions are necessary to restore confidence in the way defense nuclear waste is handled in the United States. Incidents such as these have the potential to undermine confidence in the federal government's ability to control and dispose of nuclear materials safely. I hope and expect that the Department is doing all it can to avoid such negative consequences by working expeditiously to resolve the situation at WIPP and establishing protocols to prevent similar events in the future.

Thank you for your attention to this important matter. I look forward to your response.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa Murkowski", with a stylized, flowing script.

Lisa Murkowski
United States Senator