Defense Nuclear Facilities Safety Board hearing of March 22, 2016 Santa Fe, New Mexico

Testimony of Greg Mello, Part II: Post-Hearing Comments

March 23, 2016

Dear Chairman Connery, Members of the Board, and staff –

Thank you again for coming to New Mexico and examining some of the safety issues at Los Alamos National Laboratory (LANL) in a public hearing. Your professionalism and ethic of public service were clear, as they have always been. The DNFSB has long been one of the best agencies in the federal government – the best we know. We are grateful for your work, advocate for it frequently on Capitol Hill and elsewhere, and admire its continuing technical excellence.

The <u>testimony</u> I submitted last night was, as you see, oriented in substantial part toward Ms. Creedon and Ms. Regalbuto. Superficially at least, much of what Trish and I put there does not lie within your legislative mandate. Nevertheless I strongly encourage you to mull over what I wrote, in detail and overall, for relevance. It might affect *how* you do your work.

We were not pleased that Ms. Creedon and Ms. Regalbuto left the hearing early, contrary to the agenda posted and handed out. Neither were we pleased that Dr. McMillan was not in attendance. All of our preparations assumed these parties would be present throughout the meeting.

Not just Trish and I but many of us with some years of experience observing management and safety issues in the National Nuclear Security Adminstration's (NNSA's) warhead complex are noticing a growing absence of accountability and a decreasing ability to complete needed work. Both of these negative trends are quite compatible, even served, by a narrow professionalism that does not challenge systemic dysfunction.

My comments were an attempt to illuminate that larger ground. Almost one thousand years ago, a Japanese sage wrote, "When one side is illuminated, the other side is dark." At this hearing, the Board's laser focus on transuranic (TRU) waste at Area G left a great deal – *almost everything important about safety at LANL* – in the dark. There were some tentative flashes of light (for example regarding safety culture and emergency exercises) but they were the exception and they were flashes only, not sustained, penetrating illumination.

While it is not in the Board's purview to examine the importance of LANL's various missions, or facilities, the Board can rest assured that not just the Study Group, but also many parties in government, are less than impressed with how "essential" a lot of LANL's work is. That was a major point in my testimony. One former senior LANL administrator suggested to me a couple of years ago that about half of LANL was superfluous to its current missions. That is also my estimate.

The Board therefore need not be shy about ensuring safety at LANL facilities. The sky has never fallen because such-and-such a LANL facility, or even all of LANL, has been temporarily shut down for compliance purposes. The tiresome repetition by many parties of the "importance" of LANL's missions is at odds with reality, even from a nuclear hawkish perspective. It is not too much to say that a good part of LANL is basically a fraud, the product of salesmanship and politicking more than sound science.

In a valuable <u>presentation</u> provided to us by congressional staff and no doubt already in your files (but submitted here for the hearing record) – "Safety Culture: Working on Small Problems Before They Become Big Problems" – by Thomas Weishar, Director of Environment, Safety, and Health in NNSA's Naval Reactor program, the author quotes a conclusion from the Challenger accident post-mortem:

[The p]robability of a bad event is directly proportional to day-to-day deficiencies at the work site.

At LANL, the mountain of day-to-day deficiencies in safety compliance is staggering. They range from out-of-date Documented Safety Analyses (DSAs), mentioned by a speaker last night, to a site-wide Justification for Continued Operation (JCO) that has been renewed multiple times and may still be in effect, to known but tolerated deficiencies at particular facilities (e.g. at PF-4 and the Waste Characterization, Reduction, and Repackaging Facility, WCRRF), to numerous seismic inadequacies at several major buildings (including but not limited to the Chemistry, Metallurgy Research building, CMR), to *planned* violations of safety standards (at the Radiological Laboratory, Utility, and Office Building, RLUOB). Violations of safety regulations at LANL are frequently tolerated for years or even decades and in many cases there is no plan and no budget to *ever* meet DOE standards or requirements.

In our opinion the Department of Energy (DOE) and the Board need to become considerably more aggressive in rectifying these problems or they will never be fixed. *They never have been*. They roll along, new problems adding to (or at best replacing) the old, from one administration and one contractor to the next.

And the same or similar safety (and management) problems repeat, as more than one speaker said last night.

All government parties seem to be living in the fantasy that compliance with environmental and safety requirements will occur indirectly, magically even, without any kind of governmental *force majeure*. Who are we kidding?

Right now DOE, as well as the Board, are enabling LANL's noncompliance.

This staggering background of noncompliance and poor environmental management performance lent a surreal quality to last night's proceedings.

We have to ask: who, exactly, is not compliant? Who, exactly, is responsible? An innocent observer couldn't really tell last night and frankly I am not sure if the Board understands this clearly.

The contractor, Los Alamos National Security, LANS is fully responsible, full stop. That is what they are paid for, and paid very well indeed. The Board and the DOE representatives elided this fact last night and really let the contractor staff – no corporate officers were even present, to our knowledge – "off the hook." There was an excess of misplaced kindness to the contractor, which after all is being fired by DOE for its safety and infrastructure failures – mostly at nuclear facilities that are in the purview of the Board. The Board's job is to advise DOE, but DOE doesn't manage or operate the site. That is why DOE has "management and operating" contractors. So advising DOE boils down to advising DOE what to tell its contractors.

I also don't think it is clear (to key members of Congress for starters, who have at times expressed confusion on this point, and even to senior NNSA officials) that DOE *owns* the LANL site and *hires* (and *fires*) LANS. DOE has the power and the responsibility to shut down activities deemed insufficiently safe, *and at LANL that needs to start happening, or compliance, let alone creation of a sound safety culture, will never occur.* We did not get a hint of that last night.

After the WIPP accident of February 14, 2014, instead of pursuing damages against LANS, DOE *bifurcated its own field office and oversight functions*. That bifurcation, which for the record we believe was and is a bad idea, is a rococo flourish on the previous bifurcation that created NNSA, a legislative act which many parties (e.g. the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, and the DOE Inspector General), as well as the Los Alamos Study Group, consider a mistake.

The bureaucratic complications created by the new field office were on full display last night, as well as an imbalance in staffing between the old and new offices. The new Environment Management (EM) office, which deals with less than 10% of LANL's programs, is to have something like 41 staff members, while the main Los Alamos Field Office, which oversees more than 90% of LANL's work including most of its nuclear facilities, processes, and materials, has roughly 100 staff members. The latter office has been chronically understaffed, as was stated, or understated, last night.

Regarding the narrow subject of the meeting, we were shocked that remedial actions were taking so long to do. Some, like trimming brush around Area G, should have been done before the ill-conceived Framework Agreement. Some, inexplicably, have yet to be done. Honestly, we don't fully understand why these drums haven't been stabilized yet. We don't understand why a lot of important improvements take so long at LANL and DOE. Pace and priority are not identical but they do go together.

With the present languid pace *in virtually every environmental and safety program at LANL* – as if time and money were unlimited – further program failures and serious accidents are inevitable. Dilatory and postponed work signals, to all parties, low management priority.

Finally, the tremendous secular decline in transparency at NNSA sites over the past 20 years needs to be mentioned. It leaves the Safety Board, DOE safety officials, and contractor safety officers without knowledgeable support. It decreases accountability. All these well-intentioned parties cannot succeed in their safety missions without a cultural change that includes greater openness.

Sincerely,

Greg Mello