

From: [John Ahlquist](#)
To: [Roberts, Kathryn, NMENV](#)
Subject: Comments on the Draft Consent Order (dated March 30,2016) between NMED and DOE
Date: Saturday, May 14, 2016 11:44:56 PM

Sent from my iPad

Kathryn Roberts, Director
Resource Protection Division - NMED
Santa Fe, NM

Dear Director Roberts:

My comments on the draft order are provided below. Thank you for this opportunity to comment.

Sincerely,

A. John Ahlquist
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Walnut Creek, CA 94597

**Comments on the Draft Compliance Order on Consent
Between the Depart of Energy and the New Mexico
Environment Department
For Environmental Remediation at the Los Alamos
National Laboratory
Dated March 30. 2016**

Thank you for the opportunity to provide comments on the subject order. I offer them based on my direct experience at LANL in environmental surveillance and remediation, including the TA-1 remediation of 1975-76, and direct and indirect programmatic oversight through my employment in the Office of Environmental Restoration at Department of Energy Headquarters and at the University of California Office of the President. My comments follow:

General:

It is encouraging to read in Section II.D. on governing principles that there is recognition that the process should be an action-oriented, cooperative approach that is cost effective. It will take a great deal of cooperative effort to ensure this

happens. It may require direct involvement or direction from the governor herself.

Before signing, the signatories should make it clear what they expect to accomplish, the costs to accomplish that and the schedule. It should be made available in an executive summary of less than five pages. I call for a public hearing to bring transparency to this order.

Need for transparency: It is being negotiated without the contractor or NNSA [for programmatic coordination] at the table. Also, the current draft of the Compliance Order on Consent needs to be clear that it is an improvement on the previous order which had no clear emphasis on remediation. It needs a bias for action! It is difficult to find out costs and results from the current order.

Appendix B lists milestones and targets for the next few years. It does not show actual remedial action but includes continued characterization and writing of plans. I learned in the cleanup of TA-1 in 1975-6 that it almost impossible to plan and characterize your way to a successful cleanup. The original scope was to spend \$1500 to remove a septic tank. We spent \$769K and removed 20,000 cubic yards of material. We had clear criteria of what constituted a successful cleanup and a good crew determined to find whatever contamination might be there. It was very much an iterative process. The remediation efforts drove the characterization. It would not have been possible to characterize and plan for everything that we encountered and we would have likely spent more than the remediation cost. I suggest the order take a fresh look at an active iterative process for accomplishing actual remediation.

Exorbitant costs for little value: As shown in the attachment from the public hearings on the RCRA permit in 2010, in the first six years of the current order, nearly \$1B was spent. Less than 10% went for cleanup. Since it is difficult to find real data on the costs since then, assume \$100M -150M/yr has been spent through FY2016 bringing the total spending on the current order to \$1.5B or more. What has been accomplished? NMED and DOE should publicly state what remediation has actually occurred and been closed with this \$1.5+B. List the projects by year and their cost.

Major scandal in the making? Should a reporter or politician chose to make this an issue, the money already spent poorly is much larger than the \$535M from the Solyndra scandal of several years ago. This misspending for this order goes

across political party lines having started in the Bush years in the White House and continuing into the Obama years. At the state level, it has crossed the Richardson and Martinez administrations. With the draft order, I expect there will be improvement in percentage spent for remediation, but if actual remediation costs are not a large fraction of the total spent, the scandal will continue to grow. Exhaustive characterization and excessive confirmation sampling must become a thing of the past.

Double Standards: NMED has and continues to have double standards for Los Alamos as compared to the rest of the state. For example, LANL was required to investigate for hazardous contaminants for a borrow pit created during the development of the Western Area in Los Alamos. Where else in New Mexico were borrow pits for housing developments required to be sampled? Of a more recent and egregious nature is the standard that any area from DOE/LANL must not have any anthropogenic contaminants prior to release from further action. This means any zinc from galvanized fence posts to polyaromatic hydrocarbons [PAH] from asphalt. LANL spent hundreds of thousands of dollars to remediate small amounts of PAH contamination prior to the development of the new Smith's complex. The fill brought in by Smith's contained asphalt bits and there was no response from NMED. PAH's can be found anyplace there is an asphalt pad or road. Zinc can be found wherever there is galvanized metal. Where else in NM are the landowners required to clean up all anthropogenic contaminants? Also, why does DOE continue to provide funding for such wrong-headed cleanups? The taxpayers deserve better. Uniform standards should apply statewide or the regulated community would have ample opportunity to file lawsuits claiming discriminatory practices by NMED.

No clear focus: The problem has been lack of focus on what is truly important and was driven by NMED and acquiesced to by the DOE. NMED's authority to regulate this remediation was granted by the EPA which has abdicated its oversight responsibility. I saw the same problem at the Rocky Flats Plant in the 1990s where DOE, the Colorado Department of Health and the EPA were at continual loggerheads over the cleanup agreement. I was at the seminal meeting when the Colorado Lt. Governor called a halt to the foolishness and insisted on a collaborative and not combative approach. The cleanup had been predicted to last 30 years and cost \$24B. It was completed in less than ten years for \$6B. At LANL there was a clear focus for the removal of structures at TA-21 and a

major project was successfully completed in a reasonable time. NMED was not involved in this work. If the governor provides clear direction, it is possible that the guiding principles of this draft order will be actually implemented. EPA should be monitoring NMED very carefully.

Nice but necessary? In situations where the risk is minimal to human health and environment, no further action is the preferred remedy. It is difficult to understand why the cleanup of the hillside below TA-32 was necessary when the only perceived risk was to a few earthworms in a very small area. Earthworms are not an endangered species and population at risk [if there were any in the dry tuff on the canyon wall] was very small compared to the number of earthworms across the Laboratory and state. The small amount of contamination was on inaccessible hillside, was minor in scope, and the risk to humans and the environment was minimal. Because of its location and transportation risk, the worker and population risks were much higher than the risk mitigated and hundreds of thousands of dollars were spent. The contamination was more like a benign mole or freckle – best to be left alone.

Lack of strategic thinking by NMED: Do they want to do remediation? If so, where is the emphasis? There have been so many characterization wells [120] drilled [many of them of minor usefulness] that they've become a hazard. This was clearly evident after the Los Conchas fire when the Laboratory had to scramble to protect wells in canyons from excess runoff so that they wouldn't serve as a conduit to the groundwater. Several well failures have already occurred and the probability of future failures is high. Yet, NMED is considering that another 30 wells are needed for a cost of \$120M. I learned a valuable lesson in the 1970s that a test core hole is a pathway to groundwater.

Another of the issues over a number of years has been the TRU waste drums stored in tents at TA-54. It is a prime example of regulatory mismanagement and lack of strategic thinking by NMED and allowed by EPA. The drums were safely stored on asphalt pads and covered by an earthen tumulus. When NMED got regulatory in the authority over the hazardous waste portion of the contents of the drums in the early 1990s, they correctly noted that weekly inspections could not be made to see if the drums were leaking but then their thought process went awry. They fined DOE and LANL a large sum and required the drums be uncovered and placed on asphalt pads covered by large tents so they could be inspected weekly. At the same time, they were fighting the only pathway

to disposal – the opening of WIPP - and managed to delay its opening by nine years to 1999. The Cerro Grande fire in 2000 was a serious threat to those drums and would not have been had the drums been left covered and LANL been able to uncover the drums and prepare them for shipment to an operating disposal site in a controlled manner. The NMED fear of leaking drums was largely unfounded and had leakage occurred it wouldn't have spread very far and would have been contained with no risk to the environment or humans.

Point O of Appendix C [page 4] needs to be changed to remove any further characterization requirements. I was personally involved characterization of Material Disposal Area AB in the 1970s and 1980s. With that characterization data and all that incurred in the 30+ years since then, there should be ample data to make a remedy selection. The radiological components of the waste are very well known and the hazardous waste components are well known. Location of the shafts and placement of the waste is well known. Additional drilling will only enhance the opportunities for failure of any remedy because it will create additional pathways to groundwater.

NMED should make final decisions: Over the past eleven years, NMED has provided certifications of completion for only 243 of 1397 solid waste management units and areas of concern [page 30 Appendix A]. NMED continues to request supplemental investigation reports [Appendix D] requiring additional expensive sampling and information after a remedial action has been completed. Not once has this additional expense caused any alteration to a decision. NMED needs to wean itself from the comfort of just a bit more information. I suggest that if NMED wants more information, it should come from the NMED budget. After an area has been determined to need to no further action, it means just that. No further public meetings are necessary or required.

Activist groups: Once again I urge the activist groups to use their energy and skill to agitate for cost-effective and prompt cleanup to a reasonable standard. At the 2010 public hearing on the renewal of the 1989 RCRA permit [which was over ten years behind schedule] I noted that these groups had significant influence on NMED. I thought this influence would be useful to push for a bias for action. I sent them {Concerned Citizens for Nuclear Safety [CCNS], Nuclear Watch New Mexico [NWNM], Southwest Research and Information Center [SRIC] and Citizen Action New Mexico [CANM]} an email asking if we could work together to push for action – no

response. So, I sent them a registered letter containing the email. CCNS and CANM wouldn't even accept the registered letter – they were returned to me unopened. NWNM and SRIC accepted the letter but there was no response. I had at least hoped for some dialogue but that did not happen because they weren't interested. I can only conclude that they feign concern for cleanup but their real interest is an inordinate influence. NMED should listen to their viewpoints but stand firm and not be unduly swayed by them.

Summary: The remediation train has been misaligned on the remediation track. As a consequence, great amounts of fuel [money] have been spent to force the train down the track. The taxpayers deserve better. I am highly encouraged that the governing principles of this draft order recognize this dilemma. Recognition is the first step towards significant improvement. The real test will be implementation of these principles. The new draft of the order should not be signed until it is clear that the train is clearly aligned on the track so it can run smoothly thus requiring less fuel. The following are some elements that are needed to get on track.

- Transparency.
- Clear and actual commitment by NMED and DOE to a bias for action.
- Charts should be prepared with the following columns: FY, total budget for that year, actual remediation accomplished by site, description of that remediation, the cost for that remediation and the risk mitigated by that action. These charts should be provided for past years and for what is planned in coming years.
- Actual alignment of remediation goals and processes as stated in the draft order.
- Thoughtful engagement by the EPA including a review by the EPA Inspector General on how NMED has handled its responsibility and the lack of adequate oversight by the regional office.
- EPA should carefully monitor NMED's adherence to the governing principles. Without dramatic improvement over past performance, EPA should consider withdrawing its delegation of authority to NMED and do the cleanup under CERCLA which doesn't require direct state involvement.
- Thoughtful cleanup criteria and goals. A dollars-per-life-year-saved analysis would be instructive.
- Elimination of double standards. LANL should not be held to stricter standards than any other entity in New Mexico. Funds spent to date on the double standards should be identified.

- Review by a DOE oversight group, perhaps the Inspector General, on why DOE continues to fund a program with so little real progress and why didn't DOE take matters to court when faced with unreasonable demands.
- A plan for prioritization for work if funding is reduced after the change in administration in Washington.

Exhibit 3.
Annual Funding for Consent Order Implementation

