February 28, 2020

Stephanie Stringer
Director, Resource Protection Division
New Mexico Environment Department
1190 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Comments on Cleanup Order for Los Alamos National Laboratory

Dear Ms. Stringer,

The New Mexico Environmental Law Center hereby submits the following comments on the cleanup of environmental contamination at Los Alamos National Laboratory.¹ Cleanup is currently being conducted under an Administrative Order on Consent executed by the New Mexico Environment Department and the United States Department of Energy (DOE) on June 24, 2016 (“2016 Consent Order”).² As explained below, the 2016 Consent Order severely weakened the Environment Department’s position in overseeing cleanup at the Laboratory, resulting in a much slower cleanup. The recent DOE budget cuts for cleanup at Los Alamos National Laboratory are a direct result of adoption of the weak and largely unenforceable 2016 Consent Order. We urge the Environment Department to renegotiate the Consent Order with DOE and its contractors. We appreciate the opportunity to comment on these important issues.

I. INTRODUCTION

The New Mexico Environmental Law Center is a non-profit public interest law firm that represents environmental and community organizations on a wide variety of environmental issues including issues related to water pollution, radioactive waste contamination, uranium mining, environmental remediation, and federal government facilities. The Law Center has more than 730 members. The Law Center represents Nuclear Watch New Mexico on a variety of issues related to contamination and cleanup at Los Alamos National Laboratory.

Personally, I have been practicing environmental law for about 35 years. I worked for eight years at the U.S. Environmental Protection Agency and the U.S. Department of Justice in Washington, D.C., enforcing our nation’s environmental laws. I came to New Mexico in 1993 to

¹ This letter is based on comments that I had prepared for the public meeting that the Environment Department held on the cleanup of Los Alamos National Laboratory on the evening of January 9, 2020 at the University of New Mexico Los Alamos campus.

² State of N.M. Env’t Dep’t, Compliance Order on Consent: U.S. Dep’t of Energy, Los Alamos National Laboratory (June 2016) (“2016 Consent Order”).

1405 Luisa Street, Suite 5, Santa Fe, New Mexico 87505
Phone (505) 989-9022 Fax (505) 989-3769 nmelc@nmelc.org
Printed on elemental chlorine free, 100% recycled post-consumer, recycled paper
work for the New Mexico Office of the Attorney General in what was then the newly formed Environment Division. I worked in the Office of General Counsel at the New Mexico Environment Department for 14 years. While at the Environment Department, working with staff of the Hazardous Waste Bureau and senior management, I helped draft and negotiated the original Administrative Order on Consent, executed by the Environment Department, DOE, and the University of California on March 1 2005 ("2015 Consent Order") for comprehensive investigation and cleanup of legacy pollution at Los Alamos National Laboratory.³

We wish to thank Secretary James Kenney for holding the January 9, 2020 public meeting on Laboratory cleanup, and for taking public comments on the matter. We also wish to thank you, the Division Director, and the staff at the Hazardous Waste Bureau of the Environment Department. We appreciate your willingness to reconsider the 2016 Consent Order.

II. HISTORY

Los Alamos National Laboratory has operated nuclear weapons research and fabrication, among myriad other research and testing activities, continuously since the early 1940’s. Its operations have left behind a legacy of soil, surface water, and groundwater contaminated with a medley of toxic and radioactive substances. Through the 1990’s and into the early 2000’s, DOE and its contractors made woefully little progress in cleanup of the Laboratory. Investigation and cleanup efforts were piecemeal, uncoordinated, sporadic, protracted, underfunded, and ineffective.

Consequently, beginning in about 2001, the Environment Department began a concerted effort to force DOE and its contractor – then the University of California – to fund and implement comprehensive investigation and cleanup of the Laboratory. The Environment Department concluded that the cleanup must be accomplished under an enforceable document, with specific cleanup requirements and a detailed schedule. DOE and its contractors would face stiff penalties if they did not comply with the cleanup requirements and schedule. Noncompliance should be more costly than compliance.

A. The 2005 Consent Order

The Environment Department decided to issue an “imminent hazard” order under section 13 of the Hazardous Waste Act.⁴ This provision allows the Environment Department to issue an administrative order when the Secretary finds that the management or mismanagement of hazardous waste may present an “imminent and substantial endangerment to human health or the environment.” The order would require DOE and its contractor to take action to address the endangerment – in other words, to clean up environmental contamination at the Laboratory. Through this action, the Department aimed to get an enforceable order in place, with schedules and deadlines, and with penalties accruing if DOE did not comply.

³ In re U.S. Dept’ of Energy and Univ. of Calif.: Los Alamos National Laboratory, Los Alamos County, New Mexico, Compliance Order on Consent (Mar. 1, 2005) ("2015 Consent Order").

⁴ NMSA 1978, § 74-4-13.
Accordingly, on May 2, 2002, the Environment Department made a determination that conditions at the Laboratory posed an imminent and substantial endangerment to health and the environment under the Hazardous Waste Act. On the same date, the Environment Department issued a unilateral cleanup order under section 13 in draft form for public comment. On November 26, 2002, after considering public comments, the Environment Department issued the final unilateral order to DOE and its contractor (the University of California). DOE and the University responded by promptly suing the Environment Department in State and federal court.

The parties then entered into what became lengthy settlement negotiations. At one point, negotiations broke down. DOE insisted on putting in provisions that would have made the order unenforceable. The Environment Department broke off negotiations. The next day Governor Bill Richardson called a press conference. He accused DOE of "extortion," and said that if DOE "wants to play hardball, I can play hardball, too." The Environment Department moved into litigation mode. Department counsel filed an Answer to the complaint and began working on motions. DOE and the Laboratory got some bad press. After about two months, DOE relented and negotiations resumed.

Finally, after nearly two years of negotiations – under the consecutive administrations of Governor Johnson and Governor Richardson – the parties preliminarily reached a settlement agreement. A draft of this agreement – including a detailed cleanup schedule – was made available for public comment. On March 1, 2005, the Environment Department, DOE, and the University executed a Compliance Order on Consent, requiring DOE and its contractor to conduct a comprehensive investigation and cleanup of environmental contamination at the Laboratory. This was the 2005 Consent Order. The document is about 250 single-spaced pages long.

Of particular importance, the 2005 Consent Order placed DOE and its contractor on a detailed compliance schedule, with dozens of deadlines, culminating in complete and final cleanup of contamination at the Laboratory. Failure to meet key deadlines in the compliance schedule, without a showing of good cause, subjected DOE and its contractor to stipulated

---

5 In re U.S. Dep't of Energy and Univ. of Calif.: Los Alamos National Laboratory, Los Alamos County, New Mexico, Determination of an Imminent and Substantial Endangerment to Health and the Environment (May 2, 2002).

6 In re U.S. Dep’t of Energy and Univ. of Calif.: Los Alamos National Laboratory, Los Alamos County, New Mexico, Order: Proceeding Under the N.M. Hazardous Waste Act §§ 74-4-10.1 and 74-4-13 (Nov. 26, 2002).

7 Regents of the Univ. of Calif. v. D’Antonio, No. 02-637 MV/JJS (D.N.M. filed Sept. 30, 2002) (challenging the determination of an imminent and substantial endangerment). John D’Antonio was acting Secretary of the Environment Department at the time.


9 During the negotiations, I jokingly began referring to the evolving and expanding settlement document as “Fat Man.” Fat Man, of course, was the code name for the atomic bomb developed at Los Alamos Laboratory and dropped on Nagasaki, Japan on August 9, 1945. See RICHARD RHODES, THE MAKING OF THE ATOMIC BOMB 737-42 (1986).

10 2005 Consent Order § XII.
penalties. The 2005 Consent Order contained detailed requirements on investigation and ultimate cleanup of contamination throughout the Laboratory. It required investigation and cleanup of each of the canyons that transect the Laboratory, of the Technical Areas on the mesas (including TA-10, TA-21, TA-50, and TA-54), of the Material Disposal Areas (including MDA A, MDA B, MDA G, MDA H, and MDA L), and of hundreds of individual contaminated sites ("solid waste management units" and "areas of concern") at the Laboratory. The 2005 Consent Order contained detailed procedures on remedy selection, on cleanup standards, and on risk assessment. It included detailed technical requirements on, for example, drilling and developing monitoring wells, collecting and analyzing samples, and other "on-the-ground" investigation activities. The 2005 Consent Order also included requirements for public participation, taken from State and federal regulations.

From 2005 through 2011, under Environment Department oversight, DOE and its contractor made substantial progress in completing investigation and some actual cleanup. For example, cleanup was completed at seven MDAs: MDA AA (at TA-36); MDA B (at TA-21), MDA N, MDA R, MDA U, and MDA V (at TA-21); and MDA Y. Investigation was completed at five major MDAs: MDA C (at TA-50), MDA G, MDA H, and MDA L (at TA-54); and MDA T (at TA-21). Cleanup was completed at TA-73 (Ash Pile) near the Airport. Cleanup was completed at a mercury disposal site at TA-3. Cleanup was also completed at a PCB (polychlorinated bi-phenyls) site at TA-1. Investigation was completed at approximately 90% of individual sites. Removal of buildings at TA-21, the old plutonium processing complex, was also completed; soil remediation at TA-21 was 80% completed. The plume of hexavalent chromium beneath Mortandad Canyon was discovered and partially delineated. Groundwater monitoring networks were completed at TA-49 and TA-50 and nearly completed at TA-16 and TA-54. With the 2005 Consent Order in place, the Environment Department – and DOE – were finally making progress at cleanup.

Then in about 2011 and 2012, progress began to slow down. The new administration (under Governor Martinez) “realigned” its priorities, and cleanup at Los Alamos National Laboratory became lower priority. DOE diverted funds from compliance with the 2005 Consent Order. It demobilized its cleanup efforts. Cleanup progress slowed markedly. DOE and its contractor requested, and the Environment Department granted, more than 150 extensions of time to meet 2005 Consent Order deadlines, often without any showing of good cause.

---

11 Id. § III.G.
12 Id. § IV.
13 Id. § VIII.
14 Id. § VIII.A through VIII.C.
15 Id. §§ VII.C, VIII.D.
16 Id. §§ IX, X.
17 Id. § III.W.5.
18 The correspondence requesting and granting the extensions of time were obtained from Environment Department files.
Sometimes three or four extensions were granted for the same deadline. Eventually DOE stopped even asking for extensions of the deadlines.

As a consequence, DOE and its contractor missed many of the deadlines in the 2005 Consent Order without getting any extensions. DOE quickly fell seriously out of compliance. Violations of the 2005 Consent Order included, among other things: 1) failure to complete investigations at individual sites; 2) failure to install groundwater monitoring wells; 3) failure to submit groundwater monitoring reports; 4) failure to evaluate remedial alternatives for individual sites; and 5) failure to complete final remedies. Under the provisions of the 2005 Consent Order, DOE was liable for millions of dollars in penalties. One calculation put the figure at as much as $300 million.

**B. The 2016 Consent Order**

Then, on June 24, 2016, DOE and the Environment Department executed a new Compliance Order on Consent (“2016 Consent Order”) for the cleanup of the Laboratory. The 2016 Consent Order states that it “supersedes the 2005 Compliance Order on Consent.”¹⁹ Thus, the 2005 Consent Order has ostensibly been nullified.

Further, the 2016 Consent Order states that it “settles any outstanding alleged violations under the 2005 Consent Order.”²⁰ It settled, in other words, the Environment Department’s claims for civil penalties. But DOE did not pay any penalties. The Environment Department forgave all the penalties.

Perhaps most problematically, the 2016 Consent Order does away with the detailed cleanup schedule. The 2016 Consent Order itself contains no schedule, no final cleanup deadline, and no interim deadlines. In place of a detailed schedule, the 2016 Consent Order adopts what is described as a “campaign approach” to cleanup. Under this approach, cleanup activities “will be organized into campaigns, generally based upon a risk-based approach to grouping, prioritizing, and accomplishing” cleanup activities at the Laboratory.²¹ The “campaigns” are determined by DOE without input from the public. Each year DOE and the Environment Department are to “negotiate” a schedule of 10 to 20 enforceable “milestone” deadlines for the next federal fiscal year, but only for the next fiscal year.²² The milestones for any fiscal year are determined in large part by appropriated funding.²³

Under this regime, however, the Environment Department is powerless in negotiating a cleanup schedule. The Environment Department initially had formidable leverage that could have been used to renegotiate a strict and comprehensive cleanup schedule: tens (or hundreds) of

---

¹⁹ 2016 Consent Order § II.A.

²⁰ Id.

²¹ Id. § VIII.A.

²² Additional “target” deadlines are also to be negotiated for the second following fiscal year, but these targets are not enforceable. Id. § VIII.B and C.

²³ Id. § VIII.C.
millions of dollars in civil penalties, including stipulated penalties. But, incredibly and inexplicably, the Environment Department gave that leverage away before it even began negotiating the first year’s schedule. Consequently, the Department has had little choice in the annual negotiations but to accept the schedule that DOE proposes. And DOE’s proposed schedule is largely determined by DOE’s budget for the year. The Environment Department—the State of New Mexico—is no longer in control. As the former Chief of the Department’s Hazardous Waste Bureau stated during a transition team interview, “We are no longer in the driver’s seat. DOE tells us what it will do, and we have to accept it.”

Moreover, the “negotiations” take place without any public participation.

Thus, instead of the cleanup schedules in the (2005) Consent Order driving the DOE cleanup budget and hence driving the cleanup, the DOE budget drives the cleanup schedule in the (2016) Consent Order.

The results have been entirely predictable. Cleanup has slowed down. Indeed, under the DOE proposed budget for 2021, cleanup for Los Alamos National Laboratory has been cut by 46%, or some $100 million. Under the 2005 Consent Order, the slowdown in cleanup actions that this budget cut will necessitate would have been unlawful. DOE and its contractors were legally obligated to complete the comprehensive investigation and cleanup of the Laboratory; if they failed to meet those legal obligations, they would have been liable to the State for civil penalties and even an injunction ordering compliance. Under the 2016 Consent Order, the State is powerless to contest this cleanup budget, except in the political arena.

III. RECOMMENDATIONS

Our view is that the Environment Department needs to renegotiate a cleanup order with DOE and its contractor. The renegotiated consent order needs to include, at a minimum, the provisions discussed below.

First, the cleanup order must include a detailed schedule, including interim deadlines and final cleanup deadlines. The schedule needs to include deadlines for each individual site (solid waste management units and areas of concern), each MDA, and each TA for which cleanup has not already been completed. The order must also contain a final deadline for completion of all corrective action. These deadlines—not interim and final—must be enforceable deadlines, not mere “targets.”

Second, DOE and its contractor must be liable for stipulated penalties for missed deadlines or other violations of the order. The stipulated penalties must be severe enough to have a deterrent effect. Non-compliance must be more costly to DOE and its contractors than compliance. The stipulated penalties in the 2005 Consent Order could serve as a useful precedent, although inflation from 2005 until the present needs to be considered. The order

---

24 I served on Governor Lujan Grisham’s Transition Team for the Environment Department.

should allow extensions to the deadlines, but only upon written request, and a showing of good cause.

Third, the cleanup order needs to include detailed requirements on investigation of the Laboratory that has not already been completed. Investigation requirements must address the canyons, the TAs, all the MDAs, and all individual sites (solid waste management units and areas of concern). The 2005 Consent Order can serve as a model.

Fourth, the order should contain detailed requirements on remedy selection. It should also contain detailed requirements on cleanup standards and risk assessment. Again, these requirements can be taken from the 2005 Consent Order, although they have become fairly standard in most cleanup documents – both orders and permits – issued from the Hazardous Waste Bureau in recent years (even the 2016 Consent Order included a watered-down version of these requirements).

Fifth, the order should contain detailed technical requirements, as in the 2005 Consent Order. These requirements have also become fairly standard. They need to be written as enforceable requirements as in the 2005 Consent Order, not as mere “regulatory guidance” as in the 2016 Consent Order.²⁷

Sixth, the order needs to include requirements for meaningful public participation. The 2005 Consent Order included such requirements, incorporating state and federal regulations by reference.²⁸ The Environment Department, however, ignored this requirement when it adopted the 2016 Consent Order. The public participation requirements should be made more specific and obvious. Moreover, the 2016 Consent Order expressly limited public participation, providing that public participation requirements “do not apply to modification of the Consent Order itself.”²⁹ Public participation requirements should apply to corrective action conducted under the cleanup order to the same extent that they would apply to corrective action conducted under a permit, including modifications of the order itself.³⁰

Finally, we believe that, rather than an administrative order on consent, the order should be drafted as a consent decree, and the final document should be filed with the federal district court. This procedure will make it more difficult for future administrations to weaken the terms of the document or to disregard its public participation requirements, as was done in 2016. Moreover, the document should be signed by both DOE and its contractor as was the 2005 Consent Order, not merely by DOE as was the 2016 Consent Order. Both parties conducting the cleanup should be responsible for complying with the terms of the order and adhering to its schedule.

²⁶ 2005 Consent Order §§ IX, X.
²⁷ 2016 Consent Order Appendix F (“Sampling/Analytical/Field Method Regulatory Guidance”).
²⁸ 2005 Consent Order §§ III.J.1, III.W.5.
²⁹ 2016 Consent Order § VII.G.
³⁰ See 20.4.1.900 NMAC (incorporating 40 C.F.R. § 270.42) and 20.4.1.901 NMAC.
We recognize that DOE and its contractor may be reluctant to renegotiate the cleanup order. But DOE remains liable for millions of dollars in penalties for violations of the 2005 Consent Order in claims brought by Nuclear Watch New Mexico. These penalties can be used as leverage in the negotiations. Moreover, DOE needs to renew its Hazardous Waste Facility Permit this year. The corrective action provisions in the renewed permit can also be used as leverage to negotiate a strict, comprehensive, and enforceable cleanup schedule and detailed cleanup requirements.

Thank you, again, for the opportunity to comment on this very important issue.

Sincerely,

Charles de Saillan
Staff Attorney
New Mexico Environmental Law Center
1405 Luisa Street, Suite 5
Santa Fe, New Mexico 87502
(505) 989-9022
cdesaillan@nmelc.org