

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

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**THE LOS ALAMOS STUDY  
GROUP,**

**Plaintiff,**

**v.**

**UNITED STATES DEPARTMENT  
OF ENERGY, et al.,**

**Federal Defendants.**

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**Case No. 1:10-CV-0760-JH-ACT**

**DECLARATION OF DONALD L. COOK**

I, Donald L. Cook, Ph.D., pursuant to Title 28, United States Code, Section 1746, declare:

1. I am the Deputy Administrator for Defense Programs at the National Nuclear Security Administration (“NNSA”), a semi-autonomous agency within the Department of Energy (“DOE”). I have held this position since June 2010, when I was confirmed by the United States Senate. As Deputy Administrator, I am responsible for managing the U.S. nuclear security enterprise of laboratories and manufacturing facilities. Prior to my Senate confirmation, I served as Managing Director and Chief Executive Officer of

the Atomic Weapons Establishment in the United Kingdom from 2006 to 2009. From 1977 to 2005, I worked at Sandia National Laboratories, in Albuquerque, New Mexico, in Pulsed Power Sciences, Microtechnologies, Infrastructure, and Security. I am a graduate of the University of Michigan, and obtained my Ph.D. from the Massachusetts Institute of Technology. I am a Fellow of the American Association for the Advancement of Science and the Institute of Physics, and I am a member of the American Physical Society and the American Nuclear Society.

2. I oversee the proposed Chemistry and Metallurgy Research Replacement Project (“CMRR Project”), which is the subject of this litigation. This declaration provides information on the role of NNSA, the importance of the CMRR Project to our national defense, and the breadth of environmental analysis NNSA has performed and will perform to evaluate the potential environmental impacts of the proposed CMRR Project. The information contained herein is based on my personal knowledge and information provided to me during the performance of my official duties.

**Background on the Proposed CMRR Project**

3. NNSA was established by Congress in 2000 as a semi-autonomous agency within the Department of Energy. NNSA is responsible for the management and security of the nation's nuclear weapons, nuclear nonproliferation, and naval reactor programs. NNSA performs vital national security work by ensuring that the nuclear weapons in the U.S. stockpile are safe, secure, and reliable.
  
4. In the mid-1990s, Congress passed the National Defense Authorization Act, which implemented Presidential Decision Directive 15 instructing DOE "to establish a stewardship program to ensure the preservation of the core intellectual and technical competence of the U.S. in nuclear weapons." In response to this direction from the President and Congress, DOE developed the Stockpile Stewardship and Management Program to provide a single, integrated technical program for maintaining the continued safety and reliability of the nuclear weapons stockpile. The activities undertaken at DOE's Los Alamos National Laboratory ("LANL") in Los Alamos, New Mexico – a laboratory administered by NNSA – are essential to this mission.

5. One of LANL's most important facilities is the Chemistry and Metallurgy Research ("CMR") Building. The CMR Building has unique capabilities for performing special nuclear material analytical chemistry, materials characterization, and actinide research and development. These capabilities support a number of critical national security missions, including nuclear nonproliferation programs; the manufacturing, development, and surveillance of pits (the fissile cores of nuclear warheads); life-extension programs; dismantlement efforts; waste management; material recycle and recovery; and research.
  
6. The CMR Building, a Hazard Category 2 nuclear facility (a facility with significant nuclear material and nuclear operations with the potential for significant onsite consequences), is almost 60 years old. Many of its structures, systems, and components are aged, outmoded, and deteriorated. In 1999, a seismic fault trace was discovered beneath two wings of the CMR Building, raising some concerns about its structural integrity. Over the long term, NNSA cannot continue to operate the assigned LANL mission-critical CMR support capabilities in the existing CMR Building at an acceptable

level of risk to worker safety and health.

7. Since 1999, NNSA has taken steps to minimize the worker health and safety risks associated with continued operations at the CMR Building. NNSA has limited CMR operations to the minimum set of activities that support core mission requirements or that leverage CMR capabilities. It has reduced the radioactive and combustible materials inventory and the operational footprint. Programmatic operations have ceased in three of the six laboratory wings, and new technical safety requirements are currently being implemented that reduce the radioactive material-at-risk allowed in the building. During the next few years, certain functions, such as sample management, will be relocated to other facilities within LANL to further reduce the material-at-risk in the CMR Building. Through all of these actions, LANL is striving to reduce the worker health and safety risks of operating CMR while continuing to meet national security commitments.
8. To ensure that NNSA can fulfill its mission-critical capabilities for the next 50 years in a safe, secure, and environmentally sound manner, DOE proposed in the late 1990s to develop a new, long-term facility where current CMR

activities could be carried out without the worker health and safety risks associated with operating the present CMR Building. This effort became known as the CMRR Project. As part of the proposed CMRR Project, a new nuclear facility (“CMRR-NF”) would be constructed, allowing CMR capabilities to be replaced and relocated.

### **Status of the NEPA Determination Process**

9. DOE has undertaken extensive environmental review of the proposed CMRR Project pursuant to the National Environmental Policy Act (“NEPA”). On July 23, 2002, NNSA published a Notice of Intent to prepare the CMRR Environmental Impact Statement (“EIS”) and invited public comment on the CMRR EIS proposal. NNSA also hosted two public scoping meetings on the proposed CMRR Project in August of 2002. After analyzing the potential environmental impacts and considering public comments, NNSA issued the Final EIS for the proposed CMRR Project in November 2003 (“2003 EIS”). In the EIS, DOE analyzed the potential impacts of four distinct alternatives, together with four construction options for each of the alternatives involving new construction.

10. NNSA published its Record of Decision (“ROD”) on February 12, 2004 (“2004 ROD”) announcing that the new CMRR Project would consist of two buildings: a single, above-ground consolidated special nuclear material-capable, Hazard Category 2 laboratory building (the CMRR-NF), and a separate but adjacent administrative office and support functions building, now referred to as the Radiological Laboratory Utility Office Building (“RLUOB”).
  
11. According to the original design analyzed in the 2003 EIS, the proposed CMRR-NF was to have a footprint of 300 by 275 feet, with one story below ground and one story above ground. Excavation for the building would go no deeper than 50 feet, and construction was expected to last 34 months.
  
12. Since 2004, new developments have arisen that required changes to the CMRR-NF design. Specifically, a site-wide analysis of the geophysical structures that underlay the area occupied by LANL was prepared. In light of this new geologic information regarding seismic conditions at the site, and more detailed information on the various support functions, actions, and

infrastructure needed for construction, changes were made to the proposed design of the CMRR-NF. In addition, design modifications have been made to ensure the facility implements updated DOE nuclear safety basis requirements for increased facility engineering controls to ensure protection of the public, workers, and the environment. Also, sustainable design principles have been incorporated to minimize the environmental impacts of construction and operation of the proposed CMRR-NF.

13. These changes from the original proposed design relate to structural aspects of the building, as opposed to the mission or purpose. The current design for the laboratory consists of an enlarged footprint, a deeper foundation, thicker walls, ceilings, and floors, and additional infrastructure. The current planned footprint is 342 by 304 feet, with three levels below ground and one-and-a-half levels above ground. Two concrete batch plants and approximately 560 tons of structural steel will be needed for construction, and an additional 75 feet of excavation will be required to meet seismic design requirements. Based on an enhanced understanding of the geology, current design practices will require excavation of the building footprint to an average depth of 125 feet. The resulting hole will be backfilled up to 60 feet with a lean, low-



slump concrete to stabilize the soil and support additional facility mass. All excavated soil and rock material from the CMRR-NF site will be transported to storage areas within LANL and ultimately be reused in various construction and landscaping projects. Construction of the CMRR-NF will take longer and cost more than the proposed design analyzed in the 2003 EIS.

14. Despite these design changes, the purpose and need for the CMRR Project have not changed, nor has the scope of operations to be carried out in the proposed CMRR-NF. The quantity of special nuclear material that could be handled and stored in the CMRR-NF would remain constant at six metric tons. The laboratory space where key mission operations would be performed in the facility is 22,500 square feet, which is significantly reduced from what was contemplated prior to the design modification. The design changes proposed for the CMRR-NF are primarily a function of seismic and other safety concerns and are not dictated by programmatic changes.
15. On July 1, 2010, Plaintiff's counsel sent a letter to DOE Secretary Dr. Steven Chu and NNSA Administrator Thomas P. D'Agostino requesting that DOE halt any and all CMRR-NF design activities, make no further contractual

obligations, and seek no further funding until a new EIS was prepared based on the updated CMRR-NF design. On July 30, 2010, I responded to Plaintiff's counsel in a letter and stated NNSA's intention to prepare a Supplement Analysis pursuant to 10 C.F.R. 1021.314(c)(2) to assist NNSA in determining whether the 2003 EIS should be supplemented, a new environmental impact statement should be prepared, or no further NEPA documentation was required.

16. On September 21, 2010, I determined for prudential reasons to pursue the preparation of a Supplemental Environmental Impact Statement ("SEIS") to analyze the potential environmental impacts associated with the construction of the proposed CMRR-NF (See Exhibit 1). A Notice of Intent to prepare an SEIS appears in the October 1, 2010 issue of the Federal Register (See Exhibit 2).
17. NNSA will conduct a public scoping process as part of the preparation of the SEIS. The scoping process will involve two public scoping meetings to assist NNSA in identifying potential impacts, alternatives, and mitigation strategies that should be analyzed in the SEIS. Other federal agencies,

Native American tribes, agencies of the State of New Mexico, and the general public are on notice of our intention to prepare an SEIS and will have an opportunity to participate in establishing the scope of the environmental analysis. In addition, NNSA will make a draft of the SEIS available to the public for a 45-day comment period. During this period, interested members of the public and stakeholders will have an opportunity to comment on the Draft SEIS, and all comments received will be considered in the preparation of the Final SEIS.

18. The Final SEIS will help me and other decision makers at DOE determine how best to proceed.

#### **Status of the Proposed CMRR Project**

19. To date, approximately \$210 million has been expended on the proposed CMRR-NF design. This accounts for six years of building design and analysis. Currently, 283 personnel (including LANL staff and contractors) are employed on the proposed CMRR-NF Project.

20. NNSA is still evaluating aspects of the relative sizing and layout of the proposed CMRR-NF, and the overall project design is presently less than 50 percent complete.
  
21. No CMRR-NF construction is underway, nor will any occur as long as the SEIS is being prepared. If one were to visit the proposed CMRR-NF site today, one would see a partially excavated slope, slightly larger than the footprint of the proposed facility, and small diameter bore holes. The slope and bore holes were excavated in 2006 solely for the purpose of geological examination. The samples from this excavation revealed the seismic concerns that prompted the amended CMRR-NF design. The area was later used as construction laydown space for the RLUOB – the administrative office and support functions building adjacent to the proposed CMRR-NF. The size of the excavation is consistent with the CMRR Project selected in the 2004 ROD, and no excavation or construction is planned during Fiscal Year 2011.
  
22. Construction of the RLUOB is complete, and building outfitting is currently underway. Occupancy will occur at the end of next year, with radiological

operations scheduled to begin in 2013.

23. Once the SEIS process is completed, if NNSA decides to proceed with construction of the proposed CMRR-NF, the building would become operational in 2022.

### **Importance of Continuing the CMRR Design Process**

24. Compliance with Plaintiff's request to "halt any and all design activities, make no further contractual obligations, and seek no further funding" for the proposed CMRR Project would involve firing most, if not all, of the 283 LANL and contract staff employed on the CMRR-NF Project in a time of economic hardship.
25. Continuing the design process on its current track allows NNSA to advance its national security mission to manage the nation's nuclear weapons and further nuclear nonproliferation efforts. Between October 2010 and June 2011, the expected SEIS period, the overall design is expected to advance by only about 15 percent. The design activities during this period will enhance

our understanding of the requirements for the project and will save a substantial amount of time and taxpayer money in the event that construction ultimately goes forward. NNSA will not undertake any excavation or grading activities until the SEIS process is completed.

26. I swear under the penalty of perjury that the foregoing is true and correct.

Dated this 4th day of October, 2010 in Washington, D.C.

A handwritten signature in black ink, appearing to read "Don Cook", written over a horizontal line.

DONALD L. COOK  
Deputy Administrator for Defense Programs