

Tri-Valley CAREs

Communities Against a Radioactive Environment

2582 Old First Street, Livermore, CA 94551 • (925) 443-7148 • www.trivalleycares.org



*Peace Justice Environment
since 1983*

Lisa Cummings, EIS Document Manager
U.S. Department of Energy
National Nuclear Security Administration
Office of Los Alamos Site Operations
528 35th Street
Los Alamos, New Mexico 87544

Fax (505) 665-4873

E-mail at lcummings@doeal.gov

RE: Scoping Comments for the LANL BSL-3 EIS

Dear Ms. Cummings:

Tri-Valley CAREs is a non-profit organization founded in 1983 by Livermore residents concerned about the local environmental impacts and worldwide proliferation impacts posed by the Livermore nuclear weapons laboratory.

On behalf of our 4,600 members, Tri-Valley CAREs submits the following comment concerning the scope of the Environmental Impact Statement (EIS) for the proposed Los Alamos National Laboratory's (LANL) Biosafety Level 3 Laboratory (BSL-3).

Since 2002, when both Livermore and Los Alamos labs announced plans to operate advanced biowarfare agents laboratories, Nuclear Watch of New Mexico and Tri-Valley CAREs have closely monitored these proposed labs and publicized areas of concern. In 2003, we initiated a lawsuit to require that each lab conduct a full EIS. We are happy that the Department of Energy has responded by announcing the preparation of an EIS for the Los Alamos site. Now we would like to provide input into LANL's EIS scoping process to make sure that the environmental impacts of this project are adequately analyzed, as per the requirements of the National Environmental Policy Act.

This EIS is critical to protect the health and environment of New Mexico residents and the many sovereign native pueblos in the area. Additionally, this EIS is critical to us because it may serve as a precedent for a Livermore BSL-3 EIS. We note that LANL's Environmental Assessment (EA) was in large part cut and pasted directly into Livermore's EA and we believe that a similar process could be followed with LANL's EIS.

With these comments, we hope to raise questions and provoke analysis in order to further the goal of preventing the spread of biological weapons, avoiding wasted resources and protecting the communities living in the shadow of this lab. We believe this boom of advanced biowarfare agent research laboratories in the US is likely to lead to great wastes of our nations resources and may leave us more vulnerable. We submit these comments

in the hope that it will encourage more careful consideration of the broad policy implications of these decisions in addition to the myriad of direct health and environmental hazards posed by this lab.

Purpose and Need

In the United States, bio-defense laboratories are proliferating at an alarming rate throughout the country with little oversight or accountability. There are now around sixty high-level laboratories (BSL-3 and BSL-4 labs) in the U.S. and about 25 new labs under construction. More than \$27.6 billion has been allocated for biodefense in the US since 2001. With massive sums of money flushing through federal biodefense budgets, we are concerned about stemming the inevitable tide of waste, fraud, and abuse. Therefore, we earnestly request that you discuss the purpose and need for the LANL BSL-3 within the context of federal spending on biodefense laboratories. Please describe why we need *this* laboratory, a brand new laboratory, rather than supporting and coordinating the ones that we already have. Further, we urge you to bring in CDC as a cooperating agency so that no duplication of efforts is made with CDC labs. Please also describe how you will ensure that the work conducted at Los Alamos lab will not be duplicative of work at other biodefense laboratories.

Need for Programmatic Review

Construction of the LLNL and LANL BSL-3 facilities, since they are the first advanced biowarfare research facilities within the Department of Energy, will establish a precedent for future BSL-3s and related biological and chemical agent research facilities at DOE facilities. DOE has proposed operating advanced biowarfare agent research labs in Livermore, Oak Ridge and several other sites. DOE's own Inspector General has stated that the biological research activities within the Department of Energy lacked appropriate federal oversight, consistent policy, and standardized implementing procedures, resulting in the potential for greater risks to workers and possibly others. This cries out for a NEPA programmatic review so that each lab will have clear guidance on its role in the Energy Department's network of laboratories to avoid mismanagement and duplication. An adequate review of cumulative impacts should be evaluated. Further, a review of alternatives could be assessed as to where the best locations would be for bio-work in the DOE complex or whether it would be wiser to have these labs outside the purview of DOE and within the purview of the Center for Disease Control.

Need a Realistic Alternatives Analysis

We hope that the No-Action Alternative will be a meaningful and viable alternative. In the interests of a truly unbiased process, one free of predetermination, we think it incumbent that the NNSA offer some realistic alternatives for the use of the building other than biological operations at any level. To not do so inherently prejudices the process from the start toward biological operations of some kind. Why not turn the existing building into a lab/test bed for renewable energy technologies and energy efficiencies? Or a lab/test bed/public demonstration center for improved and tangible cleanup technologies? Or a dedicated center for global climate change modeling aimed toward solutions?

Need for Proliferation Analysis / Compliance with International Law

Los Alamos is the world's first successful nuclear weapons laboratory and is known worldwide as such. Collocation of an advanced biowarfare agent facility inside LANL's classified nuclear weapons laboratory presents a whole host of problems that could undermine the Biological Weapons Convention (BWC). First off, this type of research is inherently dual use. That is, the "defensive" or "peaceful" bio-weapon research on select agents that will be conducted at these classified laboratories will be virtually indistinguishable from offensive work in the early stages.

Moreover, where defensive programs', methods, training and equipment meet the requirements of offensive programs, the potential for offensive uses for the program in a future crisis is evident. Please address how LANL will ensure that their work could not be easily adapted for offensive purposes – alleviating the fears of the US public and other nations.

Second, collocation within highly classified facilities may pose unique problems for verification and enforcement of the BWC. It may be extremely difficult for anyone outside of the facility to verify that the program is restricted to defensive purposes. Please provide a thoughtful analysis of how concerned citizens and countries could verify that the research in the laboratory is limited to defensive activities.

Third, collocation creates a “perception problem”, irrespective of whether offensive or defensive work is conducted inside a classified nuclear weapons lab. Other states and groups may perceive that new biological weapons are under production behind closed doors. Please provide an explanation of how Los Alamos plans to contend with this serious perception problem.

Fourth, collocation creates secrecy problems that undermine efforts to evaluate a state's compliance with the BWC. Please describe how LANL will ensure that the principles of openness, transparency and public accountability will guide the work conducted at the BSL-3.

Please provide a dedicated section in the EIS to address concerns posed by the placement of advanced biowarfare agent research inside secret nuclear weapons laboratories.

Disclose NBACC Connections

The Department of Homeland Security has inaugurated its National Biodefense Analysis and Countermeasures Center (NBACC) that is headquartered in Fort Detrick, Maryland but has pieces dispersed to other DOE locations. The NBACC will develop, characterize, produce and weaponize new and genetically engineered biological agents. Widespread concern is growing that these activities will not only violate the BWC's restriction on developing and producing agent delivery devices but that they may effectively give the United States a modern offensive biological weapons capability. Please disclose how work at LANL may intersect with that of the NBACC.

Need for Open Process for IBC, including selection of public members

In October 2003, the National Academy of Sciences recognized this massive growth in US bio-research and issued a report cautioning the U.S. about the hidden dangers of dual-uses of this type of research and lamenting that there were few guidelines in place to prevent the “misuse of the tools, technology, or knowledge base of this research enterprise for offensive military or terrorist purposes.” A response to this report calls upon the Institutional Biosafety Committees to ensure that US biodefense work doesn't undermine the BWC. Please outline how the IBC will ensure that work at LLNL does not interfere with the BWC and describe the selection process for the IBC members, including scientists and community members.

Whistleblower protections

A mechanism should be in place to inform all workers available whistleblower protections and 18 USC § 175. Workers who suspect that their work is for offensive purposes or is incompatible with international law should be given stringent and effective whistleblower protections should they speak up about their concerns. Because the United States is currently opposed to binding external constraints and oversight of scientists and would

prefer to have scientists self-monitor their research through the use of Institutional Biosafety Committees and similar committees, it is essential that scientists working in the biodefense arena be afforded the structure within which they may comfortably speak up about potential misuse of their research activities. It is LANL's responsibility to provide this structure. Please state in the EIS if such a structure exists and how it will be designed so that the public can be informed about the self-regulation process of the research at LANL.

18 USC § 175 is the US criminal implementing regulation for the Biological Weapons Convention. It articulates prohibitions with respect to biological weapons. Specifically, it prohibits anyone from knowingly developing, producing, stockpiling, transferring, acquiring, retaining, or possessing any biological agent, toxin, or delivery system for use as a weapon. We are concerned that offensive research could occur whether sanctioned by any management or not and prohibitions should be clearly stated and enforced. After all, the FBI's no. 1 suspect for the anthrax releases that plagued the country in the aftermath of September 11th was a scientist at a federal laboratory. These events can happen and preventative measures should be taken.

Earthquakes

Following hurricanes Katrina and Rita, it is becoming extremely clear that federal governments are not prepared for natural disaster. Los Alamos is known to be a seismically active area. This is the wrong place for the location of a BSL-3 facility. Please give us a clear analysis of the fault lines in proximity to the laboratory and provide detailed accident analysis for earthquake releases.

Transportation

Provide an analysis of security threats involving transportation, storage or use of bio-agents from terrorists, disgruntled employees or others.

LANL operating history is relevant

LANL has a history of fires, leaks, spills, accidents and security breaches. The recent missing hard drives and chromium contamination in the aquifer are just a few examples. Lax security is a major problem. For example, a lab worker walked out with radioactive material that was never missed — until a thief recently broke into his garage and tried to steal it. Can you imagine what would happen with bio-agents? Sabotage and theft scenarios should be evaluated carefully because the environmental impacts of such a release of bioagents could be catastrophic in the wrong hands.

Further, after the recent management debacle and full facility shut down at LANL – it would be outrageous if this EIS were written with a presumption of full compliance with applicable environmental standards and safety and health regulations. Some analysis should be done as to what types of environmental effects would result from failure to comply with standards. Human error and noncompliance is an unavoidable outcome of operating a facility of this size. This error should be accounted for in the calculation of environmental impacts likely to flow from the facility.

Likelihood of Accidental Releases / Exposures and Modeling

Although it is often claimed that bio-accidents rarely happen in the US, the truth is less clear. The frequency of accidents is widely disputed and there is not a comprehensive federal reporting system for accidents and releases in bio-laboratories in the US. In fact, in the last few years there have been several lab-acquired

infections and agent releases in biolabs in the US that went undisclosed for months.¹ A history of recent US accidents, releases, and infections should be included in the EIS including the accidents footnoted below.

The EIS should not rely upon outdated accident modeling. Please make sure that the accident modeling relies upon current, LANL site specific, and pathogen specific data.

Please describe how the public will be notified in the event of an accidental release or lab worker exposure and or infection. Additionally, please provide the facility limits for the amount of bio-agents that will be stored inside the facility as a whole and for each room. Also please describe whether the laboratory will mandate public reporting of security breaches, loss or inability to account for biological materials, and environmental releases.

Transmission Between Hosts

Please provide a list of bioagents that will likely be housed at the Los Alamos BSL-3 and for each agent, provide a break down of potential pathways of transmission through the community in the case of an exposure or release. (i.e. which hosts would transmit the bio-agents and how would transmission occur and how long could each agent survive in an outdoor environment without a host and how long is the incubation period – basic public health information that will enable the community to meaningfully evaluate the impacts of the proposal).

Evaluate Impacts of Terrorist and Sabotage Scenarios

Although the mission of this facility is to counter terrorism, it is not clear whether DOE will evaluate terrorist attack scenarios on this building. The EA did not evaluate this potential source of significant environmental impacts. Because of the extreme consequences of a security failure at the facility, these security risks should be addressed in an EIS. To fail to evaluate these impacts in this EIS would be folly. NEPA requires that the public be made aware of this issue, so that they can make an informed decision about approving this facility. The facility is clearly a terrorist target and should be evaluated as such. During litigation to force DOE to conduct an EIS for the proposed Livermore BSL-3, it was disclosed that no information was included about security planning for the facility because the security planning had not yet been conducted. In fact, the building was in place and still no security review had been done. Do not omit a discussion of terrorism and sabotage analysis in the LANL EIS.

HEPA Filter Weaknesses Should be Disclosed

Most HEPA filters at LANL are flimsy, weak, fiberglass, paper and glue structures mounted in wood or metal frames” that “can fail completely when wet, plugged, hot and over pressured from fires, explosions, blowers and even severe storms, resulting in an overall failure rate at DOE facilities of approximately 12%. Even under optimal conditions, HEPA filters are unable to effectively contain all bio-agents measuring between 0.03 and 0.3 micrometers. HEPA filters can be ineffective against the physical characteristics of many bio-agents, such

¹ Fort Detrick researcher exposed to Ebola from pinprick in 2004. Boston University lab workers were exposed to Tularemia in 2000 and again in 2004. Anthrax spores were found strewn outside of lab rooms in Fort Detrick, leaving one worker testing positive for exposure in April 2002. Oakland Children’s Hospital improperly received and experimented with virulent anthrax until the FBI intervened in 2004. Foot and Mouth Disease spread to different internal parts of Plum Island facility in 2004. Laboratory-acquired infection almost killed a government microbiologist in Beltsville, Maryland in 2003. Workers at the US Department of Agriculture's (USDA) Food Safety Intervention Technologies Research Unit in Wyndmoor, Pa., fell ill in May 2002. In March, 2000, an USAMRIID worker contracted glanders due to accidental exposure.

as Rickettsia. Please address how LANL intends to compensate for the inherent weaknesses in this filtration system.

Risks Inherent in Normal Operations

Although it is essential for the EIS to consider all risks associated with accident events, it is also warranted for the EIS to analyze risks associated with releases during normal operating conditions. The numerous ways that lab workers can be exposed to harmful bioagents during normal operations should be described. For instance, they are exposed to aerosols when they open a container, withdraw a needle from a vaccine bottle, blow out the last drop in a pipette or mix in a vortex. Please describe the risks associated with standard lab activities and how the lab plans to minimize these risks.

Disclose Planned Activities

Certain biodefense activities present higher risks of public release and infection and of creation of new bioagents. Please disclose in the EIS whether the laboratory will conduct aerosolization experiments or genetic modification experiments. Also please disclose the number and type of animals that will be used in research activities.

Thank you for your consideration of these important matters.

Loulana Miles
Staff Attorney
Tri-Valley CAREs

Signed this 16th of January, 2006