

**STATEMENT OF DON COBB
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Submitted to:

**UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON OVERSIGHT AND
INVESTIGATIONS**

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SUMMARY

Thank you for the opportunity to testify today on the issue of emergency response and the creation of the Department of Homeland Security. I am Don Cobb, Associate Director for Threat Reduction at Los Alamos National Laboratory. Los Alamos, working with the Department of Energy National Nuclear Security Administration (DOE NNSA) and other national laboratories, is very active in the nation's emergency response activities. Los Alamos plays an important role in the Nuclear Emergency Support Team (NEST), as well as in biological emergency response through the Biological Aerosol Sentry and Information System (BASIS). The remainder of my written testimony more fully describes our current emergency response activities.

As the nation works towards establishing the DHS, it is important to consider the following issues in the area of emergency response:

- NEST command and control—Clarify when NEST would come under the direction of the DHS and when it would be under the DOE.
- NEST research and development and technology integration—Clarify agency responsibilities for continued and enhanced NEST effectiveness.
- NEST legal issues—Legal issues related to liability and indemnification for those that respond to emergency incidents need to be sorted out and resolved.

Individuals and contracting entities responding to these incidents at the direction of the federal government need clear legal protections.

- Biological Emergency Support Team (BEST)—Consider establishing a national BEST. NEST could serve as a possible model. The issues above would also apply to a BEST.

INTRODUCTION

Thank you Mr. Chairman and distinguished members of the House Energy and Commerce Subcommittee on Oversight and Investigations, for inviting me here today to discuss the important issue of the creation of the Department of Homeland Security and what its proposed role will be in terms of dealing with chemical, biological, radiological and nuclear emergency response activities.

I am Don Cobb, Associate Director for Threat Reduction at the Department of Energy National Nuclear Security Administration's Los Alamos National Laboratory. Los Alamos is one of the three NNSA laboratories responsible for maintaining the nation's nuclear stockpile. At Los Alamos, I am responsible for all programs directed at reducing threats associated with weapons of mass destruction. I personally have more than 30 years experience working to reduce these threats.

Today, I would like to discuss with you the emergency response activities at Los Alamos National Laboratory, focusing on our involvement and work with nuclear emergency response efforts, primarily the Department of Energy's Nuclear Emergency Support Team (NEST). In addition to NEST, I also will discuss Los Alamos' efforts in responding to biological threats and incidents, in particular the Biological Aerosol Sentry and Information System (BASIS). Responding to the biological threat is an area in which our national capability is not as mature as the capabilities that we have in dealing with the nuclear threat.

NUCLEAR EMERGENCY SUPPORT TEAM (NEST)

Los Alamos plays an important role within the area of nuclear emergency response. The largest and the most well-known team in this area is the DOE-managed NEST team. NEST was created in 1975 in response to concerns over nuclear terrorism activity. Its effectiveness is due to well-established interagency relationships including significant Department of Defense and FBI collaboration. NEST is focused on responding to a threatened act involving radiological or nuclear materials or devices. Among the range of potential terrorist threats involving weapons of mass destruction, the nuclear response infrastructure and capabilities are the most mature and capable of addressing the threat. NEST includes the capabilities to search for, diagnose, and disable an improvised nuclear device.

NEST depends on a team of highly dedicated individuals at the national laboratories and facilities throughout the DOE-complex who volunteer their expertise to this program. Los Alamos' NEST and related activities are funded at approximately \$10 million in fiscal year 2002. More than 100 Los Alamos scientists and engineers are involved in various aspects of the NEST program. Nearly all are involved in other parts of the Laboratory's research in nuclear weapons or threat reduction. Many of the employees who work part-time on NEST are involved with more than one team within the NEST program.

It is important to note that NEST is more than a group of scientists who stand at the ready with pagers on their belts, waiting to be contacted to respond to a crisis. NEST team members at the DOE and NNSA laboratories, including Los Alamos, are involved in a wide range of related activities including research and development into diagnostic tools, disablement techniques, and computer simulations and modeling; working with the intelligence and law enforcement

communities on the analysis of threats and the development of analytical tools; training of employees from other government agencies in environments that allow hands-on work with the actual nuclear materials that they might encounter in the field; and providing subject-matter experts when required. Los Alamos has the lead within NEST for development of nuclear diagnostic tools to help determine the nature of the suspected threat device and for maintenance of what is called the “home team,” a group of experts parallel to those that would be deployed in the field who can provide analysis, advice and technical support.

Los Alamos is involved to varying degrees in all aspects of the national NEST program. The activities of the national team, and Los Alamos’ role, are as follows:

- Search activities—Los Alamos is primarily involved in research and evaluation of detectors used for search.
- Joint Tactical Operations Team (JTOT)—JTOT is a partnering of DOE and DoD expertise that provides advice or direct assistance to render safe a suspect malevolent employment of a nuclear device by terrorists or others and to perform a nuclear safety assessment for the eventual safe disposition of the device. Los Alamos plays a major role in the JTOT mission and is involved in maintaining management oversight, render-safe capability, diagnostics capability, emergency response home team capability, a watchbill (a group of experts who are on call 24 hours a day, seven days a week, year-round), communications support and deployable equipment, and contingency planning.

- Accident Response Group (ARG)—ARG is responsible for dealing with incidents involving a U.S. weapon, commonly referred to as a “Broken Arrow.” Los Alamos has experts on the ARG roster who may be called upon if their particular set of knowledge is necessary to deal with the given situation.
- Disposition—These assets support both the JTOT and the ARG team, making decisions about the ultimate disassembly and disposition of a device after it has been made safe to move and ship to a remote location.
- Consequence Management—Following an incident, this team is involved in the immediate monitoring of any potential radiological dispersal and in monitoring and forecasting that can advise responders on issues of evacuation and treatment.
- Attribution—This area involves drawing upon capabilities from the U.S. weapons testing program to analyze samples and draw forensic inferences about a threat device.
- Radiological Assistance Program (RAP)—Related to but separate from NEST, DOE and Los Alamos maintain response plans and resources to provide radiological assistance to other federal agencies; state local, and tribal governments; and private groups requesting such assistance in the event of a real or potential radiological emergency. The Los Alamos RAP organization provides trained personnel and equipment to evaluate, assess, advise, and assist in the mitigation of actual or perceived radiological hazards or risks to workers, the public, and the environment. This Los Alamos capability supports associated activities throughout RAP Region Four: Kansas, Oklahoma, Texas, Arizona, and New Mexico.

BIOLOGICAL EMERGENCY RESPONSE

The biological science and medical communities responded to the challenge posed by the fall 2001 anthrax attacks. Los Alamos has been involved in responding to the attacks from the beginning, providing DNA forensics expertise to assist federal law enforcement agencies in the anthrax investigation. Our bioscience experts played an advisory role in the decontamination of the Senate Hart Office Building after the attacks, providing a strategy and advice for decontaminating the building so it could be restored to its regular function.

Although more work and attention is needed in terms of biological emergency response, significant progress has been made through research efforts, many of which reside in DOE NNSA's Chemical and Biological National Security Program (CBNP). For instance, Los Alamos and Lawrence Livermore National Laboratory have been involved in research and development of bio-detection systems as part of CBNP. One such system to detect a biowarfare attack was demonstrated by Los Alamos and Livermore at the Winter Olympics in Salt Lake City. The system, called the Biological Aerosol Sentry and Information System (BASIS), provides public health officials with early warning of a potential bioterrorist attack.

EMERGENCY RESPONSE ISSUES

The following issues related to transferring emergency response authority and responsibility to DHS should be addressed.

- NEST command and control—It must be clear when NEST is under the authority of DHS and when it is under the authority of DOE. For example, continuous monitoring and surveillance looking for threats could be under either department. Once authorities under various options are clear, it will be important to establish joint training to exercise the various options.
- NEST research and development and technology integration—Heretofore, DOE has fulfilled the responsibility for NEST R&D and technology integration. It is important to determine whether this responsibility will continue in DOE or be transferred to DHS. This is the underpinning for the continued and improved effectiveness of NEST. Similarly, the ability to respond to future biological threats depends on synergy with the biological and health sciences.
- NEST legal issues—Legal issues related to liability and indemnification for those that respond to emergency incidents need to be sorted out and resolved. Individuals and contracting entities responding to these incidents at the direction of the federal government need clear legal protections.
- Biological Emergency Support Team (BEST)—The establishment of a national BEST, perhaps modeled after NEST, should be considered. Just as NEST relies on nuclear weapons and threat reduction experts, a BEST will need to maintain close contact with the biological and medical sciences communities.

CONCLUSION

At Los Alamos, we will continue to work with DOE NNSA and the other national laboratories to support the nation's ability to respond to emergencies involving weapons of mass destruction. We will work with the new DHS to ensure the continued effective function of these emergency response capabilities.