

**Opening Statement
Of
Mr. Vayl S. Oxford, Director
Domestic Nuclear Detection Office, Department of Homeland Security
Before the
House Committee on Science and Technology
Subcommittee on Investigations and Oversight**

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Introduction

Good afternoon, Chairman Miller, Ranking Member Sensenbrenner, and distinguished members of the subcommittee. I am Vayl Oxford, the Director of the Domestic Nuclear Detection Office (DNDO), and I would like to thank the committee for the opportunity to discuss how DNDO has worked with the Environmental Measurements Laboratory (EML) in the past, and our plans for working with them in the future. EML is a federally owned and operated DHS laboratory, located in lower Manhattan. It was a Department of Energy research facility with competencies in low level radiation detection and monitoring, and was transferred to DHS S&T in the Homeland Security Act of 2002.

As Director of the Domestic Nuclear Detection Office (DNDO), my office is responsible for developing new technologies, as well as ensuring that we deploy detection systems properly across the domestic nuclear detection architecture. EML has been an important partner for us, particularly because they provide technical support in the New York City metropolitan area, where there are three ongoing DNDO efforts. Of the 25 technical staff present at EML, currently, nineteen support DNDO in various capacities at a level of effort equivalent to about 9.5 full time equivalents.

The three core areas where we receive support from EML are: Securing the Cities (STC), test support at the New York Container Terminal (NYCT), and technical reachback. EML provides a combination of regional experience with radiological and nuclear subject matter expertise. Specifically, EML personnel serve as the focal point in New York for regional Federal, State and local partners, Federal technical participants, and industry/facility operators. This has resulted in a strong and trusted partnering among Federal, State, and local law enforcement agencies and the various technical Subject Matter Experts. Through EML, we have developed excellent working relationships with end users such as the Port Authorities of New York & New Jersey; New York Police Department; Fire Department of New York; New Jersey Office of Homeland Security and Preparedness, including the New Jersey State Police; New York Office of Homeland Security, including the New York State Police; New York City Office of Emergency Management; and local Customs and Border Protection, among others.

I would like to take a moment to go into more detail about some of the specific DNDO programs that EML supports.

Securing the Cities

To help address the threat of a radiological or nuclear attack against urban area targets, DNDO established the STC initiative to equip State and local personnel with radiation detection technologies and develop a defense-in-depth architecture for the protection of the New York City area. EML personnel, using their experience with radiation detection systems and their established relationships with New York City metropolitan area law enforcement agencies, are supporting the Federal participation. They are also helping us integrate DNDO Regional Reachback into STC activities and procedures. Moreover, they are providing subject matter expertise on detection system performance and capabilities to STC regional partners, as well as participating in the development of concept of operations.

Test Support at the New York Container Terminal

DNDO is currently testing its next-generation systems called Advanced Spectroscopic Portals (ASP) at NYCT. The results of the testing at NYCT will be part of a larger data set that will help DNDO determine if our ASP systems provide significant improvements in performance over current generation systems to support the Secretary's certification decision, as required by the DHS FY 2007 Appropriations Act, prior to a full-rate production decision. As you can see, this is an important task, and EML provides the Test Director for this effort and is part of the multi-lab team that we are relying on to get this task completed. Other participating labs include Sandia National Laboratories (SNL) and Brookhaven National Laboratory (BNL).

Technical Reachback

We often use a four-factor formula to define success at DNDO – successful encounter, detection, identification, and interdiction. If any of those factors are unsuccessful – for example, you

mistakenly dismiss a threat – you are looking at the possibility of mission failure. Therefore, in support of the deployment of detection equipment into the field, DNDO is developing and implementing a technical reachback capability to assist Federal, State, and local law enforcement and response personnel in understanding and resolving detector alarms.

EML, along with Brookhaven National Laboratory, provides technical support to the deployments we have in the Northeastern region. Regional reachback spectroscopists – the people who can look at alarm data and determine the presence or absence of a threat – are available twenty-four hours a day, seven days a week. They work with DNDO’s Joint Analysis Center (JAC) to provide technical support to Federal, State and local personnel if a detection incident occurs that requires further investigation and analysis. The laboratory spectroscopists evaluate the data provided through the JAC in order to determine what material(s) have been detected by the equipment, and provide other technical assistance as needed, such as answering questions about equipment, commodity shipping, or radiation safety.

Other Efforts

In addition to these three key areas, EML has played a technical advisory role to DNDO’s Assessments Directorate. They have helped us with test planning and execution, assisted in the planning and execution of our pilot programs, and provided quality assurance and data quality management for our test and evaluation activities. Also, EML is participating in one of our Transformational Research and Development projects that will help DNDO determine the physical limits of detecting nuclear materials and devices while a cargo ship is in transit. This type of research may lead to detection solutions that enable us to push out our borders and intercept threats well before they reach U.S. shores.

Conclusion

In conclusion, DNDO sees EML as an important partner in our research, development, and test, and deployment support activities. We are especially aware of the relationships they maintain with Federal, State and local law enforcement and first responder personnel in the New York

metropolitan region. Combined with their subject matter expertise in the rad/nuc field, we see those that currently support the DNDO mission at EML as valuable assets.

This concludes my prepared statement. Chairman Miller, Ranking Member Sensenbrenner, and Members of the Subcommittee, I thank you for your attention and will be happy to answer any questions that you may have.