

Opening Statement

Of

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Before the House Committee on Energy and Commerce

Subcommittee on Oversight and Investigations

“Nuclear Terrorism Prevention: Status Report on the Federal Government’s

Assessment of New Radiation Detection Monitors”

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Introduction

Good morning, Chairman Stupak, Ranking Member Whitfield, and distinguished members of the subcommittee. I am Vayl Oxford, Director of the Domestic Nuclear Detection Office (DNDO), and I would like to thank the committee for the opportunity to discuss the progress we are making in testing and evaluating next-generation radiological and nuclear detection technologies. In particular, I would like to describe how we work with our partners and customers to develop requirements and evaluate new technologies, how we have gone about evaluating Advanced Spectroscopic Portals (ASPs), and how those tests relate to the certification process required by the FY 2007 Appropriations bill. We at DNDO are optimistic about the system performance capabilities demonstrated, thus far, by the ASP systems, and hope that this hearing can provide clarity to any lingering questions.

DNDO recognizes that there have been concerns raised by the Government Accountability Office (GAO) with regards to the test campaign we performed for the ASP Program. DNDO has cooperated with the GAO to provide information and responded to questions pertaining to our test procedures, methodology, planning, and all final results. It is my hope that the information we provide today, including our path forward for the ASP program, is testament to the comprehensive and rigorous evaluation we have given the ASP program and, in turn, addresses the Committee's concerns pertaining to assessments of next-generation radiation detection technology.

DNDO's Unique Role

As you know, DNDO was chartered on April 15, 2005, through a joint presidential directive, NSPD- 43/HSPD-14 to coordinate efforts of Federal, State, and local partners to strengthen national nuclear and radiological detection capabilities, to address the threat of nuclear terrorism. DNDO has the unique role within the Federal government of ensuring that nuclear and radiation detection efforts across the U.S. government are integrated, while also performing related

outreach, training, and information sharing opportunities for State and local authorities.

Working with our partners in DHS and other Departments, including U.S. Customs and Border Protection (CBP) and the Department of Energy (DOE), DNDO works to develop coherent and integrated strategies for preventing the illicit introduction or transportation of nuclear or radiological materials and enhancing the global nuclear detection architecture. DNDO is able to provide consistent planning, performance testing, operational protocols, and reporting requirements by emphasizing coordination amongst multiple agencies and programs. Moreover, DNDO develops, procures, and supports the deployment of detection equipment within the United States, while also supporting field operations. This model of centralized planning and reporting with decentralized execution ensures that DNDO can focus on improving, standardizing, and integrating the entire Global Nuclear Detection Architecture, while working with numerous partners to ensure its robust implementation.

ASP Systems

There can be no doubt about the seriousness of the threat of nuclear terrorism. According to the 9/11 Commission, one of the gravest threats facing this Nation is the possibility of a nuclear attack. In this light, CBP wisely moved to rapidly deploy polyvinyl toluene (PVT)-based radiation portal monitors (RPMs) to provide an immediate scanning capability shortly after 9/11. The existing system (PVT-RPM and handheld detector) constituted the best commercially available system for CBP at the time. However, there are known detection limitations to the current systems, and DNDO has been working with CBP to address these limitations.

As indicated by our test results to date, ASP systems are designed to provide significant improvements in performance compared to current systems, and being algorithm-based, have the capability to be continuously improved over time. DNDO and CBP believe that tests performed to date have shown that ASP systems provide enhanced detection and identification capabilities while improving the efficiency of the CBP scanning process.

Testing ASP

As part of the development and acquisition process, DNDO has undertaken a very rigorous test campaign to evaluate ASP systems. The ASP test campaign consisted of a full range of test phases designed to evaluate all aspects of ASP performance and operations. We worked in coordination with subject matter experts (SMEs) from CBP, DOE, National Institutes of Standards and Technology (NIST), the Environmental Measurements Laboratory (EML), Sandia National Laboratory (SNL), Pacific Northwest National Laboratory (PNNL), Los Alamos National Laboratory (LANL), Brookhaven National Laboratory (BNL) and National Security Technologies (NSTec) for test planning, execution, and analysis.

The ASP test campaign consists of the following test events:

- (1) System Qualification Test to demonstrate that ASP units are manufactured in accordance with the processes and controls meeting the specified design requirements;
- (2) Environmental Product Qualification Test to determine if the system can reliably perform within the environment in which it will be operated and maintained;
- (3) Nevada Test Site Tests (Phases I and III) to evaluate systems performance and support ASP algorithm development and secondary CONOPS, and Blind or Special Tests to evaluate vulnerabilities in the test plan;
- (4) New York Container Terminal Test to determine if ASP demonstrates a significant reduction in referral rates to secondary inspection, compared to PVTs in a real stream of commerce;
- (5) Integration testing to determine whether the ASP systems are ready to deploy in an operational setting for secondary deployment;
- (6) Field Validation to identify operational issues, take corrective action and ensure that the systems provide an appropriate level of functionality.

Excluding some of the ongoing tests events, there have been approximately 100,000 test runs in this test campaign.

Certification

The Fiscal Year 2007 Homeland Security Appropriations Act (P.L. 109-295) required that the Secretary certify ASP system performance before DNDO commits to full-rate production and deployment. The language specifically stated, “That none of the funds appropriated under this heading shall be obligated for full scale procurement of Advanced Spectroscopic Portal Monitors until the Secretary of Homeland Security has certified through a report to the Committees on Appropriations of the Senate and the House of Representatives that a significant increase in operational effectiveness will be achieved.”

The Secretary of Homeland Security will decide to certify ASP systems on the basis of recommendations from DNDO, CBP, and the Independent Review.

Conclusion

It is the intention of DNDO to rigorously test and evaluate emerging technologies, in order to make procurement and acquisition decisions that will best address the detection requirements prescribed by the Global Nuclear Detection Architecture. We work with our interagency and intra-agency partners to ensure that deployment and operability of our systems enhance security and efficiency without unnecessarily impeding commerce.

We plan to work with the GAO and our customers to foster better understanding of our development, acquisition, and testing approaches and will share results of our testing with Congress. This concludes my prepared statement. With the committee’s permission, I request my formal statement be submitted for the record. Chairman Stupak, Ranking Member Whitfield, and members of the Subcommittee, I thank you for your attention and will be happy to answer any questions you may have.