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United States Government Accountability Office
Washington, DC 20548

March 9, 2007

Congressional Requesters

Subject: Combating Nuclear Smuggling: DNDO Has Not Yet Collected Most of the National Laboratories' Test Results on Radiation Portal Monitors in Support of DNDO's Testing and Development Program

Preventing a nuclear weapon or radiological dispersal device (a “dirty bomb”) from being smuggled into the United States is a key national security priority. The Department of Homeland Security (DHS), through its Domestic Nuclear Detection Office (DNDO), has lead responsibility for conducting the research, development, testing, and evaluation of radiation detection equipment that can be used to detect smuggled nuclear or radiological materials. National Security Presidential Directive-43 /Homeland Security Presidential Directive-14 established DNDO in 2005 and made DNDO responsible for, among other things, choosing and purchasing the radiation detection equipment that will be used by DHS’s Customs and Border Protection (CBP) at the nation’s seaports and other points of entry, as well as for coordinating with state and local governments on their radiation detection efforts and providing information and assistance to these governments when necessary.¹

Much of DNDO’s work on radiation detection equipment to date has focused on the development and use of radiation detection portal monitors, which are larger-scale equipment that can screen vehicles, people, and cargo entering the United States. Beginning in 2005, DNDO has tested both the portal monitors that CBP uses today and advanced technology portal monitors. Current portal monitors, made of polyvinyl toluene (plastic) and known as “PVTs,” detect the presence of radiation but cannot distinguish between benign, naturally occurring radiological materials (NORM) such as ceramic tile, and dangerous materials such as highly enriched uranium (HEU). DNDO hopes that the next generation of portal monitors, known as “Advanced Spectroscopic Portals” (ASP), will be able to detect and more specifically identify radiological and nuclear materials within a shipping container. DNDO has stated that it will begin conducting tests of ASPs in February 2007 and begin fielding ASPs in spring 2007.

¹ Although DNDO was originally created in April 2005 by National Security Presidential Directive-43/ Homeland Security Presidential Directive-14, the office was formally established in October 2006 by Section 501 of the SAFE Port Act.

DNDO has conducted tests on PVTs and ASPs at the Nevada Test Site (NTS). According to DNDO officials, the advantage of using the NTS for testing radiation detection equipment is that it provides the necessary facilities to test detection system capabilities with special nuclear materials, which consist of specified quantities of plutonium and highly enriched uranium. In addition, several of the Department of Energy's (DOE) national laboratories have performed work related to the development, testing, or deployment of radiation detection portal monitors. In particular, Brookhaven National Laboratory (BNL), Los Alamos National Laboratory (LANL), Oak Ridge National Laboratory (ORNL), Pacific Northwest National Laboratory (PNNL), and Sandia National Laboratories (SNL) have extensive expertise in radiation detection technology and have tested numerous commercial models of PVTs on behalf of DHS and DOE.

According to radiation detection experts, portal monitor tests are important because they help determine how well the monitors work in real-life situations and provide information for making the monitors better. In addition, DNDO and radiation detection experts agree that portal monitors should be tested both in a laboratory-controlled setting, to learn about their performance capabilities, and under an assortment of real-life conditions, such as at seaports, to learn how well they perform under various environmental conditions in the field. In particular, testing should examine how well a portal monitor performs when screening various types of NORM, either in the local environment or in the cargo of a shipping container. In a February 2006 report to the Committees on Appropriations of the U.S. Senate and House of Representatives, DNDO presented its Expenditure Plan for fiscal years 2006 through 2010. This plan echoed the need for testing, stating that to fulfill its missions it would, among other things,

- describe and analyze the performance of different types of radiation detection equipment, such as portal monitors, before deploying them;
- develop and use sound, quantitative assessments of different types of radiation detection equipment that it deploys;
- stress the use of both laboratory-controlled testing and operational field testing of portal monitors and other radiation detection equipment; and
- develop a comprehensive database that describes currently deployed radiation detection equipment as well as equipment planned for deployment in the near future.²

DNDO's Expenditure Plan also stated that the office would begin developing and purchasing ASPs in order to replace the PVT portal monitors currently used by CBP. DNDO contends that the intended ability of ASPs to detect and identify smuggled radiological or nuclear materials would represent an increase in capability over PVTs.

² See DNDO, *Domestic Nuclear Detection Office: FY 2006–2010 Expenditure Plan* (Washington, D.C., February 2006), p. 27. The task of developing the performance database was part of DNDO's competitively-awarded Systems Engineering Support Program contract that DNDO awarded in August 2005. DNDO identified other tasks within this contract, including the development of requirements for its Cargo Advanced Automated Radiography System (CAARS) and modeling of different portal monitor deployment scenarios. In September 2006, DNDO awarded a \$1.3 billion contract for the procurement of CAARS.

To implement this plan, in May 2006, DNDO completed a cost-benefit analysis that supported its decision to begin deploying ASPs at domestic seaports with high volumes of cargo and traffic. In July 2006, DHS announced that it had awarded 5-year contracts, totaling \$1.2 billion, to three companies to produce ASPs. In October 2006, we reported that DNDO's cost-benefit analysis suffered from several methodological flaws and did not provide a sound basis for DNDO's decision to purchase ASPs.³ Among other things, we reported that DNDO did not use actual test data on ASP performance but instead assumed that ASPs in the future will be able to meet DNDO's long-range goal of being able to detect highly enriched uranium 95 percent of the time. In addition, although DNDO also tested PVTs at the same time it tested ASPs, it did not analyze the data gathered from these tests.

Furthermore, according to DNDO's Expenditure Plan, DNDO expects to rely heavily on the participation of state and local agencies to help protect the interior of the nation from a radiological or nuclear attack. In this regard, DNDO plans to support these agencies' efforts to develop radiation detection and interdiction capabilities. For example, DNDO plans include working with state and local agencies to, among other things, deploy fixed and mobile radiation detection systems to help defend major, high-risk cities. As part of DNDO's Securing the Cities Initiative, it plans to identify a limited number of high-risk regions, then provide these regions with federally owned radiation detection equipment along with related training and other support packages. DNDO expects that state and local agencies will eventually purchase their own equipment and assume increasingly greater responsibilities in radiation detection efforts within their borders.

Given DNDO's goal of replacing PVT portal monitors with much more expensive ASPs, it is important for DNDO to fully understand the relative advantages and disadvantages of PVTs and ASPs before making the multibillion dollar investment that would be necessary to implement its current plan. Further, in light of the important role that DNDO foresees for state and local governments in radiation detection, it is also important that DNDO communicate this understanding to its state and local partners. Our October 2006 report concluded that DNDO's assessment of ASPs did not fully support DNDO's decision to purchase and deploy them. This report examines whether DNDO has fully collected and maintained all existing tests on PVTs in order to fully assess their advantages and limitations. To that end, we agreed with your offices to examine the extent to which DNDO has (1) compiled previous test results from the national laboratories on commercially available portal monitors, and (2) provided state and local authorities with information on the technical performance characteristics and operation of radiation detection equipment.

To conduct our review, we gathered data on DNDO's testing efforts, and visited existing testing facilities. To assess the extent to which DNDO has collected previous test results from national laboratories on portal monitors, we began by obtaining a

³ See GAO, *Combating Nuclear Smuggling: DHS's Cost-Benefit Analysis to Support the Purchase of New Radiation Detection Portal Monitors Was Not Based on Available Performance Data and Did Not Fully Evaluate All the Monitors' Costs and Benefits*, [GAO-07-133R](#) (Washington, D.C.: Oct. 17, 2006).

list, originally provided to GAO by DHS and Brookhaven National Laboratory (BNL), of 14 commercial, off-the-shelf, radiation portal monitors that were available for purchase as of January 2006. We then submitted this list to the national laboratories and asked each laboratory to identify, among other things, which of these portal monitors they had tested, when the testing occurred, and what agency sponsored the test.⁴ During this process, the laboratories noted 15 additional commercially available models of PVT portal monitors that we later included on our list.⁵ We also reviewed test reports for portal monitors produced by the National Institute of Science and Technology (NIST). In addition, we had discussions with officials from DNDO; the Department of Defense; CBP; NIST; the National Nuclear Security Administration; and several DOE national laboratories, including BNL, LANL, ORNL, SNL, and PNNL.⁶

To gain the perspectives of state governments that have participated in DNDO's nuclear detection working groups, we obtained a list from DNDO of the states attending one of these working group meetings, then we contacted officials from each of the 17 states and the District of Columbia that attended one of DNDO's working group meetings.⁷ We also visited DHS' NTS in Nevada, the Radiation Detector Test and Evaluation Center (RADTEC) testing facility at BNL, PNNL's testing facilities in Washington State, SNL's testing facilities in New Mexico, and DOD's Technical Evaluation Assessment Monitor Site (TEAMS) in New Mexico. We conducted our review from November 2005 through January 2007 in accordance with generally accepted government auditing standards.

Summary

DNDO has not yet collected a comprehensive inventory of testing information on commercially available PVT portal monitors. Such information—if collected and used—could improve DNDO's understanding of how well portal monitors detect different radiological and nuclear materials under varying conditions. In turn, this understanding would assist DNDO's future testing, development, deployment, and purchases of portal monitors. In response to our request for information, DNDO provided us with test reports from only 11 of at least 54 tests on commercially available portal monitors completed by DOE's national laboratories since September

⁴ Because several of the portal monitors were tested by more than one laboratory, the number of tests exceeds the number of portal monitors on our list.

⁵ One of the commercially available portal monitors on our list was an ASP, not a PVT. However, for ease of discussion, we use the term commercially available portal monitors to mean PVT portal monitors.

⁶ The National Nuclear Security Administration is a separately organized agency within DOE that was created by the National Defense Authorization Act for fiscal year 2000 with responsibility for the nation's nuclear weapons, nonproliferation, and naval reactors programs. Pub. L. No. 106-65 (1999).

⁷ The stakeholders we contacted include representatives from the following state and local entities: California, Colorado, Connecticut, District of Columbia, Florida, Illinois, Iowa, Mississippi, Missouri, New Jersey, New Mexico, New York, Pennsylvania, South Carolina, Tennessee, Texas, and Virginia.

11, 2001.⁸ However, when we later presented DNDO with our initial findings, DNDO's Director of Assessments told us that she personally has access to the vast majority of test reports completed by the national laboratories. She added that DNDO is in the process of planning how to develop a database with this type of information so that the information will be more widely available to others in DNDO. Radiation detection experts with the national laboratories and industry told us that, in their view, DNDO should collect and maintain all the national laboratory test reports on commercially available portal monitors because these reports provide a comprehensive inventory of how well portal monitors detect a wide variety of radiological and nuclear materials and how environmental conditions and other factors may affect performance.

DNDO is improving its efforts to provide technical and operational information about radiation portal monitors to state and local authorities. For example, DNDO recently helped to establish a Web site that, among other things, includes information for state and local officials on radiation detection equipment products and performance requirements. However, some state representatives with whom we spoke, particularly those from states with less experience conducting radiation detection programs, would like to see DNDO provide more prescriptive advice on what types of radiation detection equipment to deploy and how to use it.

Background

As of October 2006, which is the most recent date for which complete data are available, DNDO and CBP had installed 912 portal monitors at the nation's points of entry. All of the portal monitors are PVTs. According to senior DNDO officials, DHS plans to deploy at ports of entry this year 60 of the 80 ASPs that it has purchased with fiscal year 2006 funds. DNDO plans to use the remaining 20 ASPs for further testing or refurbishment after it has completed its tests on ASPs this year. Ultimately, DHS plans to deploy about 3,000 portal monitors at the nation's points of entry by September 2009. However, as we reported in March 2006, CBP's deployment of portal monitors is behind schedule, and it appears unlikely that CBP will be able to reach its deployment goal on schedule.⁹

DHS Has Not Yet Collected Most of the Test Data Available from the National Laboratories on the Performance Capabilities of Radiation Detection Portal Monitors

DNDO does not systematically collect the test results produced by the national laboratories on radiation detection portal monitors in support of DNDO's testing and development program. In response to our request for data, DNDO could provide us

⁸ Our estimate of 54 test reports is conservative. In cases in which a laboratory tested two models of PVTs that were manufactured by the same company and had virtually the same model number (e.g., 4550-V and 4550-R), we counted this as one test rather than two tests. We did this because, according to a manufacturer with whom we spoke, similar model numbers for two PVTs indicate that the two PVTs are virtually the same.

⁹ See GAO, *Combating Nuclear Smuggling: DHS Has Made Progress Deploying Radiation Detection Equipment at U.S. Ports-of-Entry, but Concerns Remain*, [GAO-06-389](#) (Washington, D.C.: Mar. 22, 2006).

with only 11 of at least 54 test reports completed by the national laboratories on PVT portal monitors since September 11, 2001. These 54 test reports contain information that, in our view, could help DNDO fully evaluate PVT's capabilities and thus help guide its future testing, development, deployment, and acquisitions of portal monitors. DNDO could not provide us with the test reports other than those provided to them by BNL despite the fact that the majority of the tests were sponsored by offices within DHS.¹⁰ Our findings are consistent with those of the DOE Office of Inspector General, which reported in February 2006 that neither DHS nor DOE could provide it with a complete inventory of the national laboratories' relevant research on nuclear and radiation detection.¹¹ It is important to note that DNDO's fiscal years 2006—2010 Expenditure Plan states that DNDO will develop a "comprehensive database" of current and future portal monitors.¹²

During the course of our review, DNDO officials told us that prior results on commercially available portal monitors do not remain relevant over time because the technology, in particular the software that converts the information detected by the portal monitor into meaningful data, changes often and significantly. However, officials with six private companies that manufacture commercially available portal monitors told us that, when they change the name or model number of their portal monitors, it typically does not mean that the software has significantly changed. For example, an official from one company told us that its model numbers represent different settings at which the portal monitor would sound an alarm when it detects the presence of radiation, as suggested by DNDO. However, the devices themselves were the same. The manufacturer had not changed either the portal monitor's hardware or software.

However, after a meeting on January 24, 2006, when we presented DNDO with our initial findings, DNDO's Director of Assessments told us that she has access to the vast majority of the national laboratories' test results on commercially available portal monitors. She added that DNDO was in the process of planning how to develop a database that would contain this type of information. DNDO told us it was planning to build this database because there is currently no central repository of test results that can be used by other analysts within DNDO on a need-to-know basis. According to senior DNDO officials, DNDO hired a new branch chief in November 2006 who will be responsible for, among other things, leading DNDO's establishment of a test data and report archive.

Radiation detection experts with the national laboratories told us that, in their view, DNDO should collect and maintain data on previous testing performed on portal

¹⁰ DHS offices sponsoring the research were CBP, DNDO, and the Science & Technology Directorate.

¹¹ See DOE Office of Inspector General, *Audit Report: Nuclear Detection Devices*, DOE/IG-0720 (Washington, D.C.: February 2006).

¹² In response to our findings, a DNDO official told us that the "comprehensive database describing currently deployed radiation detection systems and those planned for near-term domestic deployment" mentioned in DNDO's Expenditure Plan referred to operational data culled from the portal monitors that CBP has already deployed, not test data. However, DNDO's Expenditure Plan never makes this distinction.

monitors. In this way, DNDO could have a baseline inventory of how PVTs perform on a multitude of factors such as environmental conditions, the type of radiological or nuclear material to be detected, the best alarm setting for the PVT, the background level of radiation, and the quantity of benign radiological materials such as kitty litter or ceramic tiles that can be used to “mask” the presence of more dangerous radiological or nuclear materials in a container.

In addition, by maintaining test results, DNDO would have a full record to determine how much and in what ways portal monitor technology has improved over time, which can be critical to selecting what type of portal monitor to further develop or purchase. Even if the results from a series of tests show that no portal monitor yet meets DNDO’s performance standards, maintaining previous test results can show what portal monitors are making the most progress towards those standards. Further, tests on portal monitors should differ depending on how the portal monitor will be used. For example, if CBP decided to deploy a particular portal monitor for use in primary cargo screenings, some of the relevant tests would be different than if CBP wanted to use the same portal monitors for secondary screenings (additional scans after the primary screening has sounded an alarm). Maintaining a full record of previous test results would help ensure that CBP and DNDO, before choosing or deploying a particular portal monitor, would have the correct type of tests corresponding to the specific way in which the portal monitor will be used. Finally, the DOE’s Inspector General noted in February 2006 that maintaining a central inventory of testing information would assist DHS and DOE in coordinating radiation detection research across national laboratories and, among other things, reducing the chances for unnecessarily duplicative efforts.¹³

DNDO Has Improved Its Efforts to Provide State Authorities with Basic Performance Information and Other Forms of Assistance about Radiation Portal Monitors, but Some States Need Further Support

DNDO has started a number of initiatives to provide state and local governments with technical and operational information, training, and financial assistance on radiation portal monitors. For example, DNDO, in cooperation with DHS’s Office of Grants and Training, recently unveiled the Responder Knowledge Base. This is a Web-based database that contains information on commercially available radiation detection equipment products, performance standards, and test results. According to DNDO officials, the main purpose of the Responder Knowledge Base is to provide state and local officials with information to help them evaluate radiation detection equipment and also help guide their purchases of this equipment. In addition, last year DNDO created a working group comprised of federal, state, and local radiation detection program officials. These officials meet periodically to exchange information and develop protocols on their radiation detection programs. According to DNDO and state officials, this group met in January, June, and October 2006.

¹³ See DOE Office of Inspector General, *Audit Report: Nuclear Detection Devices*, DOE/IG-0720 (Washington, D.C.: February 2006). In addition, it is important to note that, in some instances, DHS may want separate national laboratories to perform duplicative tests as a method to confirm the accuracy of test results.

To further assist states and localities in their radiation detection efforts, DNDO has begun training state and local officials on how to operate radiation detection equipment. For example, state officials may attend 2-day training courses for law enforcement officials at DHS's Counter Terrorism Operation Support facility at NTS. Moreover, DNDO has worked to get DHS to provide grants to state and local governments to, among other things, fund their radiation detection efforts. For instance, in September 2006 DHS issued grants totaling \$3.2 million to states such as Kentucky and South Carolina to invest in fixed, mobile, and handheld radiation detection equipment at interstate truck weigh stations. While DHS provides some information to states and localities on radiation detection equipment, officials from some states told us that DHS has not sought much input from them on what types of information they find most useful or valuable.

We contacted all 18 state and local entities that participated in one of DNDO's sponsored meetings. Of these 18 entities, 15 responded to our requests for information. Although our discussions with officials from all 15 entities indicated they supported DNDO's initiatives and 4 of the 15 entities were interested in getting additional training from DNDO, officials from 8 states and the District of Columbia told us they would benefit from having more direct guidance to assist them in making purchasing decisions. According to officials from these 9 entities, they could use DNDO's input to help overcome their lack of experience and technical expertise. For example, one state official told us that her state has been purchasing older radiation detection equipment specifically because it had limited knowledge about new, commercially available equipment and it could not obtain recommendations from DNDO on which devices to use.

In response, DNDO maintains that federal regulation prohibits it from recommending to state and local officials portal monitors that are made and sold by specific manufacturers.¹⁴ According to senior DNDO officials, DNDO's goal for the Responder Knowledge Base is to provide state and local officials with available performance information on radiation detection systems that they have tested without recommending specific products, which could be construed as an inappropriate endorsement. Despite this limitation, DNDO officials told us that they are readily available to answer specific technical and performance questions involving equipment tested by DNDO.

Conclusions

DNDO told us that it is in the process of planning how to develop a comprehensive database on commercially available PVT portal monitors. We believe this is a step in the right direction. In our view, until DNDO compiles these data, it will be missing a significant tool that adds to the nation's efforts to thwart nuclear smuggling. Until DNDO develops and completes this database--one that includes both test results and data derived from operations in the field--it is losing opportunities to better understand how these portal monitors perform. We agree with several radiation

¹⁴ See 5 C.F.R. § 2635.702.

detection experts who told us that these data will provide DNDO with guidance on how portal monitors vary in performance under different conditions and according to how they are used. This, in turn, will help DNDO develop better systems and make smarter procurement and deployment decisions. Furthermore, as pointed out by DOE's Inspector General, these data would assist DHS's and DOE's efforts to reduce duplicative testing. Finally, if DNDO maintains more comprehensive data on PVTs, state and local governments could use this information to make more informed purchases of portal monitors. We believe that, if DNDO develops and maintains close working relationships with its state partners, it may be able to tailor these data to meet state needs and capabilities.

Recommendations for Executive Action

In order to ensure that the nation maintains a comprehensive source of information on the characteristics and performance of PVT portal monitors and to further the ability of state and local governments to make informed judgments about their radiation detection needs and future equipment purchases, we recommend that the Secretary of Homeland Security, working with the Director, DNDO, take the following three actions:

- collect and maintain reports concerning all of the testing performed by the U.S. national laboratories,
- review the test reports in order to develop an information database on how PVTs perform in both laboratory and field tests on a variety of indicators such as their ability to detect specific radiological and nuclear materials or how they are affected by different levels of background environmental radiation, and
- confer with state and local officials on what information they would find useful and how that information could be best presented to them.

Agency Comments and Our Evaluation

We provided DHS with a draft of this report for its review and comment. Its written comments are presented in enclosure 1. The department generally concurred with the recommendations presented. In addition, DHS offered some clarifications regarding its ability to obtain portal monitor testing results from other agencies, its archive of portal monitor test reports, and its efforts to help assist states and localities developing in their radiation detection capabilities.

DHS concurred with our recommendation to collect and maintain reports from all portal monitor testing performed by the national laboratories, but noted that it has no direct authority to obtain test reports and data for programs that were not sponsored by DHS. However, as we explain in our report, over half of the national laboratory tests we identified were sponsored by parts of DHS, specifically CBP, DHS's Science and Technology Directorate, or DNDO. We support DNDO's future efforts to collect information from the national laboratories as part of its cooperative information sharing with the Department of Energy.

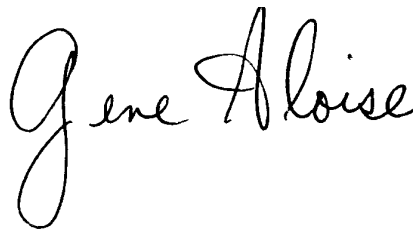
DHS also stated that we misinterpreted the comments of DNDO officials concerning the 11 test reports—specifically, that the 11 test reports represented all the reports

DNDO had in its collection. In response, we believe that there was no misinterpretation and that we described the situation accurately. During the course of our review, we asked DNDO to provide us with the results it had compiled from tests performed by the national laboratories on commercially available portal monitors. In response, DNDO provided us with the 11 test reports. We subsequently asked DNDO if it had additional test reports in its collection that it could provide to us. However, DNDO did not provide us any additional reports.

DHS also concurred with our recommendation that it confer with state and local officials regarding their information needs, pointing out a number of ongoing efforts to disseminate information. These include: meeting with its stakeholder group comprised of representatives from 22 states, offering help at establishing standards, providing test reports, developing response protocols, providing detection training, and facilitating access to federal experts for alarm adjudication, analysis, and nuclear detection-related information and intelligence. DNDO also identified efforts at establishing a qualified equipment list, threat-based standards in response to the SAFE Port Act, and a fee-for-service test process to widen the available market for testing detection systems.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to interested congressional committees and members, the Secretary of Homeland Security, and other interested parties. We will also make copies available to others on request. In addition, this correspondence will be available at no charge on GAO's Web site at <http://www.gao.gov>.

Should you or your staff have any questions, please contact me at (202) 512-3841 or by e-mail at aloisee@gao.gov. Contact points for our Office of Congressional Relations and Public Affairs may be found on the last page of this correspondence. Key contributors to this report include Julie Chamberlain, Leland Cogliani, Eugene Gray, Diane Raynes, Jim Shafer, Daren Sweeney, and Eugene Wisnoski.



Gene Aloise
Director, Natural Resources
and Environment

List of Requesters

The Honorable Carl Levin
Chairman

The Honorable Norm Coleman
Ranking Member
Permanent Subcommittee on Investigations
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Susan M. Collins
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
House of Representatives

The Honorable James R. Langevin
Chairman
Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology
Committee on Homeland Security
House of Representatives

The Honorable Michael T. McCaul
Ranking Member
Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology
Committee on Homeland Security
House of Representatives

The Honorable John Linder
House of Representatives

Enclosure: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

February 26, 2007

Mr. Gene Aloise
Director
Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Aloise:

Thank you for the opportunity to review and comment on the Government Accountability Office's (GAO's) draft report GAO-07-347R entitled *Combating Nuclear Smuggling: DNDO Has Not Yet Collected Most of the National Laboratories' Test Results on Radiation Portal Monitors in Support of DNDO's Testing and Development Program*.

The Department's Domestic Nuclear Detection Office (DNDO) generally concurs with the recommendations made in this report:

- Collect and maintain reports from all of the testing performed by the U.S. National Laboratories;
- Review the test reports in order to develop an information database on how polyvinyl toluene portal monitors (PVTs) perform on a variety of indicators such as their ability to detect specific radiological and nuclear materials or how they are affected by different levels of background environmental radiation; and
- Confer with state and local officials on what information they would find useful and how that information could be best presented to them.

However, we would like to clarify that DNDO has and will continue to collect and maintain reports on radiation detector tests as a condition of cooperative information sharing with the U.S. National Laboratories in collaboration with the Department of Energy (DOE). DNDO has no direct authority to obtain test reports and data for programs that were not sponsored by the Department of Homeland Security (DHS). Nonetheless, our cooperative working relationship with DOE has allowed DNDO to acquire multiple test reports, including several supplied by the National Laboratories. We verified that the 11 test reports cited by your office were in our archives, but this was unfortunately misinterpreted as the extent of reports in our possession.

DNDO continues to move forward in establishing a test data and reports archiving system that will be accessible to official personnel with a verifiable need to know. Once

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Enclosure: Comments from the Department of Homeland Security (cont.)

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assembled, the archival system will supplement DNDO's use of test results to inform our decisions with regard to PVT development and deployment.

The report also recommended that DNDO provide further assistance to some states. We strongly agree with this statement, as the DNDO feels that bolstering preventive rad/nuc detection capabilities within the domestic interior is an essential part of our Nation's defense. DNDO continues to meet on a regular basis with its state and local stakeholder group comprised of representatives from over 22 States. This group provides critical insight into the needs of our state and local partners as we develop our domestic support programs and expand detection capabilities.

DNDO is offering a wide array of services to the state and local community, including: helping establish standards, providing test reports, developing response protocols, providing preventive rad/nuc detection training, as well as exercise support and operational drills to ensure that state and local authorities are able to effectively detect and respond to potential threats. We are also facilitating state and local access to a full array of the technical support infrastructure to ensure that Federal experts are available to support prompt alarm adjudication, provide effective analysis, and disseminate nuclear detection-related information and intelligence.

DNDO will continue to provide information about the technical capabilities and performance of equipment to the state and local community. We are in the process of establishing a qualified equipment list, threat-based standards in response to the SAFE Port Act, and a fee for service test process to widen the available market for detection systems testing. DNDO remains committed to proactive dissemination of information to our state and local counterparts.

Finally, we would like to make clear that DNDO has conducted a variety of tests on radiation portal monitors as a part of our overall research and development process. Each test series has a specific purpose that should be accurately reported. Specifically, DNDO previously conducted tests at the Nevada Test Site (NTS) to help down-select vendors. Our ongoing test series (February 2007) is conducting performance testing of Advanced Spectroscopic Portal (ASP) systems. The results of this test series will support the Secretary's certification of our next-generation technologies, enabling a full-scale production decision and eventual introduction of ASPs into the field by spring 2007.

Thank you again for the opportunity to comment on this draft report and we look forward to working with you on future homeland security issues.

Sincerely,



Steven J. Pecinovsky
Director
Departmental GAO/OIG Liaison Office

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Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, D.C. 20548