Domestic Nuclear Detection Office
U.S. Department of Homeland Security
Washington, DC 20528

Homeland Security

February 24, 2010

The Honorable Joseph I. Lieberman
Chairman
Senate Committee on Homeland Security and Governmental Affairs
U.S. Senate
340 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairman Lieberman:

The purpose of this letter is to inform you of changes that are being implemented to the Advanced Spectroscopic Portal (ASP) program, conducted by the Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO) in partnership with U.S. Customs and Border Protection (CBP).

As you know, the ASP program was started several years ago with the goal of improving the performance of the current radiation detection system that is deployed to our seaports and land border crossings. Currently, CBP scans 99% of all cargo containers using polyvinyl toluene (PVT)-based radiation portal monitors (RPMs) that can detect radiation, but cannot distinguish between threat materials and naturally occurring radioactive material (NORM), such as kitty litter and ceramic tiles. If the initial, or primary, scan causes an alarm, then the container is moved to a secondary site for a confirmation scan with another PVT RPM and a scan using handheld detectors to identify the suspect radioisotopes. ASP systems have the ability to detect radiation in a drive-through arrangement, but with much better radioisotope identification capability than hand-held devices, thereby achieving good flow of commerce with improved threat identification. The initial concept was for ASP systems to replace PVT and handheld units in all primary and secondary sites at a cost of $2-3 billion (10-year life cycle cost).

Throughout the life of the ASP program, the Congress has had continual oversight into the development and testing of the systems via Government Accountability Office (GAO) investigations, progress briefings provided by DNDO and CBP, and hearings before several Committees. DNDO has postponed efforts to seek Certification to allow for additional testing and evaluation of the performance of ASP systems and adoption of the appropriate management processes for the program. To date, DNDO has refrained from deploying ASP units operationally and has taken steps to ensure that test planning is done openly, that entrance and exit criteria for tests are strictly adhered to, and that test events are designed to provide the data required to meet the objectives of the test and to help make programmatic decisions.

In November 2009, an ASP Governance Board (ASP-GB) was formed to plan a new way forward for the ASP program. The ASP-GB was staffed by senior DHS leaders from the Acquisition and Program Management Division (APMD), Policy, CBP, DNDO, the Office of the Deputy Secretary, and the Science and Technology Directorate (S&T).

The ASP-GB recommended that the ASP program continue on the normal acquisition path (MD 102-01) for ASP in secondary inspection applications, culminating in an Acquisition Review Board (ARB) decision milestone before acquisition and deployment. The ASP-GB has also recommended that the use of ASP systems in primary scanning applications not be pursued at this time.

The arguments for these recommendations are based on performance and cost. In secondary inspection applications, there are two criteria that must be met for the ASP systems to be considered to "provide a Significant Improvement in Operational Effectiveness (SIOE)" over the current system, as is required by law. Although not yet measured in Operational Test, results to date have shown that the ASP systems meet these criteria by wide margins. In addition, the cost to replace PVT with ASP RPMs in only secondary inspection locations is relatively low compared to the original total program cost estimate; the total estimated cost for secondary deployments is approximately $350 million (10-year life cycle cost).

The case is different in primary scanning applications, where there are four criteria to establish whether ASP systems provide a SIOE over the current system. Although the current ASP systems meet two of the criteria, they have not been shown to meet a third one, and are only marginally better than the current system for a fourth one. Because there are many more primary sites than secondary sites, the cost of replacing the current PVT systems in these primary scanning locations with ASP systems would be comparatively high – approximately $1.5 billion (10-year life cycle cost).

The Secretary has weighed the unanimous recommendation of the ASP-GB and has agreed that the ASP technology will not be pursued for primary scanning applications at this time, but that the program should continue on the normal acquisition path for use in secondary inspections. It is important to emphasize that this decision does not mean that ASP will be purchased and deployed to secondary – that is a decision for the Department to make through the MD102-01 process at the ARB – but rather that the program should continue on that path only for secondary. Any Certification decision, even when restricted only to secondary operations, is still dependent on successfully completing all testing and data analysis, which will include both field validation activities and operational testing and evaluation.

DHS strongly believes that continuing to pursue Certification of ASP in secondary, while refraining from seeking Certification in primary applications makes sense, given the available performance and cost data. We are currently reviewing the impacts that this decision will have on the future testing schedule, but remain committed to completing testing and analysis expeditiously. DNDO will continue to provide updates and information to the Congress about progress on the ASP program, and welcome the opportunity to respond to any inquiries you may have regarding these recent decisions.

Sincerely,

Dr. William K. Hagan
Acting Director, DNDO