TRANSITIONING THE ENVIRONMENTAL MEASUREMENTS LABORATORY TO THE DEPARTMENT OF HOMELAND SECURITY

HEARING

BEFORE THE

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

COMMITTEE ON SCIENCE AND TECHNOLOGY

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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TRANSITIONING THE ENVIRONMENTAL MEASUREMENTS LABORATORY TO THE DEPARTMENT OF HOMELAND SECURITY

THURSDAY, MAY 3, 2007

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT,
COMMITTEE ON SCIENCE AND TECHNOLOGY,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2318 of the Rayburn House Office Building, Hon. Brad Miller [Chairman of the Subcommittee] presiding.

BART GORDON, TENNESSEE
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Investigations & Oversight Subcommittee

Hearing on

Transitioning the Environmental Measurements Laboratory to the Department of Homeland Security

Thursday, May 3, 2007
10:00 a.m. to 1:30 p.m.
2318 Rayburn House Office Building

Witness List

Panel 1

Ms. Lynn Albin
Radiation Health Physicist, Office of Radiation Protection, Washington State Department of Health

Mr. Charles F. McBrearty, Jr
Former Director of Materials Technology, Air Force Technical Applications Center, Patrick Air Force Base, Florida

Assistant Commissioner Jonathan A. Duecker
New York Police Department, Counterterrorism Bureau

Dr. Tony Fainberg
Former Program Manager, Radiological & Nuclear Countermeasures, Office of Research and Development, Science & Technology Directorate, Department of Homeland Security

Panel 2

Dr. John F. Clarke
Deputy Director, Office of National Laboratories, Science & Technology Directorate, Department of Homeland Security

Panel 3

Admiral Jay M. Cohen
Under Secretary for Science and Technology, Department of Homeland Security

Mr. Vayl Oxford
Director, Domestic Nuclear Detection Office, Department of Homeland Security

HEARING CHARTER

SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT
COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

Transitioning the Environmental Measurements Laboratory to the Department of Homeland Security

THURSDAY, MAY 3, 2007
10:00 A.M.–1:30 P.M.
2318 RAYBURN HOUSE OFFICE BUILDING

Purpose

The Environmental Measurements Laboratory (EML), located in New York City, was transferred from the Department of Energy to the Department of Homeland Security's Science & Technology Directorate in 2003, under Section 303 of the *Homeland Security Act of 2002.* The laboratory—established in 1947—was ostensibly transferred because of its expertise in low level radioactive measurements, analysis and assessments and its ability to significantly contribute to the S&T Directorate's responsibilities as envisioned in Section 302 of the *Homeland Security Act of 2002* to develop countermeasures to radiological and nuclear terrorist threats; conduct basic and applied research, development, demonstration, testing, and evaluation activities relevant to DHS; detect, prevent, protect against and respond to terrorist attacks; and to transfer relevant technologies or abilities to Federal, State, local governments and private sector entities.

When Congress transferred this laboratory from DOE to DHS, there was a logical expectation that a lab which specialized in radiation detection and supported the work of State and local officials and first-responders would be a natural fit with an agency which was charged with protecting the country from radiological threats. Having a federal radiation detection laboratory located in the heart of New York City, which after the 9/11 attack was clearly in the top tier of potential targets for terrorists, seemed like an important asset for DHS.

Yet since its transfer to DHS, the Environmental Measurements Laboratory has largely been left to flounder. Rather than exploiting and expanding the unique skills and capabilities of the laboratory that could have clearly contributed to some of DHS' most important work, DHS has terminated, transferred and curtailed key EML programs. Top management at DHS also spent an inordinate amount of time, energy and resources planning for the lab's ultimate closure. By 2007, the DHS Science & Technology Directorate had stripped the lab of its radioisotope chemical analysis labs critical for the continuation of its radiochemistry Quality Assessment Program (QAP) praised by both State and federal participants as directly contributing to homeland security efforts. Other projects EML initiated with local first responders in New York City, including a network of roof-top radiation sensors, have been halted. Other programs have been started, stopped and then transferred. In one of DHS's most astounding decisions, it terminated the lab's entire global radiation monitoring network—in existence since 1963—and halted plans to install a new EML built radiation monitor in China, near the North Korean border in October 2005. This occurred one year before the North Korean nuclear test.

Congress never intended for the lab's programs to be disbanded, or that the laboratory be closed. The detailed plans to close the lab, first initiated in 2005, were never signed by the Under Secretary of Science and Technology, Charles McQueary. Admiral Jay Cohen, who took over that post last August, has told the Committee staff that he now intends to put the lab on a new path and anticipates making it a valued DHS asset.

In the 107th Congress, the Committee on Science played a key role in drafting the legislation that established the Department of Homeland Security, particularly in creating the S&T Directorate. As a result, the Subcommittee's oversight role regarding the S&T Directorate is particularly important. Up until now, the seemingly intentional actions by DHS to strip the Environmental Measurements Laboratory—a critical national asset—of its programs, projects and activities have occurred with-

in the inner sanctum of the S&T Directorate without any explanation to Congress or the public of the rationale for these inexplicable actions. In fact, even as the S&T Directorate was drafting plans to close the laboratory and DHS-hired contractor Booz Allen Hamilton was writing up a "communications plan" on the "message" DHS was planning to disseminate to both Congress and the public about why the lab was being closed, the S&T Directorate was telling Congress that they expected the EML to "serve an enduring role" in supporting DHS.

The Subcommittee hearing will seek to obtain a fuller public disclosure of how and why DHS terminated many of the lab's programs, why the S&T Directorate was unable—or unwilling—to chart a new course for the Environmental Measurements Laboratory and who was responsible for undermining the success of the EML since it was transferred to DHS. The Subcommittee hearing will fully examine the issues that have led to the termination and transfer of some of the lab's programs that could have played a critical role in both homeland and national security-related issues. The conditions leading to the laboratory's current state need to be examined, resolved and prevented from occurring again. Although Admiral Cohen has recently pledged not to close the lab, it is important that the Subcommittee ensure that the S&T Directorate has a detailed strategic plan and clear vision for the lab that will ensure they fully utilize the EML in the future.

Background of the Environmental Measurements Laboratory

The Environmental Measurements Laboratory—which has undergone several name changes since it was first established in 1947 as the Medical Division of the Atomic Energy Agency—moved into its current location in Manhattan in 1957. Within the Department of Energy the small laboratory moved from the Office of Energy Research to the Office of Environmental Management in 1997 to focus on environmental monitoring, decommissioning and decontamination efforts around the Nation's nuclear weapons complex. Unlike the much larger DOE laboratories, including Los Alamos, Lawrence Livermore and Pacific Northwest National Laboratory, the EML has always received much less notice, financial support and attention. To some degree, it was never able to compete with these other larger, better equipped, multipurpose laboratories within the DOE complex. Still, the EML developed world renowned capabilities in low-level radiation measurements and has been praised by State and federal officials for their contribution to both homeland security and national security-related programs.

The lab's scientists and engineers have designed and fabricated unique radiation detection instruments, played a major role in evaluating the impact of environmental contamination from nuclear weapons fallout and developed a global network of radiation sensors that performed a critical role in U.S. and international nuclear non-proliferation efforts. In the 1970s the EML established a radiochemistry Quality Assessment Program (QAP) that grew to include the participation of more than 150 labs, and they provided a support role for DOE's Nuclear Emergency Search Teams, whose task is to locate and disable nuclear weapons or radiological dispersal devices in the U.S. and abroad.

But one walk down the lab's hallways today and it is evident the lab has received only minimal upgrades since it moved to its current location five decades ago. Its peak staff of about 120 employees also dropped by half by the time it was transferred to DHS in 2003. The cost of maintaining the large facility in Manhattan has been significant. In addition, some employees who were nearing retirement had become stagnant in their positions. Yet, the Environmental Measurements Laboratory developed an unquestioned world renowned reputation for radiation analysis. Its non-proliferation and quality assurance programs, which began in the 1960s and 1970s and were still active when the lab moved to DHS, had no equals either in the Federal Government or commercial sector.

Quality Assessment Program (QAP)

The Environmental Measurements Laboratory established the Quality Assessment Program (QAP) in 1976 to perform "quality assurance" or "performance evaluation" tests designed to assess the accuracy of radiological measurements reported by radiochemistry laboratories. Department of Energy contractor laboratories were required to participate in the program. But other non-DOE laboratories, including federal agencies, commercial laboratories and State public health labs from California, Washington, Wisconsin, Texas, Tennessee, Illinois, Georgia, Idaho, Kansas, New York and New Jersey, also participated, 150 laboratories in all. When EML was transferred to DHS, EML scientists attempted to sharpen the QAP's focus on emergency response capabilities, rather than routine environmental analysis. But DHS terminated the program in 2004. Most disturbing is that in interviews with Subcommittee staff Caroline Purdy, Former Acting Director of the Office of National

Laboratories in the S&T Directorate, who directed that the program be closed, was completely unaware of what the Quality Assessment Program actually did or how it might play a role within DHS. "I don't remember any meetings discussing QAP," said Purdy. She said that QAP was an "old program" that had been around a long time and that her "general assumption was that the DOE National Labs would do this." John Clarke, Deputy Director of the Office of National Laboratories, also clearly saw no value in the QAP or its relevance to homeland security issues and also seemed unclear on what the program actually did. His justification for seeking its closure was that it was another "self generating" task that EML had developed.

Ironically, the S&T Directorate began the shut down of QAP and EML's chemistry laboratories at a time when DHS was standing up a new interagency organization dubbed the Integrated Consortium Laboratory Network or ICLN. Government officials from the Department of Energy, National Institutes of Standards and Technology and Environmental Protection Agency told Subcommittee staff that they believe EML's Quality Assessment Program would have been a key asset and perfect fit in the newly formed ICLN organization to coordinate proficiency testing at radiochemistry labs.

The Environmental Measurements Laboratory's QAP chemistry labs are now in the final stages of decommissioning. In the process the lab has donated or disposed of more than $1.7 million worth of equipment. The Food and Drug Administration and U.S. Secret Service took some of the radiation samples and the EML donated $6,000 of brand new flasks and beakers to Stuyvesant High School in New York City. Dr. Damon Chaky, a scientist at the Pratt Institute received two gamma radiation detectors valued at $20,000 each.

Global Monitoring Program

Since 1963, the Environmental Measurements Laboratory had developed, fabricated and maintained a global network of low-level radionuclide sensors. The EML monitoring system was the most extensive and comprehensive low-level radionuclide sampling network in the world, comprised of a Global Fallout Program, Surface Air Sampling Program (SASP) and Remote Atmospheric Measurements Program (RAMP). The network included more than 70 monitoring sites in the U.S. and abroad, including Antarctica, Australia, the Bahamas, Bolivia, Chile, China, France, Greenland, Panama, Singapore, South Africa, Turkmenistan, the United Kingdom, Uruguay and Venezuela. The network has been used extensively by scientists to validate global meteorological and atmospheric transport models. But the system also collected data that assisted U.S. and international nuclear non-proliferation efforts, helping to rapidly identify any new sources of radiological activities due to accidental releases or nuclear weapons tests.

In January 2002 EML established a monitoring station in Guiyang in southwest China and in April 2002 it established a second site at Mt. Waliguan. In August 2003, EML also installed a RAMP system in Ryori, Japan. The lab had plans to install a new radiation detector at Long Feng Shan in China, near the North Korean border that would have been installed in early 2006. But DHS terminated the lab's entire global radiation monitoring program in October 2005, including its plans to install a new detector near the North Korean border. This was particularly unfortunate, since North Korea conducted a nuclear weapons test in October 2006. Although portions of the program were classified, the significance of the program to U.S. nuclear non-proliferation efforts would have appeared obvious to anyone who had looked.

The EML sent e-mails to the sites maintaining the radiation detectors and informed those involved that they should dispose of the EML radiation sensors in accordance with local laws. Much of the equipment was old and it would have been too expensive to pack them up and return them to EML. The new radiation sensor that EML had planned to install at Long Feng Shan, China, near the North Korean border was never fully assembled and pieces of that planned detector remain at EML today.

With the specialized skills that the lab's core group of scientists and engineers possessed and their ability to design, fabricate and manufacture unique radiation sensors and their history of developing and producing plans and protocols for measuring and identifying radioactive isotopes it is particularly disturbing that S&T Managers could not envision how this laboratory—based in the heart of Manhattan—could have contributed to DHS. Instead, the lab's newly proposed projects were rejected, its former programs were terminated and its ability to function at virtually any level was micromanaged to the extreme. No one, it seems, in the S&T Directorate had a clear understanding of what some of the lab's most impressive programs did or how they might play a role in homeland security. Instead, they were

viewed as not being part of the "DHS mission" and were terminated. The leadership chasm that existed in the S&T Directorate was chilling.

In fact, it is not clear how the S&T Directorate expected EML to thrive, even function, within the Department of Homeland Security given the constraints that were placed on them. It's extraordinarily telling, for instance, that the lab had no computer access to the DHS Intranet until 2005, two years after EML transferred to DHS. Even then, EML was only provided with four computers that could access the DHS Intranet and one printer, despite the fact they had more than 40 employees. John Clarke also prevented DHS employees from attending conferences and routinely questioned their travel plans. Documents DHS provided to the Subcommittee show Clarke did this because of concerns over the laboratory's financial management. But even Marc Mandler, former Technical Director of the U.S. Coast Guard Research & Development Center, who was detailed to DHS for a short four month tour in 2004 and reviewed the lab's capabilities, along with Clarke, believed the financial microscope that was placed on EML was "very extreme," he said. "They could not even buy toilet paper," said Mandler, half-joking.

In the critical Mandler/Clarke review that was concluded in October 2004, Marc Mandler says he provided an honest assessment of what he encountered during his short tenure at DHS, but acknowledges that he did not speak to individuals outside of EML to get their perspective on the lab or work the lab had done for them. Mandler, who is well respected, said he felt that many of the EML employees were steadfastly resistant to change and unable to tailor their work towards their new mission at the Department of Homeland Security. But he did believe the staff that was willing to move in this direction were technically proficient, could contribute to homeland security efforts and that the lab had strategic value because of its location in the midst of New York City. Mandler says he respected John Clarke, but also says that the way the DHS S&T Directorate managed the Environmental Measurements Laboratory had a lot to be desired. "It was micromanagement without direction," said Mandler.

Witnesses

The Subcommittee hearing will use three separate panels to tell the story of the Environmental Measurements Laboratory and to explore and explain the systemic mismanagement that occurred on the part of the Science & Technology Directorate in supervising, managing and leading the laboratory.

Panel 1 will be composed of individuals from local, State and Federal Government agencies that have utilized the services of EML as well as a former DHS official in the S&T Directorate who quit over the way, he believed, the laboratory was being mistreated. Two of these witnesses have had programs they relied on with the EML terminated by the Department of Homeland Security. **Mrs. Lynn Albin,** *Radiation Health Physicist, Office of Radiation Protection, Washington State Department of Health,* utilized EML's QAP for nearly two decades. She will address the significance this program had on preparing her agency for the DHS-led TOPOFF2 counterterrorism exercise in 2003. **Mr. Charles F. McBrearty, Jr.,** *Former Director of Materials Technology, Air Force Technical Applications Center, Patrick Air Force Base, Florida,* just retired last month from the Air Force. He had a relationship with EML for nearly three decades and took a trip to DHS Headquarters in D.C. to make the case that EML was a critical asset and that in his experience they were "the masters of the universe in terms of radiation measurements." Despite that, DHS terminated all of EML's work for the Air Force. **Assistant Commissioner Jonathan A. Duecker,** *New York Police Department, Counterterrorism Bureau,* will describe the work that EML has been performing for first responders in the New York region since 9.11. **Dr. Tony Fainberg,** *Former Program Manager, Radiological & Nuclear Countermeasures, Office of Research and Development, Science & Technology Directorate, Department of Homeland Security,* will describe how he believed many of EML's programs could have benefited DHS. Fainberg witnessed many of the lab's programs killed off by the S&T Directorate and he eventually quit when he concluded that the directorate was intent on closing the laboratory.

The sole witness for **Panel 2** is **Dr. John F. Clarke,** *Deputy Director, Office of National Laboratories, Science & Technology Directorate, Department of Homeland Security.* Clarke is a Pacific Northwest National Laboratory employee detailed to the S&T Directorate, and is a key player in the ultimate degradation of the Environmental Measurements Laboratory's capabilities and programs.

Panel 3 will look ahead to the Environmental Measurements Laboratory's future. **Admiral Jay M. Cohen,** *Under Secretary for Science and Technology, Department of Homeland Security* and **Mr. Vayl Oxford,** *Director, Domestic Nuclear Detection*

Office, Department of Homeland Security will both discuss what role they see for the lab moving forward.

Conclusion

The history of the Environmental Measurements Laboratory—in the four years since it was transferred to the Department of Homeland Security—should serve as a case study of government mismanagement and incompetence. Once a valued critical asset, the lab has been stripped of some of its most successful and important programs and sorely mischaracterized by a small handful of officials in the S&T Directorate. John Clarke particularly served as a funnel through which information about EML flowed to many others within the S&T Directorate. His motivations may never be clear, but Clarke's mischaracterization of the Environmental Measurements Laboratory, the skills of its staff and the lab's programmatic capabilities are unmistakable. Subcommittee staff found that he has misconstrued conversations with both local first responders and non-DHS federal agencies about their stated positions regarding specific EML projects that Clarke eventually terminated. Even worse, Maureen McCarthy, Clarke's supervisor and the former Director of the Office of Research and Development (ORD) within the DHS S&T Directorate told Subcommittee staff that John Clarke had no "programmatic role" in the S&T Directorate. If he was involved in making programmatic decisions about the EML, said McCarthy—which he clearly and repeatedly was—this was outside of his set of responsibilities.

But McCarthy had been made aware of Clarke's propensity to overstep his lines of authority, particularly when it came to management of the Environmental Measurements Laboratory, by at least two DHS officials in 2005, including Tony Fainberg. Responsibility for reigning in the detrimental actions by John Clarke regarding EML clearly fell to her. While McCarthy says she spoke to Clarke about some of his actions, it clearly had little if any impact. Clarke managed to terminate EML's work for the Air Force, for example, even after those conversations. In fact, Tony Fainberg ended up quitting his position in the S&T Directorate partly because of the actions of John Clarke and partly because no one above Clarke was willing to prevent him from essentially destroying the programs, resources and morale at the Environmental Measurements Lab.

Admiral Cohen has told Subcommittee staff that he has no plans to close EML. He intends to maintain the lab's presence in New York City and to re-emphasize the lab's core mission towards the Testing & Evaluation (T&E) of equipment. This is a role the lab has taken on since 9.11 on an ad hoc basis for the New York and New Jersey first responder community in any event. Admiral Cohen sees EML becoming one of the premier testing and evaluation centers for DHS nationwide, he says. In addition, the Domestic Nuclear Detection Office (DNDO) intends to utilize about ten of the EML staff in the Countermeasures Test Bed (CMTB) and other related efforts that focus on the detection and identification of radiological threat material in the New York area.

It is encouraging that after more than four years the S&T Directorate seems to finally have some direction for the Environmental Measurements Laboratory. Up until now the laboratory has been left rudderless without a paddle. Admiral Cohen has emphasized that he wants to maintain the intellectual capital of EML's employees. Unfortunately, many of the lab's cadre of scientists and engineers have already retired or resigned since the lab was transferred into DHS. When the lab was transferred to DHS they had 54 employees, 12 with Ph.D.s and 18 with Master's degrees. Today the lab has 35 employees, seven with Ph.D.s and 11 with Master's degrees. Damage to the intellectual capital of the laboratory has already occurred, but Admiral Cohen can still help stem the flow.

The S&T Directorate—led by Admiral Cohen—now has an opportunity to clearly lead the lab into the future by providing them with clear guidance, renewed encouragement about their ability to contribute to the Nation's security and by obtaining a much clearer understanding of the skills and abilities of the lab's remaining personnel and how they can be utilized to their full potential. The lab has been left to wither for too long, staff has fled and critical programs have been inexplicably terminated. Admiral Cohen has an opportunity to curtail the damage that has already been done and begin a positive path forward that will benefit the lab, its employees, DHS and the Nation.

Chairman MILLER. Good morning. The Committee will come to order for the hearing on transitioning the Environmental Measurements Laboratory to the Department of Homeland Security.

We learned from Hurricane Katrina that we were woefully unprepared for an entirely foreseeable natural disaster. The failures of our response expose the sorry state of our emergency preparedness. Many of us wondered what else was suffering from similar neglect that we might only learn of if something goes horribly wrong?

Today the Subcommittee is going to review the management of the Environmental Measurements Lab by the Department of Homeland Security's Science and Technology Directorate. It appears that we have stunningly neglected our obvious national security and homeland security need to detect and measure radiation, hindering our ability to respond to nuclear proliferation around the world and here in the United States, to prevent and respond to the detonation of a dirty bomb, a promise that terrorist groups have telegraphed for years. And while we are spending billions to develop the technology to intercept a missile in the air, to hit a bullet with a bullet, a task that many think is a fool's errand, we have shortchanged research to develop the technology to prevent a nuclear device from being smuggled into the United States and detonated in an American city, a far more likely event.

EML has specialized in radiation detection analysis for 60 years. It traces its roots to the Manhattan Project. It should have been a welcome asset and a natural fit for an agency chartered with protecting our country from radiological threats. Instead, detailed plans to close the lab were concealed from both the EML staff and Congress. Critical national security programs at the lab were terminated and the lab's employees to be left to wonder about their future for the past four years without any clear direction or decisions from the Department of Homeland Security.

When the Environmental Measurements Laboratory was transferred to Homeland Security from the Department of Energy in 2003, Congress expected that the laboratory would add value. Beginning with the work on the Manhattan Project, EML scientists developed a world-renown expertise in low-level radiation measurement, a skill that would be of critical value to both help prevent and respond to potential radiological or nuclear terrorist attack. Instead of exploring and expanding unique skills and the capabilities of the laboratory in a strategic location in Manhattan, Homeland Security's S&T, Science and Technology, Directorate soon proceeded to reject the lab's proposals for future work and terminated its existing programs.

S&T managers downplayed, dismissed, disparaged the capabilities of the lab, arguing that it had no real unique skills, had low credibility in the view of local first responders, and could not compete with other larger national laboratories. Our first panel today is composed of local, State and federal, officials and a former DHS manager. They will provide a contrary view to that assessment. We will also examine some of EML's key programs that were terminated. One of those was the lab's worldwide radiation monitoring program.

Beginning in 1963, EML had built a global network of low-level radiation sensors that were used by scientists to validate global atmospheric transport models. But the system also played a key role in nuclear nonproliferation efforts, rapidly identifying any new sources of radiological activities from nuclear weapons tests. The lab had installed two radiation monitors in China in 2002 and had plans to install a new one, a new detector in China, near the North Korean border, in early 2006. But on October 1, 2005, the program was terminated by DHS. Almost exactly a year later, on October 9, 2006, North Korea carried out a nuclear weapons test. It is hard to know how valuable the EML's Global Monitoring Program, and particularly its new radiation sensor, would have been in helping determine the sophistication of the North Korean nuclear test. We only know that because of DHS's action, the sensor was not in place and remains unassembled at EML today.

In 2005, DHS also stripped EML of its radioisotope chemical analysis labs, critical for the continuation of its radiochemistry Quality Assessment Program. That is pronounced QAP. It sounds like Elmer Fudd using a mild profanity—QAP. It is praised by both State and federal participants as directly contributing to homeland security efforts. This program helped ensure the results produced by radiochemistry tests by radiochemistry labs, whose task is to analyze radioactive samples whether from a nuclear facility or in response to radiological attack, were accurate.

Some projects EML initiated with local first responders in New York City, including a network of rooftop radiation sensors, were halted by DHS. Other programs were started and stopped and then transferred. The way the EML has fared since being transferred to DHS shows an appalling lack of leadership at DHS S&T Directorate. The lack of clear decisions and direction regarding EML permitted a haphazard approach and its programs to fester within the S&T Directorate. And as a result, the lab's programs were decimated and its staff demoralized and a seemingly reckless disregard for how the lab's skills and projects could have benefited DHS, other federal agencies or the Nation.

Top S&T managers responsible for terminating some of the lab's key programs had no idea what those programs actually did and had no discussions about how they might benefit DHS. In addition, S&T managers squandered an inordinate amount of time and effort planning for the demise of the EML laboratory, rather than attempting to determine how the lab might be effectively used and its staff successfully employed to contribute to DHS. Because of all of these actions, the lab has been left in limbo. Many of its programs have been terminated, new projects halted, the skills and capabilities of its employees disparaged, and its staff reduced by a third.

The Subcommittee hopes that EML and the leadership of S&T Directorate have turned the corner and we can now expect some positive change in the future. Our last panel today will look at the lab's future role in DHS. The vast majority of those actions did not occur under Under Secretary of Science and Technology Admiral Cohen's watch. The Subcommittee is pleased that the new leadership of the S&T Directorate appears willing to utilize a lab that many have referred to as a national asset. Again, we appreciate

that the S&T Directorate and the Domestic Nuclear Detection Office will work together to employ fully the skills of the staff at the Environmental Measurements Laboratory.

And now I would like to recognize the Ranking Member, Mr. McCaul, for his opening statement.

[The prepared statement of Chairman Miller follows:]

PREPARED STATEMENT OF CHAIRMAN BRAD MILLER

Good morning.

We learned from Hurricane Katrina that we were woefully unprepared for an entirely foreseeable natural disaster. The failures of our response exposed the sorry state of our emergency preparedness.

Many of us wondered what else was suffering from similar neglect that we might only learn of if something else goes horribly wrong.

Today, the Subcommittee is going to review management of the Environmental Measurements Laboratory (EML) by the Department of Homeland Security's Science & Technology Directorate. It appears that we have stunningly neglected our obvious national security and homeland security need to detect and measure radiation, hindering our ability to respond to nuclear proliferation around the world, and here in the United States to prevent or respond to the detonation of a "dirty bomb," a punch that terrorist groups have telegraphed for years. And while we are spending billions to develop the technology to intercept a missile in the air, we have shortchanged research to develop the technology to prevent a nuclear device from being smuggled into the United States and detonated in an American city, a far more likely event.

EML has specialized in radiation detection and analysis for 60 years. It traces its roots to the Manhattan Project. It should have been a welcomed asset and natural fit for an agency charged with protecting the country from radiological threats. Instead, detailed plans to close the lab were concealed from both the EML staff and Congress, critical national security programs at the lab were terminated and the lab's employees have been left to ponder their future fate for the past four years without any clear direction or decisions from DHS.

When the Environmental Measurements Laboratory was transferred to Homeland Security from the Department of Energy in 2003, Congress expected that the laboratory would add value. Beginning with their work on the Manhattan Project, EML's scientists developed a world renowned expertise in low-level radiation measurement, a skill that would be of critical value to both help prevent and respond to a potential radiological or nuclear terrorist attack. But, instead of exploiting and expanding the unique skills and capabilities of the laboratory and its strategic location in New York City, Homeland Security's S&T Directorate soon proceeded to reject the lab's proposals for future work and terminated its existing programs.

S&T managers downplayed, dismissed and disparaged the capabilities of the lab arguing that it had no unique skills, had low credibility in the view of the local first responders it worked with and could not compete with other larger national laboratories. Our first panel today is composed of local, State and federal officials and a former DHS program manager. They will provide a contrary view to that assessment.

We will also examine some of EML's key programs that were inexplicably terminated. One of those was the lab's worldwide radiation monitoring program. Beginning in 1963, EML had built a global network of low-level radiation sensors that was used by scientists to validate global atmospheric transport models. But the system also played a key role in nuclear non-proliferation efforts, rapidly identifying any new sources of radiological activities from nuclear weapons tests. The lab had installed two radiation monitors in China in 2002 and had plans to install a new detector in China near the North Korean border in early 2006. But on October 1, 2005, the program was terminated by DHS. Almost exactly a year later, on October 9, 2006, North Korea carried out a nuclear weapons test. It is hard to know how valuable the EML global monitoring program and particularly its new radiation sensor that the lab had planned to install near the North Korean border would have been in helping to determine the sophistication of the North Korean nuclear test. We only know that, because of DHS's actions, the sensor was not in place and sits unassembled at EML today.

In 2005, DHS also stripped EML of its radioisotope chemical analysis labs critical for the continuation of its radiochemistry Quality Assessment Program (QAP) praised by both State and federal participants as directly contributing to homeland security efforts. This program helped ensure that the results produced by

radiochemistry labs—whose task is to analyze radioactive samples whether from a nuclear facility or in response to a radiological attack—are accurate. Some projects EML initiated with local first responders in New York City, including a network of roof-top radiation sensors, were halted by DHS. Other programs were started, stopped and then transferred.

The incomprehensible way the Environmental Measurements Laboratory has fared since being transferred to DHS is testimony to an appalling lack of leadership at the S&T Directorate. The lack of clear decisions and direction regarding EML permitted a haphazard approach to the EML and its programs to fester within the S&T Directorate. As a result, the lab's programs were decimated and its staff demoralized with a seemingly reckless disregard for how the lab's skills and projects could have benefited DHS, other federal agencies or the Nation as a whole. Top S&T managers responsible for terminating some of the lab's key programs had no idea what these programs actually did and held no discussions on how they might benefit DHS. In addition, S&T managers squandered an inordinate amount of time and effort planning for the demise of the Environmental Measurements Laboratory rather than attempting to determine how the lab could be effectively utilized and its staff successfully employed to contribute to DHS.

Because of all of these actions, the lab has been left in a disturbing state of limbo. Many of its programs have been terminated, new projects halted, the skills and capabilities of its federal employees disparaged and its staff reduced by one-third. The Subcommittee hopes that the EML and the leadership at the S&T Directorate have finally turned the corner and that we can expect positive change to be forthcoming.

Our last panel will look towards the lab's future role in DHS. The vast majority of these actions did not occur under Under Secretary of Science & Technology, Admiral Cohen's watch. The Subcommittee is pleased that the new leadership at the S&T Directorate appears willing to utilize a laboratory that many have referred to as a national asset. We anticipate that the S&T Directorate and the Domestic Nuclear Detection Office will work together to fully employ and exploit the skills of the staff at the Environmental Measurements Laboratory.

Mr. MCCAUL. Thank you, Chairman Miller. As I said, it is your lucky day. I am filling in for Mr. Sensenbrenner today. I want to welcome our witnesses and those out there. I want to thank the Chairman for holding this hearing on the Department of Homeland Security's Environmental Measurements Laboratory.

As the Ranking Member on the Homeland Security Committee's Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology, I am particularly interested in the future of the Department's national labs. To that end, I hope the witnesses before us today can help us understand what EML's capabilities are and how they can best fit into DHS. Any time a facility is transferred from one agency to another, there is understandably a realignment of work in order to serve the agency's and the Nation's best interest. EML is no exception. They will have to adapt to their new homeland security mission, which will likely mean a different focus and direction for the lab. In identifying this new path, we should also be mindful of other work EML does that may not be in line within the DHS structure and mission and make sure that we don't lose a national capability just because of turf considerations.

That being said, I am confident that there is a safe place for EML in DHS, after all, EML is a unique asset located in the heart of downtown Manhattan. They have built up a strong relationship with State and local entities there and are undisputedly experts in low-level radiation analysis, clearly a high priority for DHS. As I said, I look forward to the testimony. I hope this will be a productive hearing and we will leave here with a better understanding of how EML can best be utilized in the future. And with that, I yield back, Mr. Chairman.

[The statement of Mr. McCaul follows:]

PREPARED STATEMENT OF REPRESENTATIVE MICHAEL T. MCCAUL

Thank you, Mr. Miller. I will be filling in for Mr. Sensenbrenner today as Ranking Member. I want to welcome our witnesses here today and thank the Chairman for holding this hearing on the Department of Homeland Security's Environmental Measurements Laboratory. As the Ranking Member on the Homeland Security Committee's Subcommittee on Emerging Threats, Cyber Security, and Science and Technology, I'm particularly interested in the future of the Department's national labs.

To that end, I hope the witnesses before us today can help us understand what EML's capabilities are, and how they can best fit into DHS. Anytime a facility is transferred from one agency to another, there is understandably a realignment of work in order to serve the agency's, and the Nation's, best interests. EML is no different. They will have to adapt to their new homeland security mission, which will likely mean a different focus and direction for the lab. In identifying this new path, we should also be mindful of other work EML does that may not be aligned with the DHS mission and make sure that we don't lose a national capability just because of turf considerations.

That being said, I am confident that there is a place for EML in DHS. After all, EML is a unique asset: Located in the heart of Manhattan, they have built up strong relationships with State and local entities, and are undisputedly experts in low-level radiation analysis—clearly a high priority for DHS. I look forward to all of our witnesses' testimony—particularly Under Secretary Cohen's and Mr. Oxford's. I hope this will be a productive hearing, and that we will all leave here with a better understanding of how EML can best be utilized in the future.

Chairman MILLER. Thank you, Mr. McCaul. If there are other Members—Mr. Rothman is welcome to submit any kind of opening statement for the record, which he has shaken his head to show that he does not.

Mr. ROTHMAN. If I may, Mr. Chairman, let me say that I am very interested in today's hearing, period.

Chairman MILLER. The Chairman welcomes similar opening statements from the Members of the Committee.

[The prepared statement of Mr. Sensenbrenner follows:]

PREPARED STATEMENT OF REPRESENTATIVE F. JAMES SENSENBRENNER JR.
RANKING MEMBER
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT

Sensenbrenner Lauds Value of Environmental Measurements Laboratories

Washington, May 3, 2007—As the Ranking Republican on the House Science and Technology Subcommittee on Investigations and Oversight, Representative Jim Sensenbrenner (R–MI) made the following comments following today's Subcommittee hearing on Environmental Measurement Laboratories (EML), and its transition from the Department of Energy to the Department of Homeland Security (DHS):

"If an American city was a victim of a dirty bomb attack, our lack of preparedness would affect our ability to triage medical care and limit panic," said Sensenbrenner. "Proper equipment and training would allow experts to quickly assess and disclose the levels of radiation and the risk to the public, allowing people who are not at risk to be put at ease and freeing emergency responders to focus on those people most in need of care."

"After a Subcommittee investigation that has spanned the past several months, it is clear that DHS has, thus far, struggled to fully realize the value of EML's expertise," Sensenbrenner continued. "It is equally clear that EML, which specializes in low-level radiation measurements, can have a valuable place within DHS and can help prepare America to respond to a catastrophic attack."

A supervisor with the Wisconsin State Laboratory of Hygiene, Lynn West, worked with EML through its Quality Assessment Program (QAP) before that program was terminated by DHS. Ms. West explained that while America has done a lot to prepare for a full-scale nuclear disaster, it has lagged in its preparedness to respond to lower-level radiological emergencies, like a dirty bomb.

"There is currently no program, federal or otherwise, focused on developing the ability of radiochemistry labs to respond to radiological emergencies. The QAP program, had it not been terminated, would have helped in this area," Sensenbrenner concluded.

[The prepared statement of Mr. Costello follows:]

PREPARED STATEMENT OF REPRESENTATIVE JERRY F. COSTELLO

Good morning. Thank you Mr. Chairman for calling this hearing to receive testimony from witnesses on the Department of Homeland Security's (DHS)'s Science and Technology Directorate Environmental Measurements Laboratory (EML).

In the 1970s, EML established a radiochemistry quality assessment program that grew to include the participation of more than 150 labs. They have provided a support role for the Department of Energy's Nuclear Emergency Search Teams, whose task is to locate and disable nuclear weapons or radiological dispersal devices in the U.S. and abroad.

EML was transferred from the Department of Energy to the DHS's Science and Technology Directorate in 2003, under the *Homeland Security Act of 2002*. Since its transfer to DHS, programs at EML have been terminated and curtailed in order to plan for the lab's ultimate closure. The reasons for shutting down the lab are not clear and the Science and Technology Directorate within the DHS has not provided an explanation to Congress or the public of the rationale for closure.

I look forward to hearing from our panel of witnesses in order to obtain full disclosure on what happened with the EML and why Congress was not made aware of the systemic mismanagement that occurred in supervising, managing, and leading the laboratory.

Chairman MILLER. We would now like to introduce our panel of witnesses. On the first panel is Mr. Charles McBrearty, former Director of Materials Technology, Air Force Technical Applications Center, Patrick Air Force Base in Florida; Dr. Tony Fainberg, former Program Manager, Radiological and Nuclear Countermeasures, Office of Research and Development, Science and Technology Directorate, Department of Homeland Security; Lynn Albin, Radiation Health Specialist or Physicist, Office of Radiation Protection, Washington State Department of Health; and Assistant Commissioner Jonathan Duecker with the New York Police Department Counterterrorism Bureau. You can all take your seats. Thank you.

Your oral testimony is limited to five minutes. All of you have submitted written testimony which will be placed in the record and without objection, we may enter various documents in the hearing, whether identified or not during the hearing. I assume that is without objection. So after the entire panel has given your five-minute testimony, the Members of the Committee will have five minutes each to ask questions. I will try to be fairly strict about that, although Mr. McCaul has not been an offender in that regard. And we do swear the witnesses, so it is our practice to do so. Do any of you have any objections to being sworn in, to taking an oath? You also have the right to be represented by Counsel. I know hearing that does not necessarily put you at your ease. There is no reason. None of us anticipate that you need Counsel, but you may have Counsel if you want it and none of you have Counsel today.

Okay, if you would all now please stand and raise your right hand.

[Witnesses sworn]

Chairman MILLER. Thank you. Thank you, Mr. McBrearty. You may begin.

Panel 1:

STATEMENT OF MR. CHARLES F. MCBREARTY, JR., FORMER DIRECTOR OF MATERIALS TECHNOLOGY, AIR FORCE TECHNICAL APPLICATIONS CENTER, PATRICK AIR FORCE BASE

Mr. MCBREARTY. I appreciate the opportunity to represent the Air Force Technical Applications Center (AFTAC) at this hearing on the transition of EML. A detailed response to the questions you asked me, sir, is in the written testimony that I provided. I will just give a quick summary of some of those points and would be happy to answer and elaborate.

The mission of AFTAC is to provide the national authorities quality technical measurements to monitor nuclear treaty compliance by foreign nations, and to develop advanced proliferation technologies which are vital to the national security. In terms of this Committee's inquiry, AFTAC had maintained an outstanding relationship with the Environmental Measurements Laboratory for almost four decades. In 2005, when Dr. Clarke of DHS informed AFTAC that EML would be closing, I traveled to the DHS offices to personally discuss the matter with him. My purpose was to emphasize the importance of the work that EML was doing for AFTAC, as well as my view of the potential value, an important value EML represented to the new department.

The DHS decision did not change as a result of that mission meeting, so AFTAC proceeded to transfer its nuclear monitoring support functions, which we're doing on at EML, to Los Alamos National Laboratories and its engineering and nuclear analysis sampling technology evaluation support functions to Pacific Northwest Laboratories, two laboratories which, again, we have had and do have long-term relationships with.

The termination of AFTAC's efforts at EML created a short-term impact on our programs during the transfer of the analysis work to the other laboratories. Based on the DHS decisions, we adjusted our operations and today are generally comfortable with the new arrangements. Because of this decision, or the threat of it, key EML staff scientists have moved on or retired and specialized equipment has been transferred. Thus the core of the capability of great value to AFTAC no longer currently exists at EML.

From my position as a customer of EML and versed and experienced with about 38 or so years in this field, I believe that the intangible worth of EML's excellent technical experience and contacts within the international radiation measurements community were not fully appreciated. We did appreciate them and made great use of all of those contacts in matters like the Comprehensive Test Ban Treaty and things of that nature.

However, that said, the ultimate decision of whether or not to continue EML's operations was one ultimately DHS had to make. Our operations only funded a small portion of the work that went on there, so we had no choice once the decision was apparently made to terminate other than to move on, move our stuff onwards.

If you have any other questions, I will be happy to answer them.

[The prepared statement of Mr. McBrearty follows:]

PREPARED STATEMENT OF CHARLES F. MCBREARTY, JR.

Mr. Chairman, distinguished Members of the Committee, I appreciate this opportunity to represent the Air Force Technical Applications Center (AFTAC) at this hearing on the transition of the Environmental Measurements Laboratory (EML) to the Department of Homeland Security (DHS). The mission of AFTAC is to provide national authorities quality technical measurements to monitor nuclear treaty compliance and develops advanced proliferation monitoring technologies to preserve our nation's security. In terms of this committee's inquiry, AFTAC had a long and valued association with the Environmental Measurements Laboratory going back over three decades. During that period, EML provided services to AFTAC through the Department of Energy (DOE) "Work of Others Program." These efforts consisted of task-order based, technical support and consulting services associated with the area of their expertise, the measurement of radioactivity in the environment. EML also provided AFTAC with assistance on other national security projects that we will not be able to discuss in today's open hearing.

EML Program Support to AFTAC

At the time the EML was transferred to the DHS, we were maintaining a relatively small effort (on the order of $200K–$300K per year) with the laboratory. The focus of that work was largely for trace radionuclide analysis of specific samples collected by the United States Atomic Energy Detection System (USAEDS) operated by AFTAC. EML performed this analysis on gas samples collected by AFTAC's Nuclear Debris Collection and Analysis (NDC&A) program to monitor provisions of the Limited Nuclear Test Ban Treaty of 1963.

In addition, AFTAC made good use of EML's scientific expertise and excellent connections/reputation in the International Community. We routinely asked their advice, support, and assistance in tasks associated with the enhancement of the USAEDS, innovative sampler design and development, and consulted closely on matters of common interest with regard to the Comprehensive Test Ban Treaty (CTBT).

During development of CTBT protocols in the mid 1990's AFTAC, strongly recommended that EML be designated as the U.S. "States Party" radionuclide analysis laboratory. They were subsequently so designated.

Dr. John Clarke of the DHS notified AFTAC in September 2005 that, "Our yearlong review has now concluded and the programmatic decision has been made to close the EML." He also informed EML and AFTAC that the DHS would no longer accept funding for this work. Dr. Clarke noted in that e-mail that he had contacted both Mr. Scott Smith, the AFTAC Project Officer, and I and stated, "They both understand and accept that the nature of future radiation measurement work at EML is still under review in DHS and that DHS cannot commit to a new contract with their organization at this time." AFTAC worked with EML over the next seven months to relocate the government furnished equipment needed to perform our nuclear treaty monitoring mission to Los Alamos National Laboratory. AFTAC also assisted EML in relocating their sample inventory to qualified sample management facilities at AFTAC and AFTAC-sponsored laboratory facilities at Los Alamos National Laboratory and Pacific Northwest National Laboratory.

Value of EML Activities to AFTAC and Support to National Security

We highly valued the work of EML. Not only was the laboratory a reputable and highly respected analytical facility from whom we could always count on quality and cost effective work, they were unmatched in their understanding of the operational realities of sample collection operations. The culture that had evolved at the laboratory was, in my view, one of seeking practical, rugged and sustainable collection systems and collection concepts.

Again, we cannot go into the details of the national security work performed by EML in this environment. While we had significantly reduced the amount of national security work being performed by EML under this portion of the effort, some aspects were quite valuable to the USAEDS treaty monitoring efforts.

The engineering and nuclear debris sampling and radiometric technology evaluation support was of high value to AFTAC. The EML scientists, as federal employees, were noted for impartial and independent judgment on nuclear measurement related issues.

The radiometric measurements on gas samples collected by AFTAC's NDC&A program were of very high value to AFTAC. Many of the national laboratories could perform these types of radiometric measurements, but EML was unique in its proximity to our gas sample processing laboratory in New Providence, NJ. Samples could be driven to EML in less than an hour if required and time is often of the essence for measuring the short lived isotopes associated with nuclear weapons testing.

AFTAC's Efforts to Persuade DHS to Maintain EML Programs

I was initially quite pleased to learn that a decision had been made to transfer EML to the DHS. My organization and I highly regarded the expertise and competence of EML in the field of trace radionuclide detection, and I believed those same capabilities that were of such value to AFTAC could also be of great help to the new Department. EML's excellent national and international reputation in a field of critical need by DHS (trace radioactive materials detection and expertise in sample collection, data analysis and quality control) were, in my mind, extremely valuable assets.

I was surprised when I learned that closure of the laboratory was being considered. When we received clear indication from the new program office in DHS that closure was planned, I made a special trip to Washington to discuss the issue, its implications for my programs, and expressed my opinion of the inherent value EML capabilities represented to DHS.

During this visit in September 2005, I meet with Dr. John Clarke and discussed these topics. Dr. Clarke indicated that actions were underway to close the lab and that unless we wanted to pick up the tab for the operation, (a sum of about $10M per year as I recall), we should plan on moving our work elsewhere. I expressed my surprise at the proposed decision and emphasized my view that a credible, unbiased resource for testing, reviewing, and quality control of the plethora of radiation detection concepts being pushed by numerous commercial enterprises as well as the National Laboratories themselves. . .capabilities I believed resided in EML. . .was critically needed.

DHS's response to my points was that "EML was quite costly and did not fit into their 'Business Model'."

AFTAC's Response to DHS's Decision to Halt EML Support to AFTAC

After being notified of the DHS programmatic decision to close EML, AFTAC considered a number of possible alternatives to continue the national security portion of the effort. Dr. Clarke offered to assist AFTAC in finding an organization within the Federal Government that could take over this effort. Based upon the new capabilities, either already in place or scheduled for being operational with the next two years, AFTAC decided to terminate the national security effort rather than attempting to transition that effort to another organization.

The majority of the remaining engineering and nuclear debris sampling and radiometric technology evaluation support transitioned to Pacific Northwest National Laboratory, another long-term USAEDS mission partner for AFTAC. This work is sponsored by both AFTAC and the DOE Office of Nonproliferation Research and Development. AFTAC particularly valued the ability to consult with EML as an honest broker for engineering advice and technical evaluation. AFTAC successfully transitioned the gas sample radiometric measurement effort to Los Alamos National Laboratory, a long-term USAEDS mission partner for AFTAC, in the spring of 2006. EML requested permission to discontinue operating and maintaining these systems, and AFTAC approved this request on 14 March 2006. Personnel from EML and Los Alamos packed up the detectors and other Air Force government-furnished equipment and shipped them to Los Alamos in late April 2006.

Conclusion

AFTAC had maintained an outstanding relationship with the Environmental Measurements Laboratory for four decades. When Dr. John Clarke, DHS, informed AFTAC that DHS would be closing EML, I traveled to DHS to personally discuss the matter with him. The DHS decision did not change as a result of that meeting, so AFTAC proceeded to transfer its nuclear treaty monitoring support functions to Los Alamos National Laboratory and its engineering and nuclear debris sampling and radiometric technology evaluation support functions to Pacific Northwest National Laboratory. AFTAC terminated its support for the national security work due to increased capabilities elsewhere and other priorities.

The termination of AFTAC efforts at EML created short-term impact on our program during the transfer of analysis work to other laboratories. Based on the DHS decisions, we adjusted our operations and today are generally comfortable with the new arrangements. Because of this decision (or threat of it), key EML scientific staff have moved on or retired and specialized equipment has been transferred. Thus, the core of the capability of value to AFTAC no longer exists at EML.

From my position as a customer of EML's, I believe the intangible worth of EML's excellent technical experience and contacts within the international radiation measurements community was not fully appreciated. From AFTAC's perspective, this was important, and in my view was, in many ways, a unique national asset representing an experience base unlike any other laboratory in the DOE complex. How-

ever, in the larger picture, DHS as the parent agency, the primary designated customer of EML's output and the agency which was funding the bulk of EML's activities was better positioned than we, as occasional users, were to make the final funding decision. Ultimately, we—AFTAC—made our own decision as to whether or not to support a wider range of activities than we had historically supported in order to keep EML together, and we, too, decided that we couldn't provide that level of support.

Thank you for your attention. If you have any questions, I would be happy to address them.

BIOGRAPHY FOR CHARLES F. MCBREARTY, JR.

Charles F. McBrearty, Jr., retired as the Director of Materials Technology at the Air Force Technical Applications Center (AFTAC), Patrick Air Force Base, Florida on 30 April 2007. Prior to his retirement, Mr. McBrearty directed AFTAC's largest product area with an annual program budget of more than $140 million and directed the work of over 200 scientific and engineering personnel. He was responsible for the management of a network of 13 analytical laboratories engaged in trace nuclear and non-nuclear materials analysis, in support of AFTAC's global treaty-monitoring tasking to detect, collect, and analyze nuclear material associated with nuclear tests. He guided AFTAC's research and development programs exploring new technologies to enhance and assist treaty verification and efforts to limit the proliferation of nuclear, chemical and biological weapons of mass destruction. His responsibilities covered diverse sciences and technologies ranging from nuclear engineering, chemistry, and meteorology, to collection and analysis technique development. Mr. McBrearty directed AFTAC nuclear analysis and evaluation support to the International Atomic Energy Agency and the Department of State, in their monitoring of the nuclear Nonproliferation Treaty.

Mr. McBrearty has served in a variety of leadership, academic and technical positions in government and industry. He entered the Air Force in 1967 as a distinguished graduate of the Texas A&M University Reserve Officer Training Corps (ROTC) program and served as a commissioned officer until 1991.

He held two command positions with AFTAC, taught at the Air Force Academy, and served in numerous staff and scientific positions. Following his retirement from active duty, he managed NASA's Toxic Vapor Detection Laboratory supporting Space Shuttle operations at Kennedy Space Center.

Mr. McBrearty returned to federal service in 1993 to assume his current position and was appointed to the Air Force Senior Executive Service in 1998. He was awarded The Presidential Rank, Meritorious Executive Award in 2005.

Chairman MILLER. Thank you, Mr. McBrearty. Remarkably, you had a minute and 45 left. Dr. Fainberg.

STATEMENT OF DR. M. ANTHONY FAINBERG, FORMER PROGRAM MANAGER, RADIOLOGICAL AND NUCLEAR COUNTERMEASURES, OFFICE OF RESEARCH AND DEVELOPMENT, SCIENCE AND TECHNOLOGY DIRECTORATE, DEPARTMENT OF HOMELAND SECURITY

Dr. FAINBERG. Mr. Chairman and Congressman McCaul, thank you and Members of the Committee. Thank you for the opportunity to discuss my experiences with EML and my views on that lab today. I wish first to state that while I happen to be adjunct staff member at the Institute for Defense Analyses, my views are entirely personal and no way reflect any positions taken by that organization. I will try quickly to cover several topics requested by Committee staff.

My background and training is as an experimental physicist and I recently retired from the government after 20 years of service. In 2003, for the first few months at DHS, I was responsible for both administrative and programmatic oversight of EML and the DHS Office of Research and Development within the S&T Directorate.

Later on, I managed radiation detection and explosive detection research at national labs and at EML.

While at DHS, I visited the lab several times to learn about its history and resources. Its work had been mainly in the area of radiochemistry and low-level radiation measurements. There was some mismatch between some of their activities and DHS needs, but I judged that, in the field of radiation detection, their experience would be useful for DHS. My initial assessment was that the lab space was in sad condition, rented from GSA at far too high a price. There were 60 staff members, down from over a hundred some years earlier. DOE had left the lab as a neglected backwater, perhaps because of DOE's recently declining emphasis on environmental cleanup, which had become the lab's chief area of responsibility. However, although the lab had been in decline, staff welcomed and indeed embraced the chance for a rebirth as part of a mission in which they held a strong and vital interest. Located about a mile north of the World Trade Center, they were strongly and viscerally affected by 9/11 and were extremely motivated to become part of the global anti-terrorism effort.

Regarding the staff, some had been employed a task that had not changed much for decades and appeared ready for retirement. On the other hand, a large fraction of the technical staff, of varied ages, impressed me as highly motivated, energetic and very capable in their areas of expertise. Upon moving to DHS, EML management had transitioned their work to projects that it felt would be useful to and welcomed by DHS. One example of this activity was a New York area science and tech working group which held seminars for first responders in the area on radiation and operating radiation detection equipment. I learned later from some participants that these sessions were well attended and appreciated.

I found several projects to be of interest. They are written about more in my remarks, but one that particularly struck me was an experiment related to the so-called neutron ship effect, carried out by a physicist of national stature, Dr. Paul Goldhagen. This involved measurements of neutrons generated by cosmic rays striking large structures such as ships. It was directly relevant to determining whether it would be useful to try to detect nuclear material in containers bound for the United States on cargo ships.

Overall, I would like to make one comment. Since, upon its creation, the S&T Directorate had willingly accepted EML as part of its new organization, it was clearly incumbent on S&T management to establish that lab's new mission. In fact, one would have thought S&T would have had some idea of how the lab would be useful to them before agreeing to accept them. However, I saw little evidence that serious thought had been given to this matter. Indeed, after a year or two, I heard grumbling in headquarters that EML had no idea of what its mission should be, as though this were not the responsibility of S&T itself.

Committee staff have asked me to explain why I resigned from S&T. The matter is not that important, except that the reasons reveal some existence of management issues and without going into too many details, I had some disagreements with Dr. John Clarke, who was supposed to be responsible for facility management, over projects at EML. After a series of meetings with him, I suggested

that he manage the programs himself, except for those that had already been approved at a higher level by the Office Director of ORD. He agreed but shortly thereafter he came to me and tried to block this neutron ship effect project, for which I had a certain amount of interest and respect. I had asked my management after that for—well, I appealed to my management after that for help because they had previously approved that project and my management chain was entirely deaf to my e-mails, all of them, except at one point the Deputy Office Director, Robert Hooks, told me that we should fix the matter ourselves.

Since they ignored my pleas to reaffirm their earlier commitments on this project, and since I was having a very difficult time keeping other projects there alive and functioning, I submitted my resignation, deciding that management was broken. Management proved later to me, three days, that it was broken, because my immediate supervisor, Dr. Gerald Parker, came to me and handed me a letter of counseling, which was a reprimand, for daring to resign and then he threatened me with sanctions if I continued such bad behavior. This divorcement from reality, I thought, was noteworthy and complete.

Naturally, I left ORD as soon as I could, within about two working days, I think it was, and was able, fortunately, to join the DHS Domestic Nuclear Detection Office for my remaining federal service, where I found the working environment quite satisfactory. The ship project went forward eventually, but it is kind of interesting that I had to be forced to resign to accomplish this.

From my perspective, I concluded, then, that S&T management was trying to squeeze EML out of existence by turning off or crippling projects, one by one, so that it could be finally asserted that the lab had no function. I do not know why this was done. Several other projects I had thought useful had also been rejected earlier by my superiors. I cannot prove there was an overt intent to close the lab. Indeed, Mr. Hooks assured me, at this time, that such was not the case. However, in spite of such an assurance, the facts indicated to me that an intention to shut down the lab was the simplest explanation for what was going on.

My view is that S&T should have realized it was fortunate in acquiring an asset in New York City, which is a prime terrorist target. The lab had, on its own, established excellent working relations with city officials and could have functioned as S&T's presence in the area and these relations could have facilitated communication and cooperation between federal and State and local homeland security officials, at least in the radiological arena. This opportunity to take advantage of a ready-made local asset was unfortunately missed by S&T.

As to what should have been done with EML, my suggestions would have been to allow it to continue some of the local projects in which it had been engaged. I would have supported continual global monitoring, thinking that, in 2004, it was not impossible that it might be useful to have some detectors near North Korea. I would have had it fully engaged in supporting the rest of DHS and the local radiological projects. And finally, I would have authorized the hiring of some young scientists with recent degrees to reinvigorate what had been a leading radiation laboratory some 20

to 30 years earlier. Briefly, I would have decided that, although the lab had some issues that needed to be fixed, it would have been worthwhile rebuilding it into a high-profile DHS S&T facility in New York. It may be too late for some of these thrusts, but on the whole, the lab still can and should be resuscitated. I am very glad to learn that finally this may happen.

To save time, I have dropped some other remarks from my oral presentation regarding another S&T lab, the Transportation Security Lab in Atlantic City, with which I have some acquaintance over a decade or two. This lab is the Nation's premier source of expertise in explosives detection and in development of detection equipment, particularly regarding aviation security. Practically everything you see in terms of security equipment at U.S. and many foreign airports has been developed at that lab. This lab has suffered from devastating institutional buffeting since 9/11, transferring between agencies twice, having its budget rocket up by factors of two and three and then drop by factors of four. I feel we may be in danger of losing this major national asset that helps protects us from terrorist attack.

I would be happy to respond to questions about this lab as well as about EML. Thank you for your attention.

[The prepared statement of Dr. Fainberg follows:]

PREPARED STATEMENT OF M. ANTHONY FAINBERG

Mr. Chairman, Congressman Sensenbrenner, I thank you for the opportunity to discuss my experiences with the Environmental Measurements Laboratory (EML) in New York City, as an official who was present at the stand-up of the Department of Homeland Security (DHS) on March 1, 2003.

I had actually begun work with the predecessor of the Science and Technology (S&T) Directorate—the Transition Planning Office (TPO)—a few months before stand-up, in December 2002. At the time I began work there, I had over 17 years of experience in government. I had been an analyst, in areas where science and national security policy intersect, and a program manager, overseeing research and development programs for the Federal Aviation Administration and the Defense Threat Reduction Agency. As an analyst for the former Congressional Office of Technology Assessment, I had, in 1990–1991, written the first detailed analysis of the potential uses of technology in countering terrorism. My training is as an experimental physicist in the field of high energy physics, in which I received a doctorate in 1969.

When I began at the TPO, later the S&T Directorate, there were very few people on staff, perhaps some 25. That number ramped up quite quickly in the months after March 2003. At first, many of us shared duties; I was in charge of the Explosives Countermeasures Portfolio for a few months and at the same time responsible for overseeing EML, this latter task only for a few months. In addition, I worked in the Radiation and Nuclear Countermeasures Portfolio group as well. My efforts to understand EML were aided by the presence of two EML staff, who were on detail to the TPO and subsequently to S&T.

By summer 2003, things had settled down a bit, and I had just a dual responsibility: Program Manager for Radiation and Nuclear Countermeasures and Program Manager for Explosives Countermeasures in the Office of Research and Development (ORD). In these roles, I was responsible for research programs that were carried out by the Department of Energy's (DOE) National Laboratories, and those carried out by EML. Nearly all of my efforts were devoted to the large National Laboratories, as their projects consumed nearly all the budget allocated to my Program.

EML Programs at Transition to DHS

My responsibilities regarding EML began soon after departmental stand-up, with administrative and programmatic oversight. During the time that I had this broad responsibility, I visited the site, became acquainted with current projects and staff and learned about the lab's capabilities, which they were trying to adapt to DHS needs.

It was clear that there would be some mismatches in capabilities relative to the new DHS needs. Their previous work centered around low-level radiation measurements. These were in support of environmental clean-up and monitoring and of global monitoring for fallout from nuclear weapons testing. However, I judged that their abilities in the area of radiation detection were adaptable to DHS requirements. EML staff also worked on or led activities that provided the environmental monitoring community with manuals on procedures and protocols for environmental sampling. This work could have some application for DHS, for example, in providing advice for clean-up after a dirty bomb attack.

Another major line of work at EML was the Quality Assurance Program (QAP), which vetted scores of radiological laboratories, in the United States and also in other countries, to determine the quality of their analytical practices. This was a service provided by EML, earlier funded by DOE, but in which DHS had no interest at the time (I understand that recently, S&T is setting up an Integrated Consortium of Laboratory Networks, in which the QAP might have been a useful component). Unfortunately, this service, which was used by many State and local laboratories, and, to my knowledge, was widely appreciated, disappeared when DHS decided to end funding for it. I understand that a commercial laboratory is now providing a similar service, but at significant cost.

Overall Assessment of EML at Transition

My assessment of the laboratory and its potential uses for DHS were as follows. First, the laboratory space, rented from the General Services Administration, was in sad condition, depressing, and barely functional. The rent paid was far too high for the quality of the plant. About 60 staff members were on the payroll, down from about 120, a decade or two earlier. DOE had clearly left this laboratory in a neglected state, as a backwater, perhaps because emphasis on DOE clean-up activities dropped in recent years. The lab was in a clear decline, but welcomed and embraced the chance for a rebirth as part of a mission in which they had a strong and vital interest. The lab is located only about a mile from the World Trade Center, and staff were strongly and viscerally affected by 9/11. They were extremely motivated to become part of the global anti-terrorism effort, as well as to be in a position to take practical steps to aid in protecting New York against future attacks.

Some of the technical staff had been employed at tasks that had not changed much for several decades. Many appeared ready for retirement, and, indeed, in the following years, a large number did retire. Some retirements, however, especially in 2005 and beyond, were apparently occasioned by disappointment, if not outrage, at the treatment they felt EML was receiving from DHS Headquarters.

On the other hand, a large fraction of the technical staff, of varied ages, impressed me as highly motivated, energetic, and very capable in their areas of expertise. The laboratory had transitioned their work over to projects that they felt would be useful and welcomed by DHS.

One activity, the NY Area Science and Technology (NYAST) Working Group, held seminars for New York Metropolitan Area first responders: police, firemen, medical technicians, and civilian staff from the Office of Emergency Management. Lessons were given these non-scientists about understanding radiation, the dirty bomb threat, and how to use radiation measuring equipment. In talking with some participants on later occasions, I learned that these sessions were appreciated and considered very useful. They were quite well attended.

Another project of interest to me and to New York City officials was the Comprehensive Radiation Sensor Program, which deployed a small number of inexpensive but effective gamma ray detectors on rooftops in Manhattan. This network was intended to send data back via a wireless connection to a command center at the lab. The project was meant to function as an early prototype for a detection architecture that would produce relatively inexpensive monitoring of selected areas of the city, in the case of a radiation release. City officials at the Office of Emergency Management were enthusiastic about this program (as long as they did not have to fund it). This project was scheduled to be halted at the time I left, and headquarters funding was cut off, but it has been resurrected since, paid for only by staff salaries and time.

A third project, extremely interesting to me, was run by an EML physicist of national stature, Paul Goldhagen. Dr. Goldhagen was measuring the spectrum of neutrons from cosmic rays, in order to understand better the "ship effect." If we understood this effect, it might enable us to reject this background and be able to detect radiological material in containers on ships, as they traveled across oceans to United States ports. This was basic research with a clear and vital connection to homeland security needs, and only a very few researchers in the country were involved in similar work.

Finally, there was program of global atmospheric monitoring, which had national security implications. It was co-funded by DOE/NNSA and the USAF, and provided useful, near-real time sets of atmospheric data.

By summer, I had transitioned to my program management role, and had no further oversight over the lab as a whole, except insofar as they carried out projects for me.

My View of the Proper Role for EML

Since, upon its creation, DHS had willingly accepted EML as part of its organization, it was clearly incumbent upon DHS management to establish that lab's new mission, of course with input from and in collaboration with lab management. Indeed, DHS should have had an idea how the lab would be useful to them before accepting it on board. I saw no evidence that serious thought was given to this. Indeed, after a year or two, I heard grumbling among S&T management that EML had no idea what its mission should be, as though this were not the responsibility of S&T itself. Actually, EML had proposed some ideas for the proper scope of their activities, but none was accepted. I was concerned that there appeared to be no meaningful dialogue between S&T and EML to address the lab's mission. During this period, EML tried to conduct its own planning, work, and outreach without much help or, indeed, interest from S&T.

My view, then and now, is the following: DHS was fortunate in acquiring an existing laboratory asset located in New York City, a prime target of international terrorists. The lab had, on its own, developed excellent working relations with city officials and could function as S&T's presence in the area. These relationships could have greatly facilitated communications and cooperation between federal and local homeland security officials, at least in the radiological area. The opportunity to use a ready-made asset in this way was unfortunately missed by S&T.

The laboratory had both negative and positive aspects: some staff were old and tired, but others were extremely energetic and effective. The physical plant was in bad shape, but could be improved or else the lab could be moved, perhaps to an existing DHS facility in the area, where the cost of rental would not be an issue. Finally, some excellent capabilities existed at the lab, which could have been expanded upon. Some of these were:

- the atmospheric monitoring project;
- the neutron "ship effect" work;
- a strong operational and statistical understanding of low-level radiation contamination measurements;
- the vetting of a nationwide network of radiochemical laboratories;
- the development of an inexpensive distributed network of radiation detectors;
- and, most importantly, a cadre of willing and active scientists who were anxious to help, for example, with developing, operating, and staffing a radiation measurement test bed in New York.

This last item was fortunately accomplished: EML scientists became an integral part of DHS's Countermeasures Test Bed, operationally testing radiation detection equipment that was deployed at air- and seaports in the New York area.

Unfortunately, most other items were not accomplished.

Had I had the authority, I would have tried to have EML both engage in the above work and also support the rest of DHS fully in other radiological projects in the New York area. I would have considered trying to provide some of the services, such as the QAP, for the good of the community of radiochemical laboratories in the country, probably in collaboration with DOE. And I would have kept some of the atmospheric monitoring work that was useful for other U.S. Government agencies, even though it did not fit within the prevailing definition of DHS responsibilities.

Further, I would have authorized the lab to hire some young scientists with recent degrees, to reinvigorate what had been a leading radiation measurements laboratory, some 20–30 years earlier. Many such newly-minted Ph.D.s would, in my opinion, have been keenly interested in contributing their knowledge and talents to defending the Nation against the terrorist threat. Briefly, I would have decided that although the lab had some issues, it would have been worth rebuilding it into a high profile DHS/S&T facility in New York.

Apparently, DHS management did not share my feeling.

Proposals and Rejections

During 2003, S&T management wisely decided to permit ongoing projects to continue. In 2004, management naturally and correctly wanted to develop a program plan for EML that corresponded more to DHS needs and requirements. EML pro-

posed several projects, working with me as appropriate, but very few of these met approval from management above my level. The Comprehensive Radiation Sensor project, for example, was disapproved, even though NY City officials were very interested in it. Management decided that many projects were not within DHS's mission, and, indeed, this might have been true in some cases, although I disagreed with their assessments in others. At this point, I sensed a growing difficulty in the relations and communications between EML and S&T's management.

By spring 2005, as we were still working on programs and budgets for FY05, which had begun six months earlier, little remained of what EML had initiated post 9/11. Technical assistance and training for local officials was cut back by two-thirds. Other proposals were rejected in their entirety.

In addition, a bit later, a new project, involving EML, was requested by S&T 's Portfolio Manager for Radiation and Nuclear Countermeasures, Dr. Sonya Bowyer. This effort was called "reachback." It proposed using EML scientists (together with scientists from Brookhaven National Laboratory in Long Island) to provide assistance to local officials and responders, when their radiation monitoring equipment produced alarms. The general idea, which had been conceived much earlier, was to have a process in place to deal quickly with inevitable false alarms. Experts from the labs would provide advice to the responder in real time in analyzing the alarm. On those few occasions where they could not resolve the alarm, another level of reachback would be provided by the national weapons laboratories. This program was to serve the New York region. There were efforts to make similar arrangements with other laboratories for other regions of the country.

Fortunately, reachback has now been resurrected by the Domestic Nuclear Detection Office (DNDO), located within DHS, but independent of S&T. I understand that this work is about to be realized, both regionally and nationally. However, I am told that there are still problems in that EML was experiencing difficulties in getting approval to purchase a few hundred dollars of equipment to enable their participation. I hope this has been resolved.

My Resignation from S&T

Committee staff have requested that I recount the story of my resignation from S&T. In most respects, this is not an important matter. However, the reasons that led me to resign may be of interest. With your forbearance and for the record, here is the long story.

In March and early April of 2005, I had to spend much time explaining the detailed costs of several EML projects. I was asked to justify detailed expenditures, at a minute level, for several proposed ideas. This was demanded by an ORD colleague, Dr. John Clarke, who was supposedly in charge of EML as a facility. It was disturbing to me that the facility manager was deciding at such a nickel and dime level how much each R&D project should cost and whether it should proceed, since this should reasonably have been the purview of the program manager. However, to maintain comity, I took time away from far more complex and larger projects at other laboratories, for which I was also responsible, to try to accommodate his requests. In the end, since I had those other demanding tasks to take care of, and since this exercise was draining my time over relatively small matters, I suggested that Dr. Clarke take over the whole set of EML projects, with the exception of a few that I had been told (by Robert Hooks, Deputy Director of ORD) had already been approved at the Office Director level.

One of the exceptions was the "ship effect" project, being handled by the excellent physicist I mentioned above. I had approved the project, but Dr. Clarke somehow was able to place a hold on the money, because he objected to the purchase of a neutron detector that was included as part of the work. Dr. Clarke insisted that he had this right. He further stated that he could not approve such an expense unless we could show that the detector could be used after the project's end. This demonstrated that Dr. Clarke had no idea of how research and development is carried out: if a project is approved, you buy the necessary equipment to carry it out, whether or not you can find another use for it later. The cost and need of equipment are factored into the approval process. Indeed, one usually can find another use for equipment and this case was not an exception: we could have. The impression was clearly that Dr. Clarke was trying even to derail a project already approved at the highest appropriate level.

Having vociferously defended this project earlier, and since I had been previously assured by Mr. Hooks that this project had indeed been approved at the Office Director's level, I was quite properly outraged. I sent e-mails that included my direct supervisor, Dr. Gerald Parker, and his supervisor, who was Mr. Hooks, but they brought no response. Finally, I received a response from Mr. Hooks on March 28, 2005, to the effect that Dr. Clarke and I had to work this out. This contradicted

what Mr. Hooks had told me about the project's approval a week or two earlier. A further request to Dr. Parker for clarification elicited no response whatsoever.

At this point, I decided that S&T/ORD management was broken to the degree that I could no longer perform my job, and I had to leave my position. On April 4, I sent an e-mail with my resignation to my chain of command, including Dr. Parker, Mr. Hooks, and the Office Director, Dr. Maureen McCarthy.

It turned out that I was correct in determining that management was broken: within three days, Dr. Parker summoned me to his office and handed me a "Letter of Counseling"—essentially a reprimand—for daring to resign, and threatening me with reprisals if I continued such unreasonable behavior. I was also chastised for objecting to Dr. Clarke's overstepping his authority. This divorcement from reality was noteworthy.

Incidentally, in nearly 20 years of government service, I had never before received a reprimand of any sort. I have, however, received a number of commendations for my work, both verbal and written.

Naturally, I left S&T as soon as I could, within two working days, and accepted a position with the Domestic Nuclear Detection Office, remaining there for the rest of my federal service, and retiring on September 30, 2005. Indeed, most radiological work was already being transitioned from S&T to this new office. The working environment there was quite satisfactory.

Afterwards, I was happy to discover, the "ship effect" project had been approved in its entirety, probably as a result of the furor. But, to keep the project going as it should have, I had been forced to resign in order to draw sufficient attention to the matter.

Conclusions

It appeared to me that in 2005, S&T management was trying to squeeze EML out of existence by turning off projects one by one, so that it could finally be asserted that the lab had no function. It became increasingly difficult to obtain approval for any expenditures beyond the basic minima of salaries and benefits, heat, light, and rent. Further, EML was not permitted to replace staff departures, and the number of personnel has shrunk from 60 in 2003 to 34 today. I cannot prove there was an overt intent to close the lab; indeed, Mr. Hooks assured me at the time I left that this was not the case, but Occam's Razor (adopt the simplest hypothesis that satisfies all the known data) indicated to me strongly that this was, in fact, what was happening.

EML still exists, to my knowledge, in great part because DNDO is using some of their personnel for projects in the New York area. Perhaps, since responsibility for radiological and nuclear issues has transitioned to DNDO, it might be appropriate for EML to come entirely under its aegis.

If EML were to remain in existence, my remarks above contain some ideas on what I feel it might do, and how it might make a significant contribution to homeland security. Even at its current, depressed, levels, it can be successfully resurrected, if a clear mission is articulated and appropriate management is applied. I do think this is possible. Some changes will be needed, of course: for one thing, it should probably move to a new venue in the New York area, perhaps, as I noted above, within a DHS-owned facility.

If its mission would include functioning as the focus of DHS's technical capabilities in the New York area, beyond radiological and nuclear issues, it would be necessary to hire some new scientists and engineers with expertise in chemical and biological countermeasures. This would transform EML into a broader and more capable organization. One could also imagine adding collaborative efforts with another S&T laboratory, the Transportation Security Laboratory in Atlantic City, about 100 miles to the south. TSL specializes in explosives detection, and joint work in testing this sort of equipment in New York City would probably be a useful synergy. If EML were to be broadened in this way, one could argue that it should remain within S&T, which, having recently been reorganized, might be more receptive to such a concept than it was in the past.

An Additional Observation

There may be a broader issue here.

In 2003, two laboratories, EML and the Plum Island Animal Disease Center (PIADC), were relocated from other agencies to S&T, a new organization within a new organization. I understand from the press that there are now plans to close Plum Island and relocate its activities elsewhere, probably with a largely new staff. It is not surprising that, amidst all the difficulties of establishing new, nested structures, and under the watchful eye of a fearful public following 9/11, these two lab-

oratories have experienced serious difficulties while trying to fit into a new Department and to develop missions rather different from their previous ones.

However, I am also concerned about a third laboratory, the above-mentioned Transportation Security Laboratory (TSL), also involved in post-9/11 turmoil. TSL has just (2006) transitioned to S&T from the Transportation Security Administration (TSA), which is, of course, also within DHS.

TSL is not a minor player: it is the world's gold standard for developing and certifying explosives detection equipment, especially as applied to transportation security. Virtually all security technology in U.S. (and in many foreign) airports today have been developed there. Vitally needed improvements are being developed there right now. The lab and its staff are impressive: I urge the Committee Members to visit it.

Unfortunately, in the bureaucratic turbulence following 9/11, TSL has been moved between agencies twice. Its budget has undergone wild fluctuations, both up and down. This year, I am told, their budget has dropped by a factor of two from last year. This unstable situation, both institutional and fiscal, is destroying morale there; some scientists have left, others may well leave soon. Staff have been reduced from about 80, a few years ago, to 54 now. Like EML, they have not recently been able to hire new scientists or engineers. There are rumors that its equipment certification unit, which has been looked upon to provide aviation security equipment standards around the world, may be asked to raise money from vendors to continue its effective existence, beyond the fees currently levied on those asking for certification. There are other rumors that this federal laboratory, staffed by federal employees, may be required to compete for its existence with national laboratories (that have relatively immense levels of staffing, much other funding and other missions) and with the private sector.

I hope these tales aren't true. The Federal Government's ability to issue standards for explosives detectors should not depend on a revenue stream. Moreover, TSL and other federal laboratories are part of the federal infrastructure: they are federal assets, run by federal employees, who have loyalty to the mission, and who do not have to keep an eye out for profits or for obtaining the next contract. This laboratory is especially needed to provide for the Nation's security, particularly regarding air travel, where we all know there is a serious, ongoing terrorist threat.

I trust and hope that DHS will now be able to provide TSL with steady and predictable funding and a consistent vision, so that it may continue its excellent work. I fervently hope that TSL will not be subject to the same perturbations that the other two laboratories within DHS have endured during this difficult period of adjustment.

BIOGRAPHY FOR M. ANTHONY FAINBERG

Upon retiring from federal service after twenty years, Dr. Fainberg recently became a Staff Member at the Institute for Defense Analyses. At retirement, Dr. Fainberg was Director of the Office of Transformational Research and Development of the Domestic Nuclear Detection Office of the Department of Homeland Security. At the Department of Homeland Security, he had previously been Program Manager for Radiological/Nuclear Countermeasures and for Explosives Countermeasures in the Science and Technology Directorate of the Department. Earlier, he served as Director for Federal Laboratories in that Directorate. Previously, he was Division Chief at the Advanced Systems and Concepts Office, Defense Threat Reduction Agency, Department of Defense, and before that, he held the title of Director of the Office of Policy and Planning for Aviation Security in the Federal Aviation Administration.

After receiving his training and degrees in experimental particle physics, Dr. Fainberg worked as a researcher and university lecturer for eleven years, producing some 40 technical publications. His experience includes work at U.S. National Laboratories; at CERN, the international nuclear laboratory in Geneva; and at universities in the U.S. and Italy. He turned to applied physics in 1977, entering the field of nuclear safeguards and nonproliferation at Brookhaven National Laboratory, where he was responsible for projects involving technical, systems, and policy issues. In the course of his duties at Brookhaven, he worked with officials at the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, and the International Atomic Energy Agency in Vienna.

In 1983, Dr. Fainberg became a Congressional Science Fellow of the American Physical Society and spent a year as a legislative aide in the office of a U.S. Senator. Following the fellowship, he joined the staff of the Congressional Office of Technology Assessment, where he specialized in national security issues. He worked for several years in analyses of missile defense technologies. Later, he worked on

projects dealing with the Department of Energy nuclear weapon complex, the proliferation of weapons of mass destruction, and has originated and directed projects on terrorism and on technologies of use in military operations other than war.

Dr. Fainberg has frequently testified before Congress and has briefed both congressional staff and the media in his areas of expertise; he has appeared on National Public Radio, CNN, BBC, CNBC, and other outlets. He has also briefed National Academy of Sciences panels on aviation security matters. Dr. Fainberg is also active in the American Physical Society and the American Association for the Advancement of Science, and has co-edited a book on energy supply and demand.

EDUCATION:

Ph.D., 1969, University of California, Berkeley; High Energy Physics.

A.B., 1964, New York University; Magna cum Laude, Physics.

EXPERIENCE:

Currently: Adjunct Staff Member at the Institute for Defense Analyses, researching issues related to the international nuclear non-proliferation regime, risk analysis in the context of homeland security, and problems at the intersection of technology and counterterrorism.

2005: Director of Office of Transformational Research and Development, Domestic Nuclear Detection Office, Department of Homeland Security. Develops and implements research program to produce breakthroughs that radically improve on current radiation detection technologies and methods.

2004–2005: Program Manager for Radiological and Nuclear Countermeasures and for Explosives Countermeasures in the Office of Research and Development of the Science and Technology Directorate, Department of Homeland Security. Structures and manages about $50 M of research and development programs in these two areas. Most of this work is implemented by the laboratories internal to the Department, including those parts of the Department of Energy laboratories that now function as part of the Homeland Security research and development complex.

2003: Director for Federal Laboratories, Science and Technology Directorate, Department of Homeland Security. Responsible for oversight of the federal laboratories that are part of the Science and Technology Directorate of the Department.

2002: Special Assistant for Technology, Office of Policy and Planning for Civil Aviation Security, Transportation Security Administration. Planning and analysis of science and technology approaches to improving transportation security.

1999–2001: Division Chief, Advanced Systems and Concepts Office, Defense Threat Reduction Agency. Planning and overseeing projects with long-term impact studying the reduction of threats to the United States from weapons of mass destruction and establishing criteria for future U.S. nuclear forces structure. Preceptor, Georgetown University, Program in Science, Technology, and International Affairs.

1996–1999: Director, Office of Policy and Planning for Aviation Security, Federal Aviation Administration. SES-level position responsible for overseeing aviation security research and development; promulgating rules and regulations governing civil aviation security; and developing policies and procedures for assuring security at FAA facilities.

1995–1996: Self-employed consultant, national security analyst specializing in counterterrorism, nuclear safeguards, remote sensing technology. Clients included Department of Defense, Brookhaven National Laboratory, National Academy of Sciences, George Washington University, Lawrence Livermore National Laboratory, and other research organizations.

1985–1995: Senior Associate and Project Director, Office of Technology Assessment, U.S. Congress, Washington, DC. Areas of expertise: technology and terrorism; ballistic missile defense; nuclear proliferation; proliferation and the former Soviet Union; science policy. Most recent project: international peace support operations.

1991–1992: Visiting Fellow, Center for International Security and Arms Control, Stanford University, worked on issues in nuclear non-proliferation.

1983–1984: Legislative Aide, Office of Senator Jeff Bingaman, Washington, DC. Handled foreign policy issues as well as technical matters related to arms con-

trol; worked in areas related to Armed Services Committee, foreign policy, and science policy.

1977–1983: Physicist, Brookhaven National Laboratory, Upton, New York. Responsibilities included technical and systems studies of problems in nuclear safeguards and non-proliferation.

1977–1978: Adjunct Associate Professor of Physics, Syracuse University, Syracuse, New York. Responsible for developing proposals for experiments in particle physics.

1973–1977: Research Assistant Professor of Physics, Syracuse University, in residence at Brookhaven National Laboratory. Research in particle physics and teaching, directed small teams of physicists and technicians.

1970–1972: Staff Physicist, Italian National Institute of Nuclear Physics, Turin, Italy. Engaged in particle physics research at European Centre for Nuclear Research, Switzerland.

LANGUAGES:

Fluent French, Italian, German, conversational Spanish.

HONORS, PROFESSIONAL SOCIETIES, and OFFICES:

Member, American Physical Society (APS), American Association for the Advancement of Science (AAAS). Fellow, APS. Congressional Science Fellow, APS, 1983–1984. Past Chair, Forum on Physics and Society of APS; Vice-Chair, APS Panel on Public Affairs.

CLEARANCES:

Top Secret, Q (Dept. of Energy).

SELECTED PUBLICATIONS, 1985–present

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"Nuclear Safeguards and the International Atomic Energy Agency," May 1995.

"Proliferation and the Former Soviet Union," September 1994.

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Chairman MILLER. Thank you, Dr. Fainberg. Ms. Albin.

STATEMENT OF MS. LYNN ALBIN, RADIATION HEALTH PHYSICIST, OFFICE OF RADIATION PROTECTION, WASHINGTON STATE DEPARTMENT OF HEALTH

Ms. ALBIN. Chairman Miller, Congressman McCaul and Committee Members, thank you for the opportunity to provide testimony on the experience of Washington State in our environmental radiation monitoring efforts following the termination of EML's Quality Assurance Program. I have worked for the Washington State Department of Health for 21 years. I began as a radiochemist with the responsibility to provide accurate analysis of radioactive contaminants in environmental samples. Presently, I am a health physicist with the Department of Health, where I use the data to assess public and environmental health risks and to provide oversight of federal and State licensed facilities that could potentially release radioactive contaminants into the environment. I am also responsible for analyzing radiochemical data to determine its quality and its validity.

The Washington State Department of Health has operated in environmental radiation monitoring programs since 1961. All of the samples collected by the Department of Health are analyzed by the Public Health Laboratory. This laboratory has the capability to analyze for very low levels of naturally occurring radionuclides, mixed fission products and source materials in any environmental media.

Of particular interest to the Department of Homeland Security, the Public Health Lab analyzes the air we breathe, the water we drink, the soil in which we grow our food, the food we eat and the external radiation levels that surround us. The laboratory uses rapid methods to screen deposition samples to quickly identify contaminants. The data provides the basis of environmental assessments and decisions that are made during radiological emergencies. I can't emphasize enough how important it is that we are confident that the data is both accurate and precise when we make public health decisions.

When it was part of the Department of Energy, EML provided performance testing samples for exactly the type of work the Public Laboratory performs. This program was available at no charge to the Public Health Laboratory and was an important component of quality assurance.

QAP provided a link to the scientists within the Environmental Monitoring Laboratory. Radiochemists who develop many of the classical methods of analyzing radionuclides in the environment worked for EML. These methods were complied into a manual that is widely regarded as the standard of radiation measurement techniques. As a new radiochemist, I was handed the manual as a basis of understanding radiochemistry. This practice continues today.

It wasn't only the EML performance testing samples and the radiochemistry manual that benefited the quality of measurements. It was also that the scientists themselves were easily approached to assist Public Health Laboratory chemists in solving questions regarding radiochemistry. Radiochemistry is part science and part art. The science behind the chemistry allows separation and concentration of specific radionuclides, but there is also an art that requires experience to correctly interpret resulting data. It takes years of experience to be proficient in radiochemistry. The EML assisted the Public Health Laboratory whenever called upon.

Performance testing is important for assessment of laboratory capabilities, as well as important to the Department of Health's credibility when we use lab data to support decisions. The value of the performance testing comes into play when data or decisions are questioned. From Washington State's point of view, the more performance tests we have to support our data the better.

Two examples of how QAP helped prepare Washington State to respond to an actual emergency are the state's response to fires on the Hanford nuclear site in 2000 and the Department of Homeland Security's TOPOFF2 exercise in 2003. During the Hanford fire, the state mobilized field teams to collect samples. As the fire burned, wind created the concern that soil surface contamination would be blown offsite. The Department of Health analyzed soil, airborne particulates and charred vegetation samples. Sampling results showed that first responders were not working in a radiologically hazardous environment and no offsite public or environmental health impact existed.

It is just as critical that decision-makers are confident that the laboratory has reached appropriate detection limits, even in cases where the data reveal no impact. QAP provided an independent evaluation of lab performance that specifically supported the credibility of Washington State protective actions. Performance testing is essential in assuring that if results are questioned, there is a reliable method to verify data. Washington State, since losing the program, participates less often in performance testing programs because of budget considerations.

During TOPOFF2, Washington State had to make quick assessments of radiological conditions following a simulated terrorist attack. Although unplanned, samples collected by other agencies, including the EPA and the Federal Radiological Monitoring Assessment Center, were also brought to the Public Health Laboratory for analysis. The lab's strong quality assurance program gave confidence that the initial assessments were correct, even though samples were not commonly analyzed at the laboratory. It further provided evidence to other agencies that lab services had documented verification and it was capable of accurately and precisely measuring radioactive contamination in environmental samples. Once

again, the data reported by the Public Health Lab was used to support protective action decisions. Confidence in that data was essential.

In 2003, the department participated in a performance test sponsored by NIST, designed to test the capability and capacity of laboratories to quickly measure radioactive contaminants in environmental media as well as synthetic urine and feces. One of the findings of the study was an appreciation for the analytical uncertainty in the reported result, which was much higher than for traditional performance tests. This gave rise to questions of how good is good enough for emergency samples, how do we communicate analytical uncertainty to decision-makers, and how, in turn, will that uncertainty be factored into protective action? These are all questions that remain unanswered and could be a starting point for future EML support to states for homeland security-related emergencies.

As a person who reviews data validity, I must be confident that I am handing the best information to the decision-makers. The welfare of the public, emergency workers and the environment rely on the quality of laboratory data. These results for the basis for decisions concerning health risk, food embargoes and population relocation. Performance testing supports data quality assessment by providing an independent evaluation of lab capability. This independent review helps defend data, whether they support recommended protective actions that may impact someone's life, or whether they lend confidence to a recommendation of no action.

In conclusion, accurate, defensible data improves environmental assessments and enables managers to make better and more cost-efficient decisions. The termination of the QAP affects Washington State because we can't guarantee the level of participation in the private laboratory replacement programs due to costs. Cutting performance programs weakens the defensibility of the data. We are also missing the solid technical support to the Public Health Laboratory provided by the Quality Assurance Program and the scientists at Environmental Measurements Laboratory.

[The prepared statement of Ms. Albin follows:]

PREPARED STATEMENT OF LYNN ALBIN

Dear Chairman Miller and Ranking Member James Sensenbrenner,

Thank you for the opportunity to provide testimony on the experience of Washington State in our environmental radiation monitoring efforts following the termination of the Environmental Measurements Laboratory (EML) Quality Assurance Program (QAP). My name is Lynn Albin and I have worked for the Washington State Department of Health for 21 years. I began as a radiochemist with the responsibility to provide accurate analyses of radioactive contaminants in environmental samples. Presently, I am a radiation health physicist with the Department of Health's Office of Radiation Protection. My responsibilities include using radiochemical analyses to assess public and environmental health risks and to provide oversight of federal and State-licensed facilities that could potentially release radioactive contaminants in the environment. Additionally, I am the liaison between Office of Radiation Protection and the Department's Public Health Laboratory (PHL). In this capacity, I am responsible for analyzing radiochemical data to determine its quality and validity.

The Washington State Department of Health has operated an environmental radiation monitoring program since 1961. The early program looked primarily at atmospheric fallout from nuclear weapons tests. The program expanded to evaluate off-site environmental impacts related to operations of nuclear facilities and to provide readiness for assessment in case of a radiological emergency. An essential part of the assessments is the independent analysis of environmental samples.

All of the samples collected by the Department of Health are analyzed at the Public Health Laboratory. The Laboratory has the capability to analyze for very low levels of naturally occurring radionuclides, mixed fission products and source materials in any environmental media.

Of particular interest to the Department of Homeland Security, the Public Health Laboratory analyzes the air we breathe, the water we drink, the soil in which we grow our food, the food we eat and the external radiation levels that surround us. The Laboratory also uses rapid methods to screen deposition samples to quickly identify radioactive contaminants. The data provided is the basis of environmental assessments and decisions made during radiological emergencies. I cannot emphasize enough how important it is that we are confident that the data is both accurate and precise when we make public health decisions.

When it was part of the Department of Energy, the Environmental Measurements Laboratory, provided performance testing samples for exactly the type of work the Public Health Laboratory performs. This program was available at no charge to the Public Health Laboratory and was an important component of laboratory quality assurance. Through this program, the Public Health Laboratory was supplied with environmental samples that contained well-quantified amounts of radionuclides. The Laboratory analyzed the samples and reported the results back to EML. EML would then evaluate the data and document the accuracy of the submitted result against the known value and against the mean value submitted by all participating laboratories.

As far as I know, all radiochemistry laboratories supporting environmental monitoring in the Northwest participated in the Quality Assessment Program. Because the QAP results for all laboratories were included in the summary reports, I was able to use these reports when reviewing performance of other Northwest environmental radiochemistry labs.

Additionally the QAP provided a link to the scientists within Environmental Monitoring Laboratory. Radiochemists who developed many of the classical methods for analyzing radionuclides in environmental samples worked for EML. These methods were compiled into a manual that is widely regarded as the standard of radiation measurement techniques. As a new radiochemist, I was handed that manual as the basis of understanding radiochemistry. This practice continues today.

It wasn't only the EML performance testing samples and the radiochemistry manual that benefited the quality of measurements; it was also that the chemists themselves were easily approached to assist Public Health Laboratory chemists in solving questions regarding radiochemistry. Radiochemistry is part science and part art. The science behind chemistry allows the separation and concentration of specific radionuclides but there is also an art requiring experience to correctly interpret the resulting data. It takes years of experience to be proficient in radiochemistry. The Environmental Measurements Laboratory assisted the Public Health Laboratory in evaluating the ability to correctly interpret spectral data through consultation and through their Gamma Spectrometry Data Evaluation Program. This program provided simulated spectral data to the Laboratory to test the accuracy of the gamma-ray spectrometry software and the ability of the chemists to correctly interpret the results of their own software. There is no replacement for this program.

The Quality Assurance Program was one of several performance testing programs in which the Public Health Laboratory participated. Table 1 attached to this testimony summarizes the history of those programs. When the QAP program terminated, the Department of Health lost a cost-effective resource for evaluating laboratory performance as well as the resource provided by EML scientists themselves. The Public Health Laboratory replaced the QAP with a performance testing program provided by a private laboratory and augmented tests from an existing program. This private laboratory provides the same environmental media and tests that were previously provided by QAP. The disadvantage of the new program is that it is expensive. In fact, this year the Public Health Laboratory could not afford to fully participate in this performance testing program.

While there is no legal requirement to participate in all performance tests, laboratories cannot be certified by EPA to analyze drinking water samples or be qualified to perform environmental measurements in support of the Department of Energy's Environmental Management's activities without successfully passing a minimum number of tests. Performance testing is important for assessment of laboratory capabilities as well as important to the Department of Health's credibility when we use laboratory data to support decisions. The value of the performance testing program comes into play when data or decisions are questioned. From Washington State's point of view, the more performance tests we have to support our laboratory results, the better.

Two examples of how the Quality Assurance Program helped prepare Washington State to respond to actual emergency situations are the State's response to the fires on the Hanford Nuclear Site in 2000 and the Department of Homeland Security's TOPOFF2 exercise in 2003.

During the Hanford fire, the State mobilized field teams to collect samples. The Laboratory provided quick-turnaround results and health physicists interpreted results and guided decision-makers regarding protective actions. As the fire burned, wind created concern that soil surface contamination would be blown offsite. The Department of Health analyzed soil, airborne particulates and charred vegetation samples. Sampling results showed that the first responders were not working in a radiological hazardous environment and no offsite public or environmental health impact existed.

It is just as critical that decision-makers are confident that the laboratory has reached appropriate detection limits even in cases where data reveal no impact. QAP provided an independent evaluation of laboratory performance that specifically supported credibility of Washington State protective actions. Performance testing is essential in assuring that if results are questioned, there is a reliable method to verify data. Washington State, since losing the program, participates less often in performance testing programs because of budget considerations.

During TOPOFF2, Washington State had to make quick assessments of radiological conditions following a simulated terrorist attack. The first samples analyzed by the Public Health Laboratory were non-standard media: deposition collected on tape and soiled bandages from a victim of the initial simulated blast. These samples provided the hazard description and were followed by the customary environmental samples such as air particulates and soil. Although unplanned, samples collected by other agencies including the Environmental Protection Agency and the Federal Radiological Monitoring and Assessment Center were also brought to the Public Health Laboratory for analysis. The laboratory's strong quality assurance program gave confidence that the initial assessments were correct even though the samples were not commonly analyzed at the laboratory. It further provided evidence to other agencies using the State's laboratory services that the laboratory had documented verification that it was capable of accurately and precisely measuring radioactive contamination in environmental samples. Once again the data reported by the Public Health Laboratory was used to support protective action decisions. Confidence in that data was essential.

In 2003 the Department of Health participated in a performance test sponsored by the National Institute of Science and Technology designed to test the capability and capacity of the laboratories to quickly measure radioactive contaminants in environmental media as well as in synthetic urine and feces. This was the first such performance test and Washington State was one of two states that participated. The samples were a challenge to complete within the designated time and required adjustments in measurement protocol. One of the findings of the study was an appreciation for the analytical uncertainty in the reported result which was much higher than for traditional performance tests. This gave rise to questions of how good is good enough for emergency samples, how do we communicate analytical uncertainty to decision-makers and how, in turn, will that uncertainty be factored into protective actions? These are all questions that remain unanswered and could be a starting point for future EML support to states for homeland security-related emergencies.

As the person who reviews the data validity, I must feel confident that I am handing the best information to the decision-makers. The welfare of the public, emergency workers, and the environment rely on the quality of the laboratory data. These results form the basis for decisions concerning health risk, food embargoes, and population relocation. Performance testing supports data quality assessment by providing an independent evaluation of laboratory capability. This independent review helps defend data, whether they support recommended protective actions that may impact someone's life or whether they lend confidence to a recommendation of no action.

In conclusion, accurate, defensible data improves environmental assessments and enables managers to make better and more cost-effective decisions. The termination of the QAP affects Washington State because we cannot guarantee the level of participation in the private laboratory replacement program due to costs. Cutting performance programs weakens the defensibility of the data. We also are missing the solid technical support to the Public Health Laboratory provided by the Quality Assurance Program and the scientists at the Environmental Measurements Laboratory.

Table 1. WASHINGTON STATE DEPARTMENT OF HEALTH PERFORMANCE TESTING PROGRAMS

	Cost	Frequency	Availability	Food	Milk	Water	Air	Soil/ Sediment	Vegetation	Ambient Gamma Radiation	Urine	Feces	Comments
EML QAP	no charge	quarterly	Laboratories performing analyses of environmental media			X	X	X	X				Discontinued Program in 2004
EML TLD Intercomparison	no charge	once per three years	Laboratories that perform environmental ambient gamma measurements							X			International Intercomparison sponsored in part by EML. Last intercomparison 1997
EPA	no charge	quarterly	Laboratories analyzing drinking water and environmental media	X	X	X	X						Discontinued Program in 1998
FDA FERN	no charge	semiannually	FDA Agreement network of laboratories	X	X								Began 2002
RESL MAPEP	no charge		Laboratories that perform environmental analyses in support of Department of Energy's Office of Environmental Management activities			X	X	X	X				Began 1994
ERA for Drinking Water	$2,650	quarterly	Labs with valid radiochemical licenses			X							Designed program to replace discontinued EPA program
ERA for Mixed Media	$2,280	semiannually	Labs with valid radiochemical licenses			X	X	X	X				Designed program to replace discontinued EPA program
NIST NRIP	$10,000	quarterly	Accredited Radiochemistry Laboratories			X	X	X			X	X	Provides Direct Traceability to NIST. WDOH participated in only the emergency response round of NRIP
QATF	no charge	annually	Laboratories that support environmental radiological monitoring programs			X		X	X	X			Initiated 1985. WA State Governor's Task Force for Environmental Radiation Programs. Real environmental sample taken and split among participants. No direct traceability to NIST

EML	Environmental Measurements Laboratory
EPA	Environmental Protection Agency
ERA	Environmental Resource Associates®
FDA	Food and Drug Administration
FERN	Food Emergency Response Network
MAPEP	Mixed Analyte Performance Evaluation Program
NIST	National Institute of Science and Technology
NRIP	NIST Radiochemistry Intercomparison Program
QATF	Quality Assurance Task Force of the Pacific Northwest
RESL	Radiological and Environmental Sciences Laboratory
TLD	Thermoluminescent Dosimeters

BIOGRAPHY FOR LYNN ALBIN

Lynn Albin is a Radiation Health Physicist with the Washington State Department of Health. She has 21 years experience in the environmental radiation field assessing public and environmental health. She began her career analyzing plutonium in coral soils from the United States nuclear testing ground in the Marshall Islands. As part of her graduate studies in Radiation Ecology at the University of Washington, Ms. Albin studied the removal rates of radioactive contaminants from the Marshall Island Atoll ecosystem.

Ms. Albin was influential in initiating environmental monitoring at the University of Washington to assess radioactive fallout following the 1986 fire and explosion of the Chernobyl Nuclear Power Plant in the Ukraine. The Washington State Department of Social and Health Services (later the Department of Health) also responded to the accident. In addition to monitoring fallout in air, rainwater and ambient radiation levels, the Department monitored for contamination in milk, food and other environmental media. In June of 1986, Ms. Albin joined the chemists at the State's Public Health Laboratory to assist with their response to the Chernobyl accident.

In 1988, Ms. Albin transferred within the Department of Health to the Office of Radiation Protection. As a senior Radiation Health Physicist, her duties include environmental oversight of radiological monitoring programs within Washington State including the US Department of Energy's Hanford Site and the Energy Northwest nuclear power plant. She provides technical support in radiological site assessment and radiological risk evaluation and leads quality assurance activities within the Office of Radiation Protection.

Ms. Albin is the laboratory liaison between the Office of Radiation Protection and the Department of Health's Public Health Laboratory. She is responsible for analyzing radiochemical data to determine validity, quality and scientific significance related to public health and the environment.

Ms. Albin is member of the Department of Health's Emergency Response Team. In this capacity she uses her expertise to provide support at the project level to ensure sampling design and analysis criteria are appropriate and technically defensible. She has participated in numerous emergency response drills and exercises including TOPOFF2 and has also responded to actual emergencies such as the fire on the U.S. Department of Energy's Hanford site in 2002.

Ms. Albin is a member of the Conference of Radiation Control Program Directors' G–2 Committee on Ionizing Measurements.

Chairman MILLER. Thank you, Ms. Albin. Assistant Commissioner Duecker.

STATEMENT OF MR. JONATHAN A. DUECKER, ASSISTANT COMMISSIONER, NEW YORK CITY POLICE DEPARTMENT, COUNTERTERRORISM BUREAU

Mr. DUECKER. Good morning, Chairman Miller and Members of the Committee. My name is Jonathan Duecker. I am the Assistant Commissioner of Counterterrorism for the New York City Police Department and previously, I was the Director of the Office of Homeland Security of the Commonwealth of Pennsylvania. I am pleased to be here today and I thank you for the opportunity to speak to you about something that is of vital importance to both the city and State of New York as well as the United States.

When Police Commissioner Raymond W. Kelly took office in January 2002, the pyre in the grounds of the World Trade Center was still burning. He made his personal mission to ensure that New York City would never fall victim to such an event again. Commissioner Kelly's leadership and vision was the nascence of the NYPD's Counterterrorism Bureau. The mission, to make New York City inhospitable to terrorists, to their sympathizers, their supporters and their facilitators.

Fortunately, New York City and the NYPD has thwarted more than one plot against New York since September 11, 2001. One widely supported success was the investigation, the arrests and the

convictions of terrorists planning to blow up the Herald Square subway station two weeks before the Republican National Nominating Convention. In addition, the NYPD's robust deterrence and counter-surveillance program has proved its success, confirmed by Khaled Sheik Mohammed himself, who cited NYPD deployments as the sole reason that an Ohio truck driver, Iyman Farris, presently serving a prison sentence for his role in the plot to demolish the Brooklyn Bridge, decided that he would, in fact, not carry out that plot.

In New York City, we are combating terrorism aggressively. We acknowledge and welcome the synergy that comes with joining State, regional and federal partners, all of whom bring resources and expertise to the fight. Over the past few years, our relationship with the Department of Homeland Security has matured. I can say that, despite differences that have cropped up from time to time, the level of cooperation we presently enjoy has never been better. It is in the spirit of cooperation and collaboration that I ask you today to ensure that the critical federal resources are neither squandered nor withdrawn from New York City. I am talking about the yeoman's work taking place at the Environmental Measurements Laboratory located in Manhattan.

The EML has distinguished roots dating back to the Manhattan Project. It enjoys a renowned reputation as a subject matter expert in all things nuclear and radiological, from detection to testing to measurement and assessment. Although EML moved organizationally from under the direction of the Atomic Energy Commission to the Department of Energy and then to the Department of Homeland Security, it never left its home in New York City.

The NYPD has found EML to be a responsive neighbor and partner. A few years ago, when we determined that we needed to purchase small, portable but reliable radiation detectors, we asked our federal colleagues to recommend a laboratory capable to testing the products then available on the market. We were told that we would have to travel across the country to the northwest, where testing would consume a year's time. EML stepped in and performed the testing for us in a few weeks and made recommendations that work for us to this day.

As a result, the NYPD has acquired approximately 700 handheld gamma monitors and 120 gamma neutron detectors to detect potential radiological weapons of mass destruction. They have been deployed throughout the department and are in daily use throughout Manhattan and access points to the city. In addition, advanced gamma detectors and Geiger counters have been assigned to specialized units such as the Emergency Service Unit and the Bomb Squad. The department continues to seek out and acquire new technologies to aid us in the war on terror. In the future, we plan to procure additional nuclear, biological and chemical detection monitoring devices. EML has been instrumental in helping us make wise choices from among the available technology and the available products.

Now, however, the importance of keeping a vibrant EML in New York City is more important than ever. Secretary Chertoff announced last year that the Securing the Cities Initiative, STC, would be inaugurated in New York City. Under STC, the Domestic

Nuclear Detection Office at DHS has been tasked with developing and implementing the deployment of a system to detect the introduction of nuclear material into our cities for illicit purposes. The EML plays a pivotal role in STC in New York City, providing technical and management roles.

The Acting Director of EML, Dr. Adam Hunter, has served as a key liaison between DHS and the myriad of federal, State and local partners that comprise the STC partnership. He has served as a mentor to jump start initiative activities and has been a key advisor on technical details regarding the acquisition, evaluation and operation of radiological detection equipment, and he has provided critical guidance on the operational exercise activities currently underway in support of these initiative goals. Without Director Hunter's guidance and assistance from his laboratory, the STC goals of creating a formidable, in-depth defense of New York City and the region from radiological or nuclear attack would be severely degraded.

In fact, EML stood next to New York City in our early efforts to establish a defense of the city through the successful Regional Radiological Pilot Project. That program yielded significant research and funding, which led to the fielding of discrete radiological detection equipment currently used to locate and identify radiological source material.

Clearly, EML's work in the New York region has been tremendously successful and has provided a substantial credibility for federal, State and local agencies to join in a coordinated defense against a terror threat of the radiological or nuclear attack against the New York region. In fact, more assistance from EML would be welcome and would help consolidate the initial success achieved through the programs, such as Securing the Cities. The outcome of that program will result in a significant increase in the number of detection equipment deployed by STC partners, equipment which will need precision calibration and support going forward.

Also, private industry is rising to the challenge to enhance the sensitivity and capabilities of radiological detection equipment and we look to EML to provide further guidance on acquisition, evaluation and operational deployment on technologies yet to be identified. The question is not whether EML has been a success in answering the threat posed by international terrorism; rather, the question is whether EML stands ready to expand its efforts going forward. The success of STC in New York is important to the entire Nation and we expect it to be a model for implementing similar initiatives throughout the country.

I would be delighted to answer any questions you may have.

[The prepared statement of Mr. Duecker follows:]

PREPARED STATEMENT OF JONATHAN A. DUECKER

Good morning Chairman Miller, Ranking Member Sensenbrenner and Members of the Committee. My name is Jonathan Duecker and I am the Assistant Commissioner of the New York City Police Department's (NYPD) Counterterrorism Bureau (CTB). I was previously the Director of the Office of Homeland Security for the Commonwealth of Pennsylvania. I am pleased to be here today and I thank you for this opportunity to address your committee on a matter that is vital to the health and welfare of, not only the State and City of New York, but our nation.

When Police Commissioner Raymond W. Kelly took office in January of 2002, the pyre on the grounds of the World Trade Center was still burning. He made it his

personal mission that New York City never fall victim to such a calamity again. Commissioner Kelly's leadership and vision was the nascence of the NYPD Counterterrorism Bureau. The mission: make New York City inhospitable to terrorists, and to their sympathizers, their supporters, and their facilitators.

Fortunately, the NYPD has thwarted more than one plot against New York City since September 11, 2001. One widely reported success was the investigation, arrests and convictions of terrorists planning to blow up the Herald Square subway station two weeks before the Republican National Nominating Convention. In addition, the NYPD's robust deterrence and counter-surveillance program has proved its success, confirmed by Khaled Sheik Mohammed himself, who cited NYPD deployments as the reason that an Ohio truck driver, Iyman Farris, presently serving a prison sentence for his role in the plot to demolish the Brooklyn Bridge, decided that he could not carry out the plot.

In New York City, we are combating terrorism aggressively. We acknowledge and welcome the synergy that comes with joining State, regional and federal partners, all of whom bring resources and expertise to the fight. Over the past few years, our relationship with the Department of Homeland Security has matured. I can say that, despite differences that crop up from time to time, the level of cooperation we presently enjoy has never been better. It is in this spirit of cooperation and collaboration that I ask you today to ensure that critical federal resources are neither squandered nor withdrawn. I am talking about the yeoman's work taking place at the Environmental Measurements Laboratory (EML) located in Manhattan.

The EML has distinguished roots, dating back to the Manhattan Project. It enjoys a renowned reputation as the subject matter expert in all things nuclear and radiological, from protection to testing to measurement and assessment. Although EML moved organizationally from under the direction of the Atomic Energy Commission to the Department of Energy and then to the Department of Homeland Security (DHS), it never left its home in New York City.

The NYPD has found EML to be a responsive neighbor and partner. A few years ago, when we determined that we needed to purchase small, portable but reliable radiation detectors, we asked our federal colleagues to recommend a laboratory capable of testing the products then available on the market. We were told that we would have to travel across the country to the Northwest, where testing would consume a year's time. The EML stepped up and performed the testing for us in a few weeks and made recommendations that work for us to this day. As a result, the NYPD has acquired approximately 700 hand-held gamma monitors and 120 gamma neutron detectors to detect potential radiological weapons of mass destruction. They have been deployed throughout the Department and are in daily use throughout Manhattan and access points to the city. In addition, advanced gamma detectors and Geiger counters have been assigned to specialized units such as the Emergency Service Unit and the Bomb Squad. The Department continues to seek out and acquire new technologies to aid us in the war on terror. In the future, we plan to procure additional nuclear, biological, and chemical detection and monitoring devices. EML has been instrumental in helping us make wise choices from among available products.

Now, however, the importance of keeping a vibrant EML in New York City is more important than ever. Secretary Chertoff announced last year that the Securing the Cities (STC) initiative would be inaugurated in New York City. Under STC, the Domestic Nuclear Detection Office (DNDO) at DHS has been tasked with developing and implementing the deployment of a system to detect the introduction of nuclear material into our cities for illicit purposes. The EML plays a pivotal role in STC–NY, providing technical and management roles.

The Acting Director of EML, Adam Hutter, has served as the key liaison between DHS and the myriad groups of federal, State, and local partners that comprise the STC partners. He has served as a mentor to jump-start initiative activities and has been a key advisor on technical details regarding the acquisition, evaluation and operation of radiological detection equipment and he has provided critical guidance to the operational exercise activities currently underway in support of initiative goals. Without Director Hutter's guidance and assistance from his laboratory, the STC goals of creating a formidable, in-depth defense of the New York region from radiological or nuclear attack would be severely degraded.

In fact, EML stood next to New York City in our early efforts to establish a defense of the city through the successful Regional Radiological Pilot Project. That program yielded significant research and funding which led to the fielding of discrete radiological detection equipment currently used to locate and identify hostile radiological source material.

Clearly, EML's works in the New York region have been tremendously successful and have provided a substantial capability for federal, State, and local agencies to

join in a coordinated defense against the terrorist threat of a radiological or nuclear attack against the New York region. In fact, more assistance from EML would be welcome and would help consolidate the initial success achieved through programs such as Securing the Cities. The outcome of that program will result in a significant increase in the numbers of detection equipment deployed by STC partners, equipment which will need precision calibration and support. Also, private industry is rising to the challenge to enhance the sensitivity and capabilities of radiological detection equipment and we look to EML to provide further guidance on acquisition, evaluation, and operational deployment on technologies yet to be identified. The question is not whether EML has been a success in answering the threat posed by international terrorism; the question is whether EML stands ready to expand its efforts going forward.

The success of STC–NY is important to the country—it is expected to be the model for implementing similar initiatives throughout the country.

I would be delighted to answer any questions you may have.

BIOGRAPHY FOR JONATHAN A. DUECKER

Assistant Commissioner of Counterterrorism Jonathan Duecker graduated from the United States Naval Academy in 1986 and was commissioned an Ensign in the U.S. Navy. After attending Navy flight school at Pensacola, FL, and receiving his Naval Flight Officer wings, he was assigned to the EA–6B "Prowler" tactical electronic warfare community and flew electronic countermeasures missions from several fleet aircraft carriers. After his initial sea tour, Assistant Commissioner Duecker was assigned as the Electronic Warfare Range Officer at the Atlantic Fleet Weapons Training Facility at Naval Station, Roosevelt Roads, PR, where he was responsible for all aspects of operational electronic warfare training of surface, subsurface, and aviation units prior to their deployment overseas.

Assistant Commissioner Duecker attended the University of Wisconsin Law School where he received his Juris Doctor, and was admitted to the Wisconsin Bar in 1995. He attended the U.S. Department of Justice Drug Enforcement Administration (DEA) Basic Agent Training at Quantico, VA, and was ultimately assigned as a Special Agent to the Mobile Enforcement Team in the DEA Philadelphia Field Division.

Immediately after September 11, 2001, Assistant Commissioner Duecker was assigned by the DEA to the Philadelphia FBI Joint Terrorism Task Force. Subsequently, he was mobilized to active duty to the Joint Intelligence Task Force—Combating Terrorism at the Defense Intelligence Agency (DIA) providing counterterrorism intelligence analysis in support of Operations Noble Eagle and Enduring Freedom. While at the DIA, Assistant Commissioner Duecker was responsible for creating the Homeland Defense Division, which monitors the transnational terrorist threat to the continental U.S.

Assistant Commissioner Duecker was demobilized at the end of 2002. In 2003, he was appointed the Deputy Director of the Pennsylvania Office of Homeland Security by Pennsylvania Governor Ed Rendell, and in 2004, was elevated to Director. He served in that position until October 2005. Assistant Commissioner Duecker is currently a Commander in the U.S. Navy Reserve assigned to the DIA in Washington DC.

DISCUSSION

Chairman MILLER. Thank you. And before beginning with the questioning, I mentioned earlier that there would be various documents, but there is a specific set of documents that have been provided to the Minority staff and I now ask unanimous consent to enter that set of documents in the record. Thank you.

[The information referred to appears in Appendix: Additional Material for the Record, Documents for the Record.]

AIR FORCE PROGRAMS WITH THE ENVIRONMENTAL MEASUREMENTS LABORATORY (EML)

Chairman MILLER. And now the Chair recognizes himself for five minutes of questions. Mr. McBrearty, beginning with you. I under-

stand that the Air Force has had a longstanding relationship with EML, and the lab has participated in various nuclear nonproliferation-related programs. I understand that some of the work, some of the arrangements, some of what EML has done may be classified. Obviously, if we ask a question that would lead you into disclosing classified information, do not answer that. If it is necessary that we know that to understand the answer to the question, we may make other arrangements to get that information from you.

Mr. MCBREARTY. That would be perfectly fine.

Chairman MILLER. But in this setting, do not.

Mr. MCBREARTY. Right.

Chairman MILLER. Obviously, do not disclose classified information. And that goes for anyone else who has classified information. Mr. McBrearty, is AFTAC now engaged in any program or project with EML?

Mr. MCBREARTY. We had terminated all the activities that we had with them. So currently, no, we have none going on.

Chairman MILLER. Why is that?

Mr. MCBREARTY. Well, at the time we had both—some of the points made here were excellent. We used their quality control and the engineering support to a large extent and used them as advisors to our activities. The major reason is that we had—the small project that we did have was approximately $400,000 a year. It was the level-of-effort project. The reason we terminated the activities was, as I sort of alluded to and made mention in my written testimony, upon notification by DHS that there was an intention to close the laboratory, it was absolutely necessary that we move these important activities to other laboratories within our United States Atomic Energy Detection System Network. We had to make that move upon the notification that the laboratory was to be closed. So while we value it, as I said, very much, what they are capable and have been able to do, it was necessary for us to move on.

Chairman MILLER. Okay. And again, how did you learn that there was a decision to close EML?

Mr. MCBREARTY. In about 2005, in the fall, my project officer got a call from, I think, Dr. Clarke or people in the DHS office, notifying us that the laboratory was—they were planning—that DHS had planned to terminate the laboratory and that it would be necessary for us to move our work elsewhere. Or the other option given to us would be to pick up the tab for it. DHS did not seem interested in the laboratory or what it had for their particular job that they had identified.

Chairman MILLER. Okay. And I understand that EML that—excuse me. The e-mail that you have referred to is one of the documents that we——

Mr. MCBREARTY. Yes. We have that exchange of e-mails. It was absolutely essential for us to move quickly and over the course of the next year, we transitioned the equipment and a large portion of the sample library, which is a nice national asset in some respects, to our other laboratories.

Chairman MILLER. Right. And Mr. McBrearty, I understand that you were not pleased with that decision to close EML. What did you do about it, if anything?

Mr. MCBREARTY. I personally came up here from Florida. It is always an interesting trip to come from Florida up here, so it was important for me to do so. I came up to talk with the people at the Department to explain the importance of the work that we saw going on, albeit small, with regard to EML, but more importantly, to sort of touch on some of the points that were made in here. As I said in my written testimony, I was initially extremely pleased to hear DHS had picked the EML up, because the DOE had not really had a lot of use for them, as the transitions from environmental measurements and things were going on. The focus, as has been identified, was more toward the larger laboratories. EML has, and had had in the past, large assets that were rather unique in the system. So in seeing DHS pick this little laboratory, but a very competent laboratory, up, I was initially extremely pleased.

As was mentioned by Mr. Duecker, there has been a plethora of what I call Tricorders created for detection of radiation, and the entrepreneurship that is out there on the market to sell these things is huge. Quality control, measurements, validation and testing of these sorts of things, so that you have compatibility and things actually work, is critical. And to me, that was a job that EML has shown capability to do in the past.

So my initial impression when I heard they were being picked up by DHS was great, this is a good location. I was disappointed, obviously, when the decision was made, or indications of that decision, from two perspectives. One, we had to do some moving and shuffling of stuff, which was an impact which we have recovered from. But I think, as has been mentioned here, the intangibles are the things that worried me most.

Chairman MILLER. Okay. I have further questions, but in order to set an example for the Committee, I will now recognize Mr. McCaul.

EML'S ROLE IN THE DEPARTMENT OF HOMELAND SECURITY (DHS)

Mr. MCCAUL. Thank you, Mr. Chairman. Dr. Fainberg, I want to—if you could, tell us about EML's infrastructure capabilities and morale prior to its transfer to DHS. I wonder if you could expand beyond that, whether you think these capabilities fit within the DHS mission.

Dr. FAINBERG. As to the morale before it transferred, I was not directly aware of it. I didn't have close contact. The morale shortly after transition I can talk about. People were very happy to be away from DOE and within DHS. Regarding their infrastructure, as I said, their plant, their lab space was fairly depressing and barely functional. However, they did have laboratories within that lab space that they did keep functioning quite well, supporting the QAP program, for example.

And they had quite a bit of capability in radiation detection technologies. Their development of—I think it was a called comprehensive monitoring system—was kind of interesting. This was a set of gamma ray detectors they had assembled from parts on the market, but at much cheaper prices than you could buy assembled detectors on the market. That became the core of their rooftop sensor system. Hooking that all into a central command room at DHS

was—at EML was quite a useful thing to do as a demonstration for what one might do in the future, putting a radiation monitoring system in a large city. What you have to be careful of, you don't want to put a million monitors out there, because you will never be able to manage that, but you could think of putting maybe 50 or 100 monitors in strategic places. And this kind of work was an interesting pilot for that.

As I also indicated in my remarks, some of the people there were clearly ready for retirement. However, I identified at least a quarter of the technical staff who I thought were extremely active, up with current technologies and good and many of them, in fact, were useful to the comprehensive—the monitoring test bed that was set up by other elements in DHS in New York City. They assisted with that, where they were out on bridges and tunnels at all hours of the day, taking measurements, testing out systems and running down alarms. What they could be useful for in the future, all of that expertise in radiation detection still is there. I am not sure how many people remain in the radiochemical area. Reconstituting that certainly is possible, but it is not certain to me that the cost benefit analysis would favor reconstituting laboratories that were there. It would be useful, however, I think, to use those people who are still in the system, who are still federal employees there, and their expertise in helping other laboratories do quality assistance—quality assurance work. I think that could be done. There is a lot that can be done there and if S&T wanted to establish a serious technological presence in New York City, nothing would prevent them from hiring a few more people, as I said, younger people, to reinvigorate it.

I would also suggest that they are really being ripped off by GSA. That is not a good place to be and the prices, I understand, are going up for the rental, because the prices in Greenwich Village, where this is located, are going up and GSA is able to match rental to local market values. If it were up to me, I would try to put them in another facility in the New York area, perhaps in Lower Manhattan, owned by other elements at DHS. That probably would be a lot more——

EML AND COUNTERTERRORISM IN NEW YORK CITY

Mr. MCCAUL. Thank you for raising that point and it is a good transition. I was going to ask Mr. Duecker the value of having the DHS Science and Technology footprint in Manhattan or where you are located, in response to Dr. Fainberg's comments, but also what role they can play to better assist your counterterrorism efforts in New York.

Mr. DUECKER. Yes, sir. In your opening remarks, you commented that this was critical for national security purposes, it was a critical resource. We take a very parochial approach to that in that regard and we look at this as a very critical local resource. They provided us significant test and evaluation capabilities, as I mentioned, looking at the rad pagers that we currently have on the street. And as was mentioned, there is so much technology out there nowadays that making sure that what our cops on the streets carry, in terms of detection equipment, in fact, is going to detect something that we should be watching for, is of critical importance.

There is a lot of technology out there and frankly, the New York City Police Department isn't—we are not the subject matter experts on test and evaluation of this kind of equipment. We rely on our partnership with EML. And having them local to Manhattan, and having them basically a partner within the city, has become something that we rely on to a great degree. Otherwise, we would either have to go further up on eastern Long Island to BNL, which is a laboratory about 65 miles outside the city, or elsewhere outside the region.

And in terms of the threat to the city, the rad threat and nuke threat to the city, that is just not a workable solution for us. So we look at the partnership that we have with EML, Dr. Hunter, in particular, as being something that has been good in the past and we are looking to grow that in terms of the Securing the Cities Initiative that we currently have. Ultimately what we want to do is we want to create a ring of sensor technology around the region to protect to New York City, because, as we know, New York City is the primary threat set for the threats

Mr. MCCAUL. In your experience, has the transition from EML to DHS been a smooth one? Is it a positive experience or what could be done to make it better assist you?

Mr. DUECKER. We have always asked for more. You know, if the New York City Police Department constantly asks—requests for items and we get a portion of those and we are happy with those, but we are always constantly asking for more. I can't really speak to the transition from DOE to DHS in that term, but I can tell you that, since about 2004, the relationship that we have had with them has been growing since 2003, and we would like for them to stay in New York City and greatly enhance their capabilities in New York City, so that as we go forward with the rad detection system that we envision, we have a partner that is right there that we can work with that is local. I mean, one of the things that we rely on in New York City is that we don't have to rely on folks in Washington, D.C. or outside the region. We like to interact with them right there in the city.

Mr. MCCAUL. Thank you. I see my time has expired.

Chairman MILLER. Thank you. There should be ample time for all of us to have a second or even a third round of questions. Mr. Rothman.

DHS' DECISION TO CLOSE EML

Mr. ROTHMAN. Thank you, Mr. Chairman, and let me thank you for holding these hearings this morning. Let me just start by saying, not surprisingly, as a Representative from the northern part of New Jersey, across the George Washington Bridge from Manhattan, representing that district, I am a firm believer that the number one target of terrorists, New York City and the New York metropolitan area, should be given the commensurate amount of the Homeland Security funding and counterterrorism funding, because it is justified on the basis of risk.

In addition, because of the quality of the work of the New York Police Department and the other law enforcement, the first responders in New Jersey and New York, we have come up with great approaches to the threats and have invented the wheel, so to

speak, and so other targets around the Nation can come to us, as they often do, as the model for programs and it is a more efficient use of the Nation's national security or Homeland Security funding. So the burden of proof, in my mind, should be on any agency or individual who would withhold funds or close Homeland Security projects in New York City, or New York metropolitan area, to prove why that is a good thing or necessary.

Here is my general question to any of the panel members or all of you who want to answer. I look forward to hearing from Dr. Clarke and I have read his testimony. Is the closing or the decision to close EML, was that simply a good faith decision that people can disagree with, but nonetheless, was it a good faith effort on their part to best manage the taxpayers' funds, yet accomplish its mission? Or did it evidence some bias or poor judgment or pattern of bad management decisions that you would like to comment on?

Dr. FAINBERG. Well, Congressman, sympathetic to where you come from, I grew up in Hackensack and my parents are still there.

Mr. ROTHMAN. My constituents.

Dr. FAINBERG. That is a coincidence. I had no idea of this beforehand.

Mr. ROTHMAN. Okay.

Dr. FAINBERG. I was told, as I said in my testimony, that there had been, in May of 2005, no plan to close the laboratory and in fact, there had been talk of establishing, sort of in its place or transitioning it into something called a technical liaison office, which I never understood and it didn't make any sense to me, but maybe you can hear about that from later witnesses. It appeared to me that there was a decision to close it down and I do not know why. I don't know what caused it, if there were bad feelings that had been generated by earlier miscommunications between laboratory management and headquarters. I don't know if it was just, and I suspect this is what it is, the difficulties of starting a new organization, S&T, within another new organization, DHS, and assimilating pieces and laboratories from elsewhere and the confusion that reigned at that point. It may well have been a good faith effort. I wouldn't question that. I do think it was a very poor judgment and that is all I can say about it.

Mr. ROTHMAN. Any other panel members wish to comment?

Mr. MCBREARTY. Yes, sir, I guess I would throw a little into this, too. Was there a decision to close? Yes, we had the impression there was a decision to close the place. Was there bias? Two parts to your question. Bias, I don't know that that was the case. I simply feel that there was a lack of appreciation of the intangible values that were embedded in this small laboratory located in New York City. Two, it was very costly. You have heard indications of the cost of doing business in the city and I guess that comes with the territory. But it was viewed as a costly operation vis-á-vis the new organization and I don't think the new organization appreciated that it could utilize those—that it had those talents.

Mr. ROTHMAN. But you don't see a bias or an under-appreciation of the threat that New York City and its surrounding areas were under, vis-á-vis the corn fields of Iowa or the sheep farms in Montana, who are getting a disproportionate share of DHS money?

Mr. MCBREARTY. Well, sir, I don't know how the distributions go, but I will say this, as I said earlier, I thought it was good that they had been picked by DHS, because they were in the location that needed some help. There is analog to the DHS/New York City thing in the Argonne National Laboratory located in Chicago. The synergy that is derived by the presence and working closely with first responders, the homeland security kind of initiatives that Chicago has developed has made great use of Argonne and to me, that model was one I thought was going to prevail in the EML relationship.

Mr. ROTHMAN. Thank you, Mr. Chairman.

Chairman MILLER. Thank you, Mr. Rothman. Mr. McBrearty, you described DHS, the S&T Directorate not really understanding what they had. The image that comes to my mind is the last scene in the Raiders of the Lost Ark, where the Ark of the Covenant is in a crate being loaded into a warehouse on top of other crates by a forklift, and I have the sense that they don't—they didn't quite comprehend what they had, from what you have said, and that is your impression as well. You said you came to Washington to discuss the value of the lab. Did you give a classified briefing to Mr. Clarke or anyone else?

Mr. MCBREARTY. No, sir. During that visit, the venue was not available for a classified briefing. However, the importance of EML to us, in any unclassified venue, there are relationships with the international community, our associations with them in the Comprehensive Test Ban Treaty development, development of samplers, those sort of things, those values that we derive from this little entity, those were those sorts of things I imparted.

Another particular bias of mine, perhaps, is that I valued EML and AFTAC valued EML, too. It is a small government laboratory as opposed to a DOE facility. Now, we love the DOE laboratories. We have great associations with them and a lot of work that goes on. But what EML uniquely provided, in my opinion and it is in my written testimony, is the ability to independently assess technologies and do so in a very capable manner. So in that regard, they were—that was part of the value or pitch that I thought EML represented to the DHS.

MORE ON AIR FORCE PROGRAMS WITH EML

Chairman MILLER. Thank you. We have been called to a vote. We will continue for a while. We all have a very good idea of exactly how long it takes us to get to the Floor and we have 15 minutes and we should be able to at least complete my round of questions. Did the decision by DHS force you to terminate any of your programs?

Mr. MCBREARTY. Is that directed to me, sir? Yes?

Chairman MILLER. Yes. I am sorry. Yes.

Mr. MCBREARTY. Well, actually, we had some activities with which EML assisted us that we were not able to carry out. So I will have to leave that at that point.

Chairman MILLER. Is that because of the nature of the information?

Mr. MCBREARTY. Yes, and——

Chairman MILLER. Okay.

Mr. MCBREARTY.—I would rather not go into that.

Chairman MILLER. Thank you. And at that point, did you have any plans to transfer or terminate or halt or cancel any of the programs until you got the e-mail telling you that EML was going to be terminated?

Mr. MCBREARTY. No, sir, not at all. We and my staff had full impressions that we would continue operations into the future pretty much as we had in the past.

Chairman MILLER. Okay. And if EML employees were told that the Air Force was not any longer interested in working with them, was that—that was inaccurate?

Mr. MCBREARTY. Oh, absolutely. We were basically told that we needed to find other places for our work, because there was an intention to close the laboratory. We were also told that it was considered private information and that we were asked not to discuss the issue with EML staff. We respected the fact that the decision had not been made and we made no contact to any of the employees, per se, regarding that.

EML'S GLOBAL SENSORS: NORTH KOREA

Chairman MILLER. Okay. One last question and I think we will all go to vote and then we will be in recess and come back and complete the hearing, and I apologize for the herky-jerky nature of this. It is simply what our schedules are like. But one last question, Mr. McBrearty, and I know that probably you more than any other witness have to tread carefully to avoid disclosing classified information. But I know that you must have been aware of EML's network of global sensors.

Mr. MCBREARTY. Yes, sir, very much so. In fact, we were close with them on that and appreciated the work that they did in developing that network, because it gave the monitoring community at large a better capability.

Chairman MILLER. Okay. And EML had installed two radiation sensors in China in 2002 and had plans to install a third sensor near the North Korea border in 2005, just before DHS shut down that program. From the technical expertise you have in this area, what would have been the value of the information gained from those sensors?

Mr. MCBREARTY. As part of the expansion of an international network of samplers and a national or international——

Chairman MILLER. I am sorry. Excuse me.

Mr. MCBREARTY. That is a hard question to answer directly, but always more samplers, more locations, more interplay between these networks, samplers within a network, is of value. So from AFTAC's perspective, with its job of worldwide nuclear test monitoring, we have always been interested in the advancements at EML and the associations that they had with these things. To have a sampler closer to Korea, given those things, a joint operation with the Chinese and the United States through EML, was certainly a valuable undertaking and we were quite interested in seeing that as means of improving the ability to globally monitor those things that all the nations who have signed up to this Comprehensive Test Ban Treaty have expressed a utility in.

Chairman MILLER. And I know my time has expired and we need to go vote, but just one last question. I know there are other sources of information about the detonation of a nuclear device anywhere in the world. Was the information you would have gotten from those sensors duplicative? Would it have been helpful additional information?

Mr. MCBREARTY. It could have been supplemental, sir. AFTAC is the operator of the United States Atomic Energy Detection System. We are the ones that provide that information and did detect and report it on that nuclear test. For those sorts of things, we look at the entire suite of systems available, both United States, international and those that EML would have had and it could—those things could help under certain circumstances. In the North Korean test, they would not have helped because the situation is that the samplers that are involved or were involved, whether worldwide RMP, or Remote Monitoring Program, have to do with monitoring particulate debris as opposed to the noble gases that actually came out of the tunnel. In that particular case, we, AFTAC, collected the gases using our aircraft. So those samplers, per se, were not—would not have, in hindsight, been useful in that case. However, if the event that occurred had vented, had thrown particulate debris into the atmosphere, depending on the meteorology, depending on where the sample was transported to, they could have indeed played a part, but that is a scenario that did not occur. However, the more is always better.

Chairman MILLER. All right, thank you. Okay, again, I apologize to all of the witnesses, but we do need to stand in recess to allow us to vote and we will back as quickly as we can. Thank you.

[Recess]

Chairman MILLER. The Committee will be back in order. Any moment, Mr. Rothman will be prepared to ask some questions. Mr. Rothman.

Mr. ROTHMAN. Okay, thank you, Mr. Chairman. Commissioner Duecker or Duker?

Mr. DUECKER. Duecker.

Mr. ROTHMAN. Duecker. Thank you for your service, first of all, and please convey our thanks to all the men and women that you serve with on NYPD.

Mr. DUECKER. Thank you. I appreciate that.

Mr. ROTHMAN. You just do a great job and thank you for your work with New Jersey's finest and bravest and all of our first responders.

Mr. DUECKER. We were out with them yesterday carrying the Cities Initiative. We were with Passaic and Bergen Counties. It was the second phase to the Securing the Cities Initiative. There is going to be quite a few more phases going forward, but yesterday was a good day for us.

NEW YORK CITY FIRST RESPONDER COMMUNITY

Mr. ROTHMAN. Great. As you know, many people in my district work in Manhattan and many of our first responders were the ones who came into New York City to help out, as well as doing a lot of the medical care at Liberty State Park.

Commissioner Duecker, there was apparently a report prepared by the employees of DHS that evaluated EML. I think the report is 2004–2005. That report painted a portrait of the New York City first responder community as being lukewarm in its feelings about EML. Do you recall if that is an accurate statement of the feelings of the New York City first responder community at that time?

Mr. DUECKER. I don't know what comprises the first responder community to which you refer. I don't know how broad that was.

Mr. ROTHMAN. Right.

Mr. DUECKER. I don't know to what degree the New York City Police Department was involved in that assessment or that survey. I can tell you that, with respect to the relationship that we have, and it is evolutionary with EML, it is evolutionary because the technology that we see in terms of rad and nuke detection devices, that is evolutionary. Our relationship with them has grown. It has grown more in the last year, I think, than it did in the two or three years previous to that. A lot of that has to do with the leadership of Dr. Hunter, as I mentioned, and his willingness to be a partner in the Securing the Cities Initiative and understanding that. Instead of having technology drive operations, I think he is willing to allow operations to drive technology and he is——

Mr. ROTHMAN. Commissioner, how long have you been aware of the workings of EML?

Mr. DUECKER. I have been with the NYPD for about a year and a half, so it has been—I was aware of the rad issues as soon as I got there and the fact that EML played a pivotal role in the testing of the rad detection devices that we have on the street.

EML FUNDING

Mr. ROTHMAN. Okay, thank you. Dr. Fainberg, Dr. Clarke's prepared testimony, in it he says that a review of EML found no S&T project manager who intended to fund EML beyond 2006 and any other activity, other than the CMTB, Countermeasures Test Bed Project. You were the Program Manager for radiological and nuclear countermeasures in the DHS S&T Directorate at the time. Did you plan to fund any projects at EML beyond 2006?

Dr. FAINBERG. Yes, I was Program Manager until—I believe it was late April of 2005.

Mr. ROTHMAN. Right.

Dr. FAINBERG. At that time, we were not planning anything very much in the fiscal 2007 timeframe for EML or for any of the labs. We were kind of consumed with doing fiscal 2005 and 2006. My intention had been to propose continuing funding in a number of areas. I had not been asked, at least I do not recall having been asked, if I intended to fund them beyond fiscal 2006. Had I been asked, I would have said yes, I would have.

Mr. ROTHMAN. In your experience, decades of experience in your field, is it customary to—or for people to ask about projects and their longevity several years beyond the present?

Dr. FAINBERG. It can be. I mean, some projects by their nature are large, long-term projects.

Mr. ROTHMAN. But your testimony is you just weren't asked?

Dr. FAINBERG. Yes, I do not recall having ever been asked if I—what I wanted them to do in 2007. In documentation that we were

supposed to provide each year for the research plan, there was a list of projects and how long they would last and how long we anticipated they would last. Some of the ones I had down, like the ship effect, was supposed to finish in 2006, but there was a possibility it might have continued into 2007, for example. Other things that were going on, like the New York area Science and Tech working group, were ongoing things which I would have wanted to keep. I wanted to keep the global monitoring, for example. But a number of these projects that I had wanted to keep, I had been told at a higher level, not by Dr. Clarke, but by other people who had responsibility up the chain, that they were not going to be approved.

THE NEUTRON SHIP EFFECT

Mr. ROTHMAN. If I may, just one other question. The neutron ship project.

Dr. FAINBERG. Yes, neutron ship effect.

Mr. ROTHMAN. That ultimately was worked on by some other group?

Dr. FAINBERG. Well, no, it is worked on by Dr. Goldhagen, even today, I believe, in collaboration with RSL, a laboratory at the Nevada Test Site. It also has interest in it. But Dr. Goldhagen, I believe, is still working on that today.

Mr. ROTHMAN. So just forgive me. Was he at EML?

Dr. FAINBERG. Yes.

Mr. ROTHMAN. And then——

Dr. FAINBERG. As far as I know, he still is.

Mr. ROTHMAN. Oh, he still is?

Dr. FAINBERG. Yes.

Mr. ROTHMAN. So that work continued——

Dr. FAINBERG. That work——

Mr. ROTHMAN.—at EML?

Dr. FAINBERG. That work did continue, yes.

Mr. ROTHMAN. Then I must have misunderstood you. Was there some slowing down or hindrance of that work?

Dr. FAINBERG. Oh. Dr. Clarke wanted to prevent the acquisition of a detector that was vital to do the work properly. After people at the higher level, the office director, had approved it and it was over this issue that I resigned. I said it seems to me that you are trying to block something that you don't have competence to do. I went to my management and I said, why are you allowing this, and my management ignored me.

Mr. ROTHMAN. And how long after you resigned did the equipment get approved?

Dr. FAINBERG. I don't know. Probably within a month or two, but I don't know. I was told within a few weeks that it would be or it had been.

Mr. ROTHMAN. Well, you believe there was a causal relationship between your resignation and the acquisition of this equipment?

Dr. FAINBERG. I think so, yes.

Mr. ROTHMAN. Okay. Thank you, Mr. Chairman.

DIRTY BOMBS

Chairman MILLER. Thank you. I understand Mr. McCaul has no further questions of this panel. I do have a few more of Ms. Albin. Ms. Albin, I mentioned in my opening remarks that one of the most likely terrorist events, one that has been amply telegraphed, is a dirty bomb. Could you describe what role EML might play in the event of a dirty bomb or any other kind of radioactive event?

Ms. ALBIN. So far, we have been talking and implying that the events that would be covered, people would be able to carry instrumentation into the area and say whether or not it is safe or not safe, kind of go or no go. Those hand-held instruments are good for that, good for looking at first responder safety and good for making a quick call if you need to evacuate an area.

In the case of dirty bomb, those instruments have limited capabilities and it really is going to be the radiochemical analysis of samples that are going to give us the information we need to know what is the extent of the contamination, if it was a dirty bomb and unsafe. Can they come back to their houses, if they have been evacuated? And for us, and a lot of people in the trenches, we are the people that are doing that analysis and we are handing our results off to government officials that are going to make decisions and we need to have the credibility and make sure that we are doing the best we can do. So if we are analyzing samples and we are giving data and we tell people, you know, you need to stay away, that is one problem. But if we are also telling people it is okay to go back, it is safe to come back, there is no hazard here, those no-action decisions require that we have a lot of confidence in our data and that is where the performance testing, like the QAP program helped us, because it independently verified the work that we do and independently gave us that assurance that the data that was being produced by the Public Health Laboratory can be used by decisions makers to address those problems.

THE QUALITY ASSESSMENT PROGRAM (QAP)

Chairman MILLER. Okay. You mentioned the Quality Assessment Program, QAP, and as I understand it, it set standards for laboratories to verify the reliability of their detection equipment. Can you describe how Washington State's involvement with QAP at EML helped your programs?

Ms. ALBIN. Well, the QAP program was directly providing our samples that were directly related to the type of work we do, low-level radiochemistry analysis, so that is how we used them with the QAP program. But EML also had other programs. They sponsored an international inter-comparison to look at external radiation levels, and there was another program where they tested the ability for the analysts to correctly look at spectral data, and there was a lot of interaction with EML, from the QAP program as well as availability of the scientists to answer questions, to collaborate on what to do if we get into a situation and we have a problem analysis.

Chairman MILLER. I feel like I am talking to you by cell phone. You are kind of going in and out.

Ms. ALBIN. Oh, sorry. How is that?

Chairman MILLER. Oddly enough, the Science and Technology Committee does not always have the best technology. And oddly enough, our witnesses are sometimes worse than Congress in using the technology. I don't know if you have answered this, but now that QAP has closed, what do you do? Who do you go to for what QAP formerly did?

Ms. ALBIN. We participate in other performance testing programs and one of them is through a mixed—it is a program that is sponsored by a DOE lab in Idaho and it is developed for mixed waste and they augmented their program to include some of the radionuclides and the work that the QAP program was doing and their performance and distribution schedule. And there is also a private laboratory that has picked up quality assurance for environmental samples. And the difference is that we cannot fully participate in the private laboratory's program because of costs and we are limited by costs and the government samples or the samples from EML were at no charge to us. And the Idaho laboratory samples are similar but they lack some of the natural products and things that were provided by the QAP program.

Chairman MILLER. Your answer to this question seems evident, but if the QAP program were reconstituted in EML would you use it again?

Ms. ALBIN. We would use it again, yes.

Chairman MILLER. Thank you. I think we are fine now with this panel. Thank you all very much for your testimony. Mr. McCaul, I know you need to leave shortly. If we could maybe take a shorter break than we would ordinarily take and we could have you ask questions first.

Mr. MCCAUL. Thank you.

Chairman MILLER. Okay. The next panel is not really a panel. It is Dr. Clarke. So if we could just take a couple, three minutes to stretch and let people reposition ourselves, we could begin with Dr. Clarke.

[Recess]

Chairman MILLER. Okay, the Committee has now reconvened and Dr. Clarke is our next witness. Dr. John F. Clarke is the Deputy Director of the Office National Laboratories, Science and Technology Directorate, Department of Homeland Security. As you know, Dr. Clarke, your testimony will be limited to five minutes, but you have submitted a written statement which has become part of the record. And after you have given the testimony, each of the Committee Members will have five minutes. We may have more than one round and we will call on Mr. McCaul first to accommodate his schedule. We do swear our witnesses, Dr. Clarke, if you would stand. Do you have any objection to being sworn?

Dr. CLARKE. No.

Chairman MILLER. Okay. And you also have a right to Counsel. If you could raise your right hand.

[Witness sworn]

Chairman MILLER. Thank you. Dr. Clarke, you may begin.

Panel 2:

STATEMENT OF DR. JOHN F. CLARKE, DEPUTY DIRECTOR, OFFICE OF NATIONAL LABORATORIES, SCIENCE AND TECHNOLOGY DIRECTORATE, DEPARTMENT OF HOMELAND SECURITY

Dr. CLARKE. Good morning, Chairman Miller, Ranking Member Sensenbrenner and distinguished Members of the Subcommittee. It really is a pleasure to be here today. I want to thank you for holding this hearing and specifically for inviting me to testify. I think that your oversight is providing the catalyst for key decisions by the leaders of the Department of Homeland Security that I hope will allow the EML staff to develop a more productive role within the department.

I have been honored to serve in the Department of Homeland Security since July of 2004. Like many of my colleagues in Homeland Security, I was moved by the events of 9/11. I interrupted my career to devote time to national security. Now, for me, the motivation was quite personal. I am a New Yorker. Eleven people with my family name and 69 fellow Fordham University alumnae died on that day and that was basically my motivation for coming to Homeland Security. I was very fortunate to find the Office of Research and Development and they gave me the opportunity to apply my 37 years of research and management experience to assist in the integration of the DOE national laboratories and the specialized DHS organic laboratories into a complex, a laboratory complex that would serve the need of homeland security.

Now, you have asked me to testify regarding the termination or transfer of programs, projects or activities at one of these labs, the EML. You wanted to know how these decisions were made and the impact of these decisions. My written testimony addresses these issues in context and I apologize for the length, but it is a historical record based on extensive written documentation—and it has been entered in the record. Now, the extensive Science and Technology reviews in which I participated found that the EML had serious challenges, let me put it that way, to overcome with regards to matching their legacy capabilities with the current missions of the Department of Homeland Security.

I assure you that to properly address this kind of issue, the transition of a laboratory, involves people and their past experience and many, many factors. You have to approach it with frankness and candor in order to make realistic management decisions about the future of the institution. And these judgments and findings are summarized in my testimony for the record. But I wanted to do is to assure you that throughout the process of investigation, review which went on for oh, well over year, perhaps 18 months, the leaders within the Science and Technology Directorate at that time always acted with great empathy for the people, the individuals at the EML who, after all, had been caught up in a difficult transition which was not of their making. Nonetheless, the Under Secretary and his predecessors are pursuing an important national mission with limited resources. They have attempted to tackle the difficult challenges associated with the EML forthrightly, honestly and in my view, courageously in order to blend the EML capabilities with

the national needs served by the Department of Homeland Security.

And with that, Mr. Chairman, I am prepared to answer questions.

[The prepared statement Mr. Clarke follows:]

PREPARED STATEMENT OF JOHN F. CLARKE

Introduction

Good morning, Chairman Miller, Ranking Member Sensenbrenner, and distinguished Members of the Subcommittee I am John Clarke, Deputy Director of the Office of National Laboratories in the DHS Science and Technology Directorate. I would like to thank the Committee for the opportunity to discuss the transition of the Environmental Measurements Laboratory (EML) from the Department of Energy (DOE) to the Department of Homeland Security (DHS) and the Science and Technology (S&T) Directorate's management of EML since its transfer in March 2003.

In particular, you have asked me to testify regarding the termination or transfer of programs, projects or activities at the EML, how these decisions were made, and the impact of these actions. In previous correspondence, the Committee inquired about the period FY 2002 through the present, part of which predated the Department of Homeland Security (DHS), so the prior history of EML within DOE is relevant to subsequent DHS management decisions.

In 2004 the Office of Research and Development conducted a series of reviews concerning the EML. I was only peripherally aware of the EML during my service in the Department of Energy. Consequently, when I was asked to participate, I consulted EML staff and also talked to current and former DOE officials in the Office of Science (OS), the OS Office of Health and Environmental Research and the Office of Environmental Management who had managed, and had personal knowledge of, EML from the late 1970's until its transfer to DHS.

Background on EML

The EML is located in a General Services Administration (GSA) office building in lower Manhattan. It was transferred from the Department of Energy to the Department of Homeland Security in March 2003 by the *Homeland Security Act of 2002*.

The current EML evolved from the Health and Safety Laboratory (HASL) of the Atomic Energy Commission (AEC). HASL contributed significantly to various national programs during the "Cold War." However, the laboratory's size and the uniqueness of its capability declined as the global nuclear industry matured and national priorities changed. With the formation of the Department of Energy (DOE) in 1977, the HASL was renamed to EML to reflect its narrower focus on the measurement of low level environmental radiation.

In subsequent years, continued changes in national priorities led to a decline in EML's technical capability relative to the private sector and other DOE National Laboratories all of whom possessed broader scientific and engineering capabilities and missions. According to officials in the DOE Office of Science and its Office of Health and Environmental Research, during the 1990's, the DOE Office of Energy Research struggled to decide whether to close the facility or to find a viable mission for EML. Finally, in 1997, the EML was transferred to the DOE Office of Environmental Management (EM) where it provided radiation measurement and quality control services supporting DOE's internal environmental monitoring, decommissioning, decontamination, and remediation mission. Periodically, EML also provided radiation measurement services to the National Nuclear Security Administration (NNSA) and, through an Interagency Agreement between the Air Force and DOE, it provided similar services to the Air Force Technical Applications Center (AFTAC), both of which were concerned with nuclear non-proliferation.

Immediately following its transfer to DHS in 2003, the EML continued to work on the internal DOE Quality Assessment Program (QAP), which supported DOE environmental site cleanup, some radiation detector projects and two small and intermittent measurement activities related to non-proliferation. By 2004 when the S&T reviews began, EML was supplying a few staff to provide local support to the S&T Directorate Standards (~1.5 FTE) program and Counter-Measures Test Beds (CMTB) project (~4.8 FTE) in its testing of radiation and explosive detectors, performing two radiation monitoring projects and offering advice and seminars to local first responders.

Science & Technology Directorate Management Reviews of EML:

Since its transfer to DHS in March 2003, the S&T Directorate's Office of Research and Development (ORD) had numerous meeting with the EML's Director and staff of the EML to inform them about the evolving S&T program. ORD also provided funding to EML to support transition planning and the Director had weekly discussions with the ORD Director. In 2004, growing concerns about EML's progress in transitioning its capabilities to support S&T programs, led to a series of reviews by ORD. The first was conducted by Dr. Mark Mandler, who, at the time was the Technical Director of the Coast Guard Research & Development Center on assignment to S&T to assist with lab transitions.

Dr. Mandler's review of the FY 2005 EML Facilities Plan revealed that the EML had a carryover from FY 2004 of 42 percent in their O&M budget and 26 percent in their assigned project funds. This increased S&T concerns about EML's progress in managing its transition to DHS. Further, Dr. Mandler's review also found that, despite the EML's large FY 2004 under run, the EML Director's funding projections for FY 2005 staff were significantly overestimated and also contained inflated funding for self-initiated EML projects. It concluded that EML management did not understand the organization's actual capabilities and entertained unrealistic expectations of its potential role within DHS. The final conclusion of Dr. Mandler's review was that S&T needed to reassess how it could utilize the EML. After review and acceptance by the Under Secretary, these conclusions led to the initiation of a more comprehensive Top-to-Bottom ORD management review of the EML.

My personal involvement in the management of the EML began in the fall of 2004 when I was tasked by the ORD Director to work with Dr. Mark Mandler in performing this Top-to-Bottom review.

The Top-to-Bottom management review was to examine whether EML staff could provide more support to the S&T Directorate projects such as the ongoing CMTB project, which was S&T's largest operational activity in New York and New Jersey. It was also to examine what other work was ongoing at EML, what S&T programs it served, what new work was proposed and what priority these EML activities had within DHS. Finally, and most importantly, it was to determine how S&T could best apply the resources invested in maintaining the EML to support the science and technology needs of DHS components as well as the local agencies in the New York area.

The Top-to-Bottom review followed a systematic data gathering process to answer these questions. This included visiting EML, talking to EML staff, examining EML progress reports with S&T project managers, reviewing its quarterly cost reports with S&T Chief Financial Office (CFO) staff, discussing EML's role and contributions with CMTB management and S&T Project Managers, consulting DOE officials familiar with EML and reviewing EML's new and existing work proposals in context of the program plans of S&T managers. The review was completed by late October of 2004. At that time, it was decided by the ORD Director that the results of the review should be presented to EML's management. The conclusions are summarized below.

An S&T team consisting of Dr. Parker, Mrs. Alyce Bridges from S&T Human Resources and I visited EML on Dec. 17, 2004. We met with Dr. Erickson and his senior managers and reviewed the S&T Directorate's mission and goals with them. We informed them of the conclusions of the Top-to-Bottom review and reminded them of ORD's expectations for EML.

After reviewing S&T's current and future program directions, it was noted that the CMTB, which utilized some of the EML staff, seemed to be the closest match to the EML's radiation measurement competency. However, Dr. Parker also warned the EML management team that, even within the CMTB, change was coming. We further noted that the ongoing CMTB test and evaluation program required more than experience in radiation measurement and, as it developed, it would need core competencies in field operations, pilot deployment and consequence management. We informed them that ORD expected EML management to engage in a serious assessment of its strengths, weaknesses, opportunities and barriers to its success in identifying and serving DHS customers such as CMTB project.

We then reviewed the detailed findings of the Top-to-Bottom Review on each of the currently funded activities at the EML. The review had found that in the area of standards development, urban atmospheric circulation measurements and radiation monitoring development activities, S&T program managers believed that EML was not competitive with other institutions. Consequently, these managers expected that current EML activities in these areas would be completed by 2005 with little, if any, follow-on work. The review had not found any S&T project manager who intended to fund EML beyond 2006 in any activity other than the CMTB project.

The review had also gathered mixed reviews of the EML relationships with local New York area government agencies. EML was recognized for holding seminars for local government personnel, for answering their questions related to radiation measurement and for the contributions of their staff to the CMTB test program. However, the review found that Homeland Security support to local government agencies was multi-faceted and required not only a broad range of technical expertise but significant skills in relationship management with both S&T, other DHS components and local agencies, skills which EML had not exhibited outside of the CMTB test program.

Based on overall DHS goals, we told the EML managers that creating an operational platform to coordinate the development, operational testing and transfer of homeland security technology to local government agencies was potentially a critical success factor for S&T. The CMTB fulfilled part of these functions and EML was already contributing to its test and evaluation program. However, this participation, while certainly valuable, employed only a fraction of the EML staff and was not sufficient by itself to justify the existence of EML. We informed the EML managers that ORD would be performing a market survey of S&T technology suppliers and potential users in New York to determine a concrete value proposition for such an operational platform. ORD expected to evaluate EML's future role based on their institutional strategic and business plans and the results of the DHS market survey.

Following this meeting, S&T together with a team of organizational management experts from Booz Allen Hamilton (BAH), conducted dozens of interviews with potential customers for, and suppliers of, science and technology services in New York for the purpose of determining a vision and value proposition for S&T activities in New York. The teams also gathered information from several DOE National Laboratories, other government laboratories, DHS component agencies and local agencies both at Headquarters in Washington, DC and in New York.

The teams identified S&T operational activities in New York of value to a broad cross-section of homeland security technology suppliers and operational users. These activities fell into four categories: 1) Providing operational liaison to maintain interactive communication between developers and operators; 2) Identifying opportunities to exploit emerging science and technology; 3) Spiral development to evaluate developmental technology in an operating environment and; 4) Providing continuous technical support during technology test and evaluation, insertion and deployment.

The team briefed ORD management throughout the process and by the summer of 2005, the ONL team was instructed to developed strategic and business plans for an operational platform to perform these identified functions: the Technology Liaison Office (TLO). The TLO's value proposition focused on providing relationship management between technology developers and potential users to coordinate operational test and evaluation and on providing interactive communication and mutual support between potential users and S&T developmental technology programs.

As recommended by the Top-to-Bottom review, ONL then evaluated EML's potential future role in S&T based on its staff capabilities, its institutional strategic and business plans and the results of the DHS market survey and resulting value proposition. The EML's leadership of the CMTB local support activities (4.8 FTE) fell within the scope of the TLO value proposition. Unfortunately, when ORD compared the range of professional skills required to achieve the TLO value proposition with those skills extent at EML, it found only this small overlap.

This led to a recommendation to ORD management that the EML should be phased out as an institution because its capabilities were neither competitive nor necessary to the mission of the S&T Directorate. Furthermore, it had no prospects of future S&T R&D program support, the skills of most of its staff were not suited for a useful S&T operational role in New York, and its operating costs were high and rising. The team also recommended that a TLO serving the identified customer needs in New York be established and that EML staff and capabilities be transitioned as far as possible.

ORD management accepted this recommendation in the summer of 2005. ONL, S&T Human Resources and Congressional Relations were then tasked to prepare detailed transitions plans for the EML staff and facilities. This work was completed during September 2005 and Under Secretary McQueary was briefed on the results. He commented on ORD's thorough and systematic preparation for a difficult decision. He verbally agreed that phase-out of the EML was the right thing to do and asked that a final decision package be prepare for Secretarial approval. The Secretarial decision package was completed by ONL and forwarded to the Under Secretary by ORD.

Under Secretary McQueary announced his resignation shortly thereafter and the Secretarial decision package was put on hold pending the arrival of his successor. After Dr. Runge was named Acting Under Secretary, he received a memo from Dr.

Vayl Oxford, Director of the Domestic Unclear Detection Office (DNDO), noting that DNDO was planning a regional reach back initiative and proposed to use staff from Brookhaven National Laboratory and EML as its staff on a part time basis. This request required modification of the plan for the EML phase out and the startup of the TLO. A second Secretarial decision package with these modifications was prepared for Acting Under Secretary Runge. However, when Retired Rear Admiral Jay M. Cohen was nominated to be Under Secretary of the S&T Directorate, this second package was held pending his confirmation.

S&T Management Actions and Rationale:

While the options for the future of EML were being developed and reviewed, a number of S&T management actions were taken to address concerns identified during the Top-to-Bottom Review. The overall intent was to increase EML's focus on transitioning its staff to viable missions within Homeland Security.

First ORD conducted a detailed review of the EML Program Execution Plan (PEP) for FY 2005. This review was conducted for Dr. Parker and coordinated with S&T's Chief Financial Office (CFO), the Chief Information Officer (CIO) and the project managers who were currently funding activities at EML. For this purpose, ONL supported Dr. Parker.

With respect to the EML operation and maintenance budget, the PEP Review found that most of the cost was due to EML occupying space equivalent to more than an entire city block—with most of the space unused for years. For instance, EML had six chemistry labs that were utilized over decades on various DOE programs—primarily for sample preparation prior to analysis and data acquisition for DOE programs. As the programs were reduced or terminated by DOE, the need for maintaining these labs no longer existed but they were, nonetheless, maintained by EML management. The review also identified traditional EML expenditures that were no longer necessary, such as a special EML security guard, in a federal building already secured by the Federal Protective Service—for which EML was also paying. It also found that EML was requesting project funds for activities that involved little more than staff time, which was funded separately.

The review recommended specific operating budget reductions to eliminate these and other unnecessary expenses. The review also recommended that the unused EML space and facilities be decontaminated in anticipation of returning the excess space to GSA.

The ORD Director reviewed the recommended budget and decided that it contained sufficient funds to allow EML to carry out all activities proposed in the EML PEP that had any relationship to DHS goals. She adjusted the EML budget request accordingly and reserved the savings for EML cleanup purposes. The result of this review was to focus EML staff on actual DHS goals and ORD management was able to redirect nearly a million dollars to initiate decontamination and disposal of unused and unneeded space at EML.

As part of the cleanup of the unused EML Chemical laboratories, all unused reagents, materials, and equipment of value were sorted and offered to other research institutions (i.e., DHS labs, other federal labs, State labs, universities, and GSA). Any mixed waste or radioactive waste was collected and disposed of by Brookhaven National Lab. The empty lab spaces, including fume hoods, benches, storage cabinets, and other physical structures that are not removable, are being surveyed and decontaminated for "free-release" by a subcontractor through the U.S. Army Field Support Command. Other unused areas of the approximately 96,000 sq. ft. occupied by the EML were also surveyed and are being decontaminated.

Given additional concerns with EML's management raised by the findings of the budget review, the ORD Director assigned ONL to monitor future EML operating expense requests, including requests for travel, new staff, facility modifications and information technology equipment. The travel review was directed at eliminating unnecessary expenses related to the continuation of their former DOE activities by EML staff.

The IT review, which was done in conjunction with the S&T Chief Information Officer (CIO), was aimed at eliminating unreasonable expenses given the limited EML activities. The CIO reviewed EML IT needs and provided connectivity to the DHS network through four, rather than the requested forty, computers. These computers were to be used for EML travel, financial and procurement activities and active CMTB business. The existing EML computer network was found adequate to be used for all other business. Blackberries were provided to EML management personnel and those who were active on DHS projects outside of EML.

Much of EML's nominal budget in FY 2004 was actually procurement or "pass-through" for work at other laboratories, rather than to support local EML activities. When the procurement warrant holder who resided at EML retired, the S&T CFO

and the DHS Office of Procurement Operations (OPO) determined that it was not practical or cost effective to replace him and that procurements could be handled through S&T/OPO. As a result, for FY 2006 CMTB major procurements were handled through S&T/OPO and minor purchases made through the EML purchase cards. From that point on, major CMTB procurements and funds for the Urban Dispersion Project was routed directly through the UDP Principal Investigator to the multiple laboratories actually carrying out the project. The effect of these decisions was to eliminate unnecessary duplication of effort. However, they did not in any way reduce the technical capability of the EML.

The Top-to-Bottom Review had found that a serious impediment to the transition to DHS was that some EML personnel were adhering to their former roles within DOE. As a result of reviewing the proposed EML travel, ONL advised individual EML staff to phase-out their roles on various DOE related interagency committees and activities that required travel without a DHS justification. Any travel that related to active DHS functions was approved immediately. Compared to the other ONL management responsibilities with respect to other DHS Laboratories, this travel monitoring did not involve a great deal of money. However, it was extremely important to refocus EML staff from their identification with their former roles in DOE upon their current DHS situation.

Similarly, the Acting Deputy Director of ORD, Dr. Carolyn Purdy, detailed the EML Director to Washington to strengthen his understanding of S&T programs. He is currently supporting the S&T Infrastructure and Geophysical Division. Dr. Adam Hutter, who had successfully managed EML support of S&T CMTB activities, was asked to serve as Acting EML Director. Mr. Hutter has taken on the EML Director's assignment of defining a strategic and business plan for EML and has been working very successfully with DNDO in developing expanded EML support of their regional reach-back and testing activities.

Project Closures at EML:

Aside from these internal S&T management actions aimed at eliminating unnecessary expenditures and redirecting EML's focus to actual DHS requirements, there have been a number of unrelated project changes or closures at the EML. The Committee has inquired specifically about four of these: the Global Monitoring Activity, the Quality Assessment Program (QAP), the Urban Dispersion program (UDP) and a Reach-Back Pilot Program (RPP). Even though I have generalized knowledge about these programs through my responsibilities in the ONL, I was neither the program manager for any of these projects nor did I direct any actions be taken in connection with any of these programs.

The first two items, the Global Monitoring Activity and QAP, were never DHS programs and decisions on their funding were made independently by their sponsoring agencies.

The third program, the UDP, is a DHS research program that was started, successfully executed and is in the process of transferring its results to the intended recipients.

The last program, the RPP, was discussed by the S&T Portfolio Manager as a concept but never approved or funded. Under Secretary Cohen has addressed each of these programs in his letter to Chairman Miller dated March 13, and since I did not have programmatic oversight over those programs it would be more appropriate for others to comment on the specific facts associated with any particular project.

Conclusion:

Unfortunately, despite S&T's identification of several valuable functions for an operational presence in New York and the joint S&T/EML efforts to address the problems that the Top-to-Bottom review identified in 2004, by the Fall of 2005 the EML had not been able to find a function within DHS that matches the size and capabilities of the majority of its existing staff. This led Under Secretary McQueary to make a preliminary program level decision that a phase-out of the EML was in the best interests of both S&T and the EML staff. Changes in the S&T Directorates management delayed the transmittal of S&T's recommendation to the Secretary of DHS for a final decision.

Of course, this delay has been extremely stressful to the people at EML. A year ago, one of the EML professionals advised our Human Resources office that the lack of decision was hurting EML's professional demeanor, impacting mental health, and hurting people in their home life. He was speaking for himself as a professional who only wanted a significant job to perform but he also said that the situation was impacting everyone at EML including the large support staff. S&T management was aware of, and very sensitive to, the difficult situation that the transfer to DHS had created for the people at EML.

S&T management was, and continues to be, sympathetic to the difficult situation of the EML staff. Since the transfer of EML in March 2003, the S&T Directorate has tried to provide responsible management which balanced concern for the people at EML with stewardship of the mission and public resources with which we are entrusted.

Some progress has been made in the one area where EML capabilities matched the Homeland Security needs that the review identified in New York. The Acting EML Director, Mr. Hutter, has been doing a commendable job in providing EML support for the S&T radiation detection test and evaluation activities, which have since been transferred from S&T to DNDO. He has also been working with Brookhaven National Laboratory to provide support for the DNDO regional initiative in New York and in examining the potential technology liaison activities that might be addressed by his staff.

Under Secretary Cohen has indicated a commitment to right-sizing the EML facilities and workforce. This will include both supporting those individuals working on the DNDO activities and transitioning the remaining staff to a productive roles working on S&T programs. We all look forward to assisting in this transformation.

DISCUSSION

MORE ON DHS' DECISION TO CLOSE EML

Chairman MILLER. Mr. McCaul.

Mr. MCCAUL. I thank the Chairman for accommodating my schedule. Dr. Clarke, there has been a lot of controversy in terms of how you handled EML at the transition time. We heard from Mr. McBrearty that, in his testimony, that you notified AFTAC in December of 2005 that DHS had made the programmatic decision to close EML and my question is who actually made that decision?

Dr. CLARKE. Well, perhaps could I just clarify?

Mr. MCCAUL. Sure.

Dr. CLARKE. Dr. McBrearty's statement. In fact, the AFTAC contacted the Science and Technology Directorate and myself in an e-mail, which I have, and this e-mail said that they were preparing their fiscal year 2006 budget and they needed to know what the status of our review was. This was a little difficult because our review was not completed, which I told them. The process of getting a decision through the Department of Homeland Security had not been completed. However, at the programmatic level, in the Officer of Research and Development, the decision had been made to close the laboratory; not to withdraw from New York, but to close this specific laboratory called EML.

Mr. MCCAUL. Who made that decision?

Dr. CLARKE. Oh, sorry. To answer your question, it was Dr. McCarthy, who is the Director of the office, after many, many briefings.

Mr. MCCAUL. Okay. Do you know if this decision ever rose to the level of the Under Secretary?

Dr. CLARKE. Yes, I do. After the final decision was made at the programmatic level, and I emphasize this was not a Homeland Security decision because that has to go through the Secretary. But at the programmatic level in the Office of Research and Development, I was instructed to prepare a package that would go from the Under Secretary to the Secretary and that package contained our plans for, as I say, the closure of the institution called the EML and simultaneously the standup of a new organization that would satisfy the value proposition that we had identified for S&T activities in New York.

Mr. MCCAUL. And again, did this rise to Under Secretary McQueary's level?

Dr. CLARKE. Yes, it did. I was present at the briefing.

Mr. MCCAUL. And did he basically approve this decision?

Dr. CLARKE. He agreed that this was the right thing to do and he was the one who requested that the decision package be prepared through Dr. McCarthy.

Mr. MCCAUL. Okay. And the decision was to close, just to explain the decision, itself. How is it going to change the role of——

Dr. CLARKE. Well, as I stated in my testimony, this process went through three stages. First was the review of what the reality of EML was, which was very staggering. The second review was, well, since the reality of EML, as it stood at that time, was not contributing much. They did contribute some, but they weren't contributing anything commensurate with the cost of maintaining the laboratory, that we better do an investigation and find out what would be valuable in Manhattan. Dr. McCarthy was very determined that if possible, if we could a valuated mission that we would maintain a capability in Manhattan. We did this.

We consulted widely across the department with all of our coast and border protection, the FEMA, all of the agencies within Homeland Security to see what they thought they needed in terms of technology support in Manhattan. We consulted with the Office of Emergency Management in New York. We consulted with our agencies both in New York and in Washington. We consulted widely with everybody that we could think of and we came up with a value proposition. The value proposition was basically the types of things that Commissioner Duecker was talking about, supporting the first responders with certain types of technology support, including the Countermeasures Test Beds. That was one of the things that we found that was obviously of benefit.

But it only involved, at that time, 4.8 full-time equivalents out of a laboratory which has over 40 people and costing us in excess, at the time, of, as I recall, $7 million a year. So you see, that was the reason behind all of this. We were trying to find a cost-effective method of supporting both DHS operations and the first responders in New York.

Mr. MCCAUL. And so that is a value added that remained in the mission.

Dr. CLARKE. Exactly.

THE NATIONAL NUCLEAR SECURITY ADMINISTRATION

Mr. MCCAUL. And what happened to the other core missions?

Dr. CLARKE. Well, let us get back to that. The only other core missions that EML had, you have heard the testimony about the QAP program, the AFTAC program and you haven't heard about the NNSA program. That was also supporting this counter-proliferation mission. In the spring, I believe, of 2005, in the preparation for her decision, before she made the decision, Maureen McCarthy asked us to consult with these small programs. As you heard from Dr. McBrearty, $400,000, involved basically one full-time staff member to service that program. And the NNSA program was a few sample measurements during the year; it didn't amount to very much. But she was thorough and she asked us to

consult with these agencies to see if we made a decision, at that time, on EML, what would be the effect on their programs. We didn't want to disrupt the valuable programs of other agencies.

Mr. MCCAUL. Okay. I see that my time has expired. Thank you.

MORE ON DHS' DECISION TO CLOSE EML

Chairman MILLER. Thank you, Dr. Clarke. Dr. McQueary is from Greensboro, which is in my district and he is well regarded in that community. He is regarded as very competent and has a high reputation for integrity. So this is not, the question is about these decisions are not personal attacks, but they really do go to the correctness of the decision. Your testimony just seems to be irreconcilable to the testimony of all the other witnesses that we have heard from today and I think we will hear from in a later panel. I know that others were involved in the decision, from your testimony. You heard Mr. McBrearty testify that there was no classified briefing, that he did come to Washington to complain, to protest what was happening to EML and to explain that it had an important role in AFTAC and other programs by the Air Force, but that there was no classified briefing, is that correct?

Dr. CLARKE. No, it is not correct.

Chairman MILLER. It is not correct?

Dr. CLARKE. No.

Chairman MILLER. Okay.

Dr. CLARKE. Now, I have no personal knowledge of this and that I did not participate in the briefing, but I was told by Dr. Parker.

Chairman MILLER. Who is Dr. Parker?

Dr. CLARKE. Dr. Parker was the head of research and development in the Office of Research and Development. He reported to Dr. McCarthy. He told me that he had a classified conversation with AFTAC. Now, that is all I know about it. I don't know who he talked to or whatever, but you know, that was a classified discussion.

Chairman MILLER. And at that point, then you understand that AFTAC conveyed to the Air Force—conveyed to DHS the nature of the programs of its programs that EML contributed to and that it would be disrupted by the closing of EML, is that right?

Dr. CLARKE. No, that is—I just testified that I don't know what the content of that discussion was.

Chairman MILLER. Okay.

Dr. CLARKE. Because it was a classified discussion, I was not involved with it.

Chairman MILLER. I assume you have security clearance. You could be in a classified.

Dr. CLARKE. I could have been and yet I was not invited.

Chairman MILLER. Okay. Well, it was our impression the reason you are sitting there today is that we understood that there was no one at DHS who knew more about EML than you did. Is that wrong?

Dr. CLARKE. Well, Mr. Chairman, before I was assigned to this task by my management, I had—I knew EML just by the name. I had no knowledge of it. But when I was assigned this management review task, I did due diligence and I talked to people in the Department of Energy who had managed this EML throughout the

decades and you know, so I learned a great deal about EML. So I suppose that statement is true, that I was—I knew more about it than anybody else, but it was only because of the reviews that I was conducting for the Department.

Chairman MILLER. Okay. Did you know, from Mr. McBrearty, that there were programs, AFTAC and others, that he regarded as important to national security that would be disrupted by closing EML?

Dr. CLARKE. I did not talk to Mr. McBrearty, initially. I contacted the AFTAC Program Manager when, as I said, I was requested by my management to find out the effect of any change in EML on their programs. I talked to a Mr. Scott Smith and we later exchanged e-mails and it was in that conversation that—well, let me back up. The conversation was about a proposed trip of an EML staff member to China. I inquired about whether this trip was, in fact, requested by AFTAC. In the course of that conversation, I mentioned that we were reviewing the EML and its role in S&T, and then I proceeded to the question that I was tasked to ask, which was, in the event that a decision was made to change EML, and at that time, of course, no decision was made of closure or otherwise, if a decision was made, what effect would it have on your program? Mr. Smith told me at that time that it would have minimal effect. He mentioned, if I recall correctly, five other laboratories that could do the work that EML was doing and that——

Chairman MILLER. And which work is that we are talking about?

Dr. CLARKE. We are talking about the AFTAC work and Mr. Smith was their Program Manager. Dr. McBrearty was the head of the materials division in AFTAC. This is the man directly in charge of the program. And that occurred in the summer, before the discussions that Dr. McBrearty was talking about.

Chairman MILLER. Did either Mr. McBrearty or anybody else discuss with you the national security implications, the importance for monitoring of nuclear proliferation of the sensors in China.

Dr. CLARKE. Yes. I don't believe this—well, I am not sure whether that was mentioned specifically. As Dr. McBrearty testified, he did come to see me in Washington. He was actually there, as I understand it, for a meeting at DHS and he stopped in and we talked for about an hour and our conversation was pretty much as he indicated, that he expressed his, just as in his testimony, he expressed his personal confidence in EML. He expressed his opinion that EML was a valuable resource. I gave him the situation. I described to him the situation that we had with a laboratory that was costing the Department of Homeland Security millions of dollars servicing a $400,000 program, as he described it, which took up, as I understand it, one full-time equivalent in EML.

It was servicing some episodic measurements for the National Nuclear Security Administration, which took up a few staff hours several times a year. That is what we discussed and I just put it to him, I said it is costing us a lot of money. Your programs are being conducted under an agreement with the Department of Energy, not with Homeland Security. The Economy Act, in the event that something is done with the laboratory, the Economy Act would cause us to charge you a lot more than you are paying now because

there are no other DHS activities that are being supported. That was my half of the conversation.

Chairman MILLER. And did he say if you charge him more we are not going to do it?

Dr. CLARKE. Yes, he was astonished. He was astonished at the costs that I related to him from the laboratory. Now, he had no idea about what else was going on in the laboratory, so when I told him, basically, what is in my testimony, that we had not identified, you know, work for this laboratory after 2006 and he recognized that this was reality. This was not my choice, not his; this was the Economy Act.

Chairman MILLER. My time is up and I do want to recognize Mr. Rothman, but a year ago I was in Hawaii on a Congressional delegation from this Committee, to the South Pole, to Antarctica. But while we were in Hawaii on the way, we saw the device, the floatation device that was to be towed and positioned. It is a massive device with radar equipment and other sensing equipment to be towed and positioned in the Bering Sea to support our technology that has yet to succeed in intercepting a missile and I don't know how much we are spending on that, exactly, but I assume it is many billions.

So the amount of money that you are talking about for this lab, which would help us respond to a dirty bomb; would help us identify a dirty bomb before it detonated; would help us identify or had the potential, if we furthered the research, to identify if a ship was carrying a nuclear device, which strikes me as a much more likely threat to the United States than a missile from the soul of another country; that had the ability to tell us more about nuclear detonations in the region of the world where we are most worried about proliferation, that adjoins North Korea, India, Iran, Pakistan. It seems to me that no, this lab is not that expensive. Mr. Rothman.

Mr. ROTHMAN. Thank you, Mr. Chairman. Dr. Clarke, do you know how much the review and analysis of EML costs, this 18 month review?

Dr. CLARKE. How much it costs?

Mr. ROTHMAN. Yes.

Dr. CLARKE. No, I really don't. It was some of my time. This was not my full-time activity. Some of Dr. Mandler's time.

Mr. ROTHMAN. You hired a firm called Booz Allen?

Dr. CLARKE. Yes, Mr. Hooks, our Deputy Director had a contract with Booz Allen, it is our ASETA contract for technical support and he arranged to have a team of about four people, but they didn't work full-time on this.

Mr. ROTHMAN. Can we get that for the record? Is it possible——

Dr. CLARKE. I don't have that information, but I am sure it can be provided.

Mr. ROTHMAN. Can you provide it?

Dr. CLARKE. I cannot provide it. It wasn't my contract.

LIMITED DHS SCIENCE & TECHNOLOGY DIRECTORATE FUNDING

Mr. ROTHMAN. Okay. Doctor, you said that S&T was, I believe you were referring to S&T, was involved in an important national mission with limited resources.

Dr. CLARKE. Yes, sir. My personal view, but——

Mr. ROTHMAN. Yes. Do you think it is being under-funded by the Congress?

Dr. CLARKE. Congressman, that is a policy question. It is way above my pay grade.

Mr. ROTHMAN. Do you have an opinion?

Dr. CLARKE. On whether——

Mr. ROTHMAN. It is under-funded.

Dr. CLARKE. Let me put it this way. I attend reviews of the programs that we have. I look at the yearly budgeted activities and there are always projects that appear to be very, very worthwhile projects that fall above the funding level that the directorate has. Now, they say that is a policy issue. That is not for me to decide.

Mr. ROTHMAN. Have you ever gone to your superiors and said there is a program that needs to be funded and for whatever reason they have said we don't have the money for that?

Dr. CLARKE. No, sir. I have not had any programmatic responsibility while I was at Science and Technology directorate. I offered management advice and analysis to my superiors when asked.

Mr. ROTHMAN. Did you call those resources limited? I suppose it just—you meant nothing by that?

Dr. CLARKE. Well, what I meant was what I just said, that I see, in the budget process every year, projects that look like they are worthy projects that have been requested by customers for the Science and Technology directorate and they are not funded. That is what I meant.

Mr. ROTHMAN. But it hasn't been under your jurisdiction to——

Dr. CLARKE. No, not my responsibility.

Mr. ROTHMAN.—to comment on their being not funded?

Dr. CLARKE. No, sir.

Mr. ROTHMAN. I think I followed the chronology in your written testimony and in the remarks that you made. If I have got it correct, at some point new people came in and changed the decision that had been made with regards to EML? Is that a fair characterization or how would you characterize it?

Dr. CLARKE. Actually, that is a very good question and if I may just respond completely. I don't want to waste your time if you have others, but there seems to be a misunderstanding about the term closure. I tried to indicate before, in my previous remarks, that when we were using the work closure, we were using that with respect to an organizational entity with the title Environmental Measurements Laboratory because frankly, even that title is not appropriate for this department.

Mr. ROTHMAN. No, I understand. I am not asking about the closure.

Dr. CLARKE. Okay.

Mr. ROTHMAN. Whatever changes you were going to make with regards to EML. Apparently, some or all of those decisions were revoked, made null and void, find new leadership? Can you comment? Is that true?

Dr. CLARKE. I would say not. If you look at the value proposition that we identified through all of our work in New York, which is recorded in my testimony, and then you look at the decisions that will be discussed by Admiral Cohen and Mr. Oxford, you will see

that there is a strong overlap. Supporting the testing and evaluation that Mr. Duecker talked was in there, that was part of our value proposition.

Mr. ROTHMAN. Excuse me, Doctor. Just refer, if I may, to part of your written testimony. At several different places in your written testimony you say that because an under secretary or somebody retired or resigned, new people were coming in, that recommendations to the Secretary were never acted upon.

Dr. CLARKE. Um-hum, that is correct.

Mr. ROTHMAN. So is it fair to say, then, that those recommendations that you made have still not been acted upon?

Dr. CLARKE. That is correct, yes. Yes. At least at the Secretarial level. That is correct, yes.

Mr. ROTHMAN. They haven't been acted upon, period? They haven't been effectuated.

Dr. CLARKE. That is correct.

Mr. ROTHMAN. Please go ahead.

Dr. CLARKE. No, I thought you were asking me, at least what I heard was that you said that the recommendations were revoked and——

Mr. ROTHMAN. Okay.

Dr. CLARKE.—the decision didn't go forward. What I was trying to emphasize was——

Mr. ROTHMAN. They just haven't been effectuated.

Dr. CLARKE. That is correct.

Mr. ROTHMAN. The 18 months' review and the recommendations have never been effectuated by DHS.

Dr. CLARKE. Yes, sir.

Mr. ROTHMAN. Thank you.

MORE ON THE FIRST RESPONDER COMMUNITY IN NEW YORK CITY

Chairman MILLER. A few more questions, Dr. Clarke. One of the reasons that you have consistently given was the relatively low value assigned to EML. It had little credibility among first responders in New York. We asked the police to send us someone to testify. They sent us Deputy Commissioner Duecker and the gist of his testimony was we love those guys. I understand, from our staff, that we have talked to that they have talked to all the first responders; the police, the fire, the EMS, in New York City and adjoining areas and consistently they hear the same thing, that Mr. Duecker said today, which was that they thought that EML's work was outstanding. It was the gold standard in radiation monitoring and detection and analysis. From whom did you hear that EML had a poor reputation, it had little credibility among first responders?

Dr. CLARKE. From the people that we interviewed. From the FEMA Director in New York, from the people in the Office of Emergency Management. Let us be clear. What Mr. Duecker was talking about was the work that was supervised by Adam Hunter in the Countermeasure Test Bed doing testing and evaluation of radiation detectors, which he feels is so important for the City of New York. That work was never questioned. That work was never intended to be closed down. But that work was a very small part

of what we are talking about here, which is the larger EML. The management issue that we had was what do we do with this larger part of the EML which is not being employed, with no disrespect and a great deal of respect for the productive activities led by Dr. Hunter.

Chairman MILLER. And did you talk to the first responders personally or you kind of heard it through the grape vine?

Dr. CLARKE. I didn't talk to first responders. I mean, there are 40,000 police in New York and——

Chairman MILLER. No, did you talk to the leadership of the first responders, the emergency response folks?

Dr. CLARKE. I talked to operational DHS elements in New York and the Office of Emergency Management, which has the job of coordinating all first response in New York. I did not talk directly to the police or the fire department.

Chairman MILLER. Okay. And can you identify, for our staff, after this hearing, the folks that you did talk to and if you had correspondence by e-mail, can we see the e-mail exchange?

Dr. CLARKE. Well, you should have it. I gave you everything that I had in my computer.

Chairman MILLER. Have we gotten that? Okay. Mr. Rothman.

Mr. ROTHMAN. I have another meeting of a bunch of folks on another important matter, but Mr. Chairman, I thank you for allowing me to ask this question. Dr. Clarke, do you have an opinion about as to whether the, as a consequence of the 18 month review, the work of EML was affected positively, negatively, no effect, hurt their operations, slowed them down or not? And if so, could you share that with us, your opinion?

Dr. CLARKE. Actually, I was very pleased to hear Mr. Duecker's testimony in which he said that the contact and the support from EML to the New York Police Department greatly accelerated over the last year and a half and I believe that is in the record from his testimony. So in the area in which the EML was making a positive contribution, namely, the test evaluation work led by Dr. Hunter, that work has improved.

Mr. ROTHMAN. Well, he only was there for a year and a half, so he said for the year and a half he was there they worked well together.

Dr. CLARKE. I am working from memory here but we can look at what he said. I believe that is what I heard.

Mr. ROTHMAN. I think he has only been there a year and a half.

Dr. CLARKE. But then he did say that it had accelerated over that period.

Mr. ROTHMAN. Over this last year and a half.

Dr. CLARKE. Which is what you asked me, whether as a result of our actions, I could venture an opinion.

Mr. ROTHMAN. Well, when were the recommendations shelved or that you made not acted upon? If you will understand what I mean. I can go back into your testimony, if you don't remember.

Dr. CLARKE. I do.

Mr. ROTHMAN. You do?

Dr. CLARKE. Yes, the first package we submitted was in December.

Mr. ROTHMAN. Yes. Of what year?

Dr. CLARKE. Of 2005.

Mr. ROTHMAN. Right.

Dr. CLARKE. That was when Secretary McQueary was still the Under Secretary. In planning for the transition of EML, we had to figure out how to preserve the valuable sections of the laboratory and what we should do about the people that——

Mr. ROTHMAN. But is it fair to say that your 18 month review concluded in December of 2005 or no?

Dr. CLARKE. I would say so, yes.

Mr. ROTHMAN. Okay. And that is about the time he got his job, Mr. Duecker?

Dr. CLARKE. Yes.

Mr. ROTHMAN. Okay. So during the 18 months that preceded December 2005, do you have an opinion as to whether that review process affected EML during that time up to December 2005?

Dr. CLARKE. Yes. Now, this is a much narrower answer because it is with respect to the management of a small special purpose laboratory. In my view, it did improve. When we began this review, there were a number of EML staff who were traveling around, spending public money on behalf of their interests in carrying out the roles that they had formerly been responsible for in the Department of Energy. That was stopped. And my own opinion, based on a certain amount of experience in management is that this was good for the staff because it focused their attention on their new role in the Department of Homeland Security, rather than their old role.

Mr. ROTHMAN. So overall, would you say this 18 month review had a positive, negative or neutral effect on EML?

Dr. CLARKE. Overall, I would say, taking account of the stress on the staff from the lack of decision, I would say that it was a terrible burden on the staff.

Mr. ROTHMAN. Mr. Chairman, if I am allowed to come back by my staff, I would like to ask that question of the next panel. If not, Mr. Chairman, if it is possible for somebody to ask that same question to the next panel? I appreciate your testimony, Doctor, and thank you, Mr. Chairman.

MORE ON DHS' DECISION TO CLOSE EML

Chairman MILLER. Thank you, Mr. Rothman. Just a couple more questions, Dr. Clarke. Dr. Fainberg testified here this morning that he fought to fund various projects at EML. The global radiation monitoring program, their rooftop radiation sensors—and I think others, and he testified that he consistently advocated for that and resigned out of frustration. And your testimony was, today, your written testimony is that there was no project manager who intended to fund EML beyond 2006. No S&T project manager who intended to fund EML beyond 2006 and any activity other than the Countermeasure Test Bed project. Now, Dr. Fainberg was an S&T project manager, isn't that right?

Dr. CLARKE. That is correct.

Chairman MILLER. Is his testimony incorrect?

Dr. CLARKE. Well, in part and I believe he said that he was never asked or he couldn't remember whether he was asked and he certainly was. One of the first stops when Dr. Mandler and I were

conducting the initial review of EML was to interview him because he was funding most of the ongoing activities at EML. And at that time, he gave us some very frank evaluations of the worth of the projects. Now, what he said in his testimony was that he felt they had some value. Well, as I testified, the competition for funding of worthwhile projects in Science and Technology is very fierce and just because something has some value doesn't mean that it necessarily will be approved. Now, I personally did not make any decisions on the funding of any project at EML. Those decisions were made by Dr. Jerry Parker.

Chairman MILLER. Dr. Clarke, I am just struck by the fact that you and I seem to have heard different testimony just an hour or so ago. I didn't detect any ambivalence in Dr. Fainberg's testimony about the value of EML's programs. I detected in him great frustration and that certainly is consistent with the e-mail that he sent, resigning, in which he said John Clarke is reaching into my program, preventing me from carrying it out under the guise of exercising his authority over EML. He has a clear aim of eliminating as much of EML's work for me as he could. It goes on and on. I am sure you must have seen this e-mail.

Dr. CLARKE. I have seen several e-mails, yes.

Chairman MILLER. Well, this is actually to Maureen McCarthy.

Dr. CLARKE. Yes, sir.

Chairman MILLER. It does not show a cc to you. It does show to Dr. Parker and Robert Hooks and Carol Linder, but I assume that——

Dr. CLARKE. Dr. Parker shared this with me after the fact and so what he says in this e-mail is not correct.

Chairman MILLER. Is that your testimony?

Dr. CLARKE. No, I am not challenging Dr. Fainberg's opinions. They are his opinions. His opinions were not accepted by management, not accepted by Dr. Parker or Carolyn Purdy, for example. They were present at the final discussion that led to Dr. Fainberg's decision. I was not involved. I was not there. I was informed after the fact. So I am not challenging his opinions, but they are his opinions.

Chairman MILLER. Okay. It seems that that is a very different take, that he had opinions that you considered but rejected, rather than what you—it sounded to me like you said, a moment ago, that he candidly talked about the programs of questionable value.

Dr. CLARKE. We are talking about a period of about four months and what I just said about the initial interview between myself and Dr. Mandler and Tony Fainberg, and there was another person present, the contractor, whose name escapes me. We had a very frank discussion about the value of these programs. The issue we are talking about now occurred four months later and it was between Dr. Parker, Dr. Purdy and apparently Dr. McCarthy. I had nothing to do with that.

Chairman MILLER. Okay. Is it true that Dr. Fainberg wanted to continue funding and increase funding for the EML labs, for the EML programs? That he advocated for that?

Dr. CLARKE. Yes. He mentioned a couple of specific projects. A neutron ship effect which was, in fact, continued. It is still ongoing. He commented on the—if I remember correctly and I am just work-

ing from memory, he commented on the seminars that were held for the New York first responders. Those programs were continued and are continuing today. There was one just recently. I can't remember what else he commented on specifically. So those programs, that I recall, that he was in favor of, were, in fact, continued.

Chairman MILLER. Dr. Clarke, you said that in addition to the lack of credibility that the lab had, it was simply a cost concern and I certainly applaud every agency of government looking for ways to spend money and not feeling like they had to spend everything that they have got, but this a lab that total funding was $7 million. I think we heard $10 million, but $7 million to $10 million. You know, again, a good deal less than that contraption I saw in Hawaii that was hauled away to the Bering Sea.

Dr. CLARKE. Yes, sir.

Chairman MILLER. And according to the S&T Directorates, budget information in fiscal year 2005 there was $505 million at the end of the year in un-obligated funds, in other words money that had been appropriated, not spent. I applaud savings, frugality. In fiscal 2006, $51 million in un-obligated funds or money that is appropriated but not spent and right now, for fiscal year 2007, for $223 million in un-obligated funds or money that is appropriated but not spent. Are those figures correct?

Dr. CLARKE. That is above my pay grade. I had fiduciary responsibilities in one small area and that is what I was addressing.

Chairman MILLER. Okay. Well, I have no further questions, but I encourage frugality in all of the Federal Government, but I am sure that FEMA saved a lot of money in the time leading up to Katrina. In retrospect, that appears to be penny wise and pound foolish. And the money that the S&T Directorate saved on EML, I fear greatly, is going to appear at some point in the future to be penny wise and pound foolish if we are not ready to prevent and respond to a radiological attack. Thank you, Dr. Clarke.

And we will take a five minute recess so everyone can stretch and refocus and attend anything else that needs attending to, and we will reconvene shortly.

[Recess]

Chairman MILLER. The Subcommittee has reconvened. The hearing is in order again and I will now call our third panel, Admiral Jay M. Cohen, the Under Secretary for Science and Technology, Department of Homeland Security; and Mr. Vayl Oxford, Director of Domestic Nuclear Detection Office, Department of Homeland Security.

And you all have been here for the other panels, so I am sure you know that you have five minutes to present all testimony. Your written testimony has already been placed in the record and after you have given your testimony, each Member of the Committee, which may be just me, will have five minutes to ask questions. Or Mr. Rothman may be able to return.

And we do place everyone under oath. Do either of you have any objection to taking oaths, being sworn? And you also are entitled to counsel, if you want it. Do you have counsel or do you wish counsel? And both of you are already raising your right hand.

[Witnesses sworn]

Chairman MILLER. Thank you. Mr. Oxford.

Panel 3:

STATEMENT OF MR. VAYL S. OXFORD, DIRECTOR, DOMESTIC NUCLEAR DETECTION OFFICE, DEPARTMENT OF HOMELAND SECURITY

Mr. OXFORD. Good afternoon, Chairman Miller. I would like to thank the Committee for the opportunity to discuss how DNDO has worked with EML in the past and our plans for working with them in the future. I am pleased to appear in front of you with my colleague, Under Secretary Cohen.

EML has been an important partner for us and support us in three core areas; the Securing the Cities Initiative that you heard about; a testing series underway at the New York Container Terminal, as well as providing technical reach back within the Northeast region. They also perform a variety of other technical support efforts to include the neutron ship effect program that we have heard about this morning.

First let me talk about Securing the Cities. DNDO established the Securing the Cities initiative to equip the New York region State and local personnel with radiation detection capabilities and develop a defensive architecture for the protection of New York City. EML personnel, using their experience with radiation detection systems and the relationship with the New York regional law enforcement agencies, are supporting these federal efforts. They provide subject matter expertise on detection system performance to the regional partners and participate in the development of conceptive operations.

Second, DNDO is currently testing its next generation systems called Advanced Spectroscopic Portals at the New York Container Terminal. The results of the testing done at NYCT will help DNDO determine if these systems are ready for full reproduction. EML provides the test director for this effort, oversees data quality management, and leads the multi-lab team to complete this test series.

Third, to support the deployment of detection systems into the field, DNDO provides training, response protocols, and technical reach back capabilities to assist federal, State, and local law enforcement agencies and response personnel in resolving detector alarms. EML provides technical support to the deployments we have throughout the Northeast. Their spectroscopic expertise is available 24 hours a day, seven days a week to provide technical support for alarm resolution.

In conclusion, DNDO sees EML as an important partner in our development, test, and deployment activities and projects. There will be an enduring need for EML into the foreseeable future.

Mr. Chairman, I thank you for your attention. I will be glad to answer any questions you may have.

[The prepared statement of Mr. Oxford follows:]

PREPARED STATEMENT OF VAYL S. OXFORD

Introduction

Good afternoon, Chairman Miller, Ranking Member Sensenbrenner, and distinguished Members of the Subcommittee. I am Vayl Oxford, the Director of the Do-

mestic 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 reach-back. 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 Reach-back 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 Reach-back

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 reach-back 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 reach-back 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 fur-

ther 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.

BIOGRAPHY FOR VAYL S. OXFORD

Mr. Vayl Oxford was appointed Director of the Domestic Nuclear Detection Office (DNDO) in September 2005, reporting to the Secretary of the Department of Homeland Security with responsibility for the establishment of the new, jointly staffed office and for directing all activities associated with the organization.

Prior to his appointment to DHS, Mr. Oxford served as the Director for Counterproliferation (CP) at the National Security Council.

Before his assignment to the White House, Mr. Oxford was the Deputy Director for Technology Development at the Defense Threat Reduction Agency (DTRA).

From 1993 to 1998, Mr. Oxford served at the Defense Nuclear Agency, and, then, the Defense Special Weapons Agency as the Director for Counterproliferation.

During his Air force tenure, Mr. Oxford held several positions associated with aircraft and weapons development, and war plans analysis in Europe and the Pacific. He also served as an Assistant Professor of Aeronautics at the United States Air Force Academy from 1982 to 1986.

Mr. Oxford is a graduate of the United States Military Academy and the Air Force Institute of Technology and the recipient of numerous military awards. He received the DOD ACTD Technical Manager of the Year Award in 1997. He was appointed to the Senior Executive Service in 1997 and received the Meritorious Executive Presidential Rank Award in 2002.

Chairman MILLER. Thank you, Mr. Oxford. Admiral Cohen.

STATEMENT OF ADMIRAL JAY M. COHEN, UNDER SECRETARY, SCIENCE AND TECHNOLOGY DIRECTORATE, U.S. DEPARTMENT OF HOMELAND SECURITY

Admiral COHEN. Chairman Miller, it is a great honor, as always, to appear before the Science and Technology Committee and I wanted to let you know personally how much I appreciate the professionalism of the Committee staff in this matter.

Science and technology has and will change the world and it holds the potential to make our nation safer. I grew up in the shadow of the EML building in Lower Manhattan and fully appreciate both its strategic location and its capabilities. I assumed my duties as Under Secretary for Science and Technology, Department of Homeland Security on the 10th of August. You may remember that was the day of the London liquid explosives plot. Immediately

thereafter, on the 11th of August, I established a rapid response team similar to what I had done in Navy and then after 9/11.

The very first thing we did was to convene and at that time we did not have a means to have a secure video teleconference, so we just had a conference call with all of my organic labs, including the Environmental Measurements Laboratory and all of the Department of Energy laboratories, which the enabling legislation so wisely allowed me to leverage. I challenged them with their diverse backgrounds and talents, especially the DOE labs, with all the class chemistry and physics capabilities to help us solve the problems associated with liquid explosives on the aircraft.

Within two months those efforts allowed TSA to establish the 3–1–1 rule, which is the three ounces in one bag per person, and get our aircraft back to some normalcy. I found that, in August, with the bipartisan support of the Congress and the Administration, I immediately went about aligning my directorate for success as I believe the enabling legislation wisely envisioned. I established what I call the Four Gets. I had to get the organization right; I had to get the people right; I had to get the books right; and I had to get the content right. And along with these I established what I believe to be the principle threats or as I call it, the Four Bs; bombs, border, bugs and business where business represents the underlying cyber that enables our whole society and our economy.

The organization was approved the first week of September 2006. The president's fiscal year 2008 budget was realigned to the new six division customer outward focused model that I put in place. And in October, the Congress, in a bipartisan way, asked me to realign the fiscal year 2007 Department of Homeland Security appropriations law to the new model. The status of my directorate at that time was clearly documented in fiscal year 2007 legislation. The Transportation Security Lab's assignment to the Department of Homeland Security S&T versus TSA was in doubt. The universities' Centers of Excellence were at risk, moral was low and good people were leaving my directorate.

Congress was on the verge of cutting my fiscal year 2007 budget by $200 million. As I previously testified, Mr. Chairman, it took great courage on both sides of the aisle in an election year to restore those monies, as you did so late in the year and I am very appreciative of that. Over the last eight months, we have, with the help of Congress, largely achieved the Four Gets. Included in that, government service scientists and engineers who had left my directorate last spring, last fall asked to come back and we welcomed them with open arms and they are now part of my team.

The final piece of that effort was bringing the full integration of both my organic DHS labs with national Department of Energy labs, as well as university Centers of Excellence, to provide the two pillars of basic research so important to our national safety. I have some charts, should you ask questions, that will allude to how we have done that.

Finally, Vayl Oxford and I are military and naval academy graduates who understand the meaning of leadership responsibility and accountability. For all my DHS S&T mandated missions, the buck stops with me. People are the most valuable asset. The Nation is in crisis in science and technology. No one knows that better than

the Science and Technology Committee and I salute your efforts in the stand and so many other initiative areas and we want to be part of that.

I regularly meet with and listen to all of my people. I have worked to make amends to them for any perception that they were not fully valued and appreciated at the Department of Homeland Security. I can assure you they are. Mr. Chairman, Members of the Committee, we can and will do better for the Nation. I welcome your oversight and your questions and I will look forward to working with your Committee and your staff. Thank you, sir.

[The prepared statement of Mr. Cohen follows:]

PREPARED STATEMENT OF JAY M. COHEN

Good Morning Chairman Miller, Ranking Member Sensenbrenner, and distinguished Members of the Subcommittee. It is an honor to appear before you today to update you on the Department's plans for the Environmental Measurements Laboratory (EML).

The Science and Technology (S&T) Directorate is committed to serving our customers, the components that comprise the Department of Homeland Security (DHS)—and their customers—the hardworking men and women on the front lines of homeland security, especially the first responders, who need ready access to technology and information to perform their jobs more efficiently and safely. I am honored and privileged to serve with the talented scientists, engineers and other professionals who support these dedicated Americans in our shared mission to secure our homeland and defend our freedoms. Many of those talented people work at our organic DHS laboratories, the Transportation Security Lab, Plum Island Animal Disease Center, and EML.

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.* EML has currently 35 federal employees. Twenty-five are technical with backgrounds in radiation health physics, dosimetry, atmospheric transport, radio-chemistry, and nuclear spectroscopy. There are also ten administrative support employed at EML. Since coming to DHS, EML staff has provided support to the S&T Directorate and, since its inception in April 2005, the Domestic Nuclear Detection Office (DNDO).

DNDO was established pursuant to Homeland Security Presidential Directive 14 and Section 872 of the *Homeland Security Act of 2002* (P.L. 107–296). Section 501 of the *Security and Accountability For Every (SAFE) Port Act of 2006* (P.L. 109–347) statutorily established DNDO, and amended the *Homeland Security Act of 2002* removing all radiological or nuclear responsibilities and authorities from the Under Secretary for Science and Technology. Although the laboratory is managed within the S&T Directorate, EML has applied its staff's radiation detection expertise and operational testing experience primarily to support DNDO programs. Currently, nineteen EML staff members support DNDO at level of effort equivalent to about 9.5 full-time employees. DNDO director Vayl Oxford and I have discussed DNDO's requirements and have agreed that this is approximately the long-term workload that EML can expect in support of DNDO programs.

EML staff has also been involved with radiation and explosives detection Test & Evaluation (T&E) involving a number of federal, State, and local end-users; and with standards development, including program management and working group activities. As the *Homeland Security Act of 2002* also assigned me the responsibility of coordinating all T&E activities of the Department, together with my DHS S&T Directorate T&E Director and EML leadership, I am personally and actively working to identify an appropriate T&E role for the remainder of the EML workforce. The President's Budget Request for FY 2008 reflects my expectation that DNDO will continue to require the current level of support from EML, and that we will be able to productively utilize the remainder of the workforce in a meaningful DHS T&E role.

EML currently leases ~96,000 sq. ft. in the GSA building at 201 Varick Street New York, NY. The leased space includes basement storage, a four bay garage and loading dock, and a rooftop platform. The current lease expires at the end of FY 2008 and the rent is expected to increase in 2009. I will work to "right size" both leased floor space at the current EML location and a sustainable technical and ad-

ministrative workforce that will ensure EML's new role in supporting both DHS S&T and DNDO in making the Nation safer. EML will be fully integrated into my organic and DOE laboratory governance model designed to align my supporting laboratories to the current DHS S&T Directorate organization, similar to the alignment being accomplished with DHS S&T university Centers of Excellence. I greatly respect the invaluable contribution that the intellectual capital our S&T workforce of scientists, engineers and associates at EML (and all other S&T activities supporting DHS missions) make through discoveries and inventions to equip our DHS components and First Responders with cutting edge technology to protect America well into the future.

I appreciate the many demands on the taxpayers' precious dollars. You have my commitment that the S&T Directorate will be wise stewards of the public monies you have provided to serve the best interests of the Nation by investing in the talent and technology that will provide America with a sustainable capability to protect against acts of terror and other high-consequence events.

Members of the Subcommittee, I thank you for the opportunity to meet with you today to discuss this important matter. I welcome your interest and oversight. I look forward to working with you and your dedicated staff throughout the 110th Congress.

BIOGRAPHY FOR JAY M. COHEN

Department of Homeland Security, Under Secretary for Science and Technology, Jay M. Cohen is a native of New York. He was commissioned in 1968 as an Ensign upon graduation from the United States Naval Academy. He holds a joint Ocean Engineering degree from Massachusetts Institute of Technology and Woods Hole Oceanographic Institution and Master of Science in Marine Engineering and Naval Architecture from MIT.

His early Navy assignments included service on conventional and nuclear submarines. From 1985 to 1988 Cohen commanded USS HYMAN G. RICKOVER (SSN 709).

Following command, he served on the U.S. Atlantic Fleet as a senior member of the Nuclear Propulsion Examining Board, responsible for certifying the safe operation of nuclear powered ships and crews.

From 1991 to 1993, he commanded USS L.Y. SPEAR (AS 36) including a deployment to the Persian Gulf in support of Operation DESERT STORM.

After Spear, he reported to the Secretary of the Navy as Deputy Chief of Navy Legislative Affairs. During this assignment, Cohen was responsible for supervising all Navy-Congressional liaisons.

Cohen was promoted to the rank of Rear Admiral in October 1997 and reported to the Joint Staff as Deputy Director for Operations responsible to the President and DOD leaders for strategic weapons release authority.

In June 1999, he assumed duties as Director Navy Y2K Project Office responsible for transitioning all Navy computer systems into the new century.

In June 2000, Cohen was promoted in rank and became the 20th Chief of Naval Research. He served during war as the Department of the Navy Chief Technology Officer (a direct report to the Secretary of the Navy, Chief of Naval Operations and Commandant of the Marine Corps). Responsible for the Navy and Marine Corps Science and Technology (S&T) Program (involving basic research to applied technology portfolios and contracting), Cohen coordinated investments with other U.S. and international S&T providers to rapidly meet war fighter combat needs. After an unprecedented five and a half year assignment as Chief of Naval Research, Rear Admiral Cohen retired on February 1, 2006.

Under Secretary Cohen was sworn in to his current position at the Department of Homeland Security on August 10, 2006.

DISCUSSION

DHS' ASSESSMENT OF EML

Chairman MILLER. Thank you, Admiral Cohen. I do have a few questions for each of you. Mr. Oxford, in your testimony this morning, mixed testimony. It was skills, the strengths, the capabilities of the Environmental Measurements Laboratory and obviously there were some people, at least within the S&T Directorate, who

did not believe that the lab had any unique skills, it did not have any qualities, that its programs could be easily replicated in other labs and then others on the first panel this morning who took, in my hearing, a very different point of view. What is your own assessment of the Environmental Measurements Laboratory?

Mr. OXFORD. We have, Mr. Chairman, found them to be very adaptable and responsive to the changing landscape. When I was first standing up DNDO, the view in S&T at the time was that the Countermeasures Test Bed would draw upon them to continue the efforts. We actually contemplated moving the Countermeasures Test Bed to DNDO because it had been predominately a rad nuke related activity with EML providing some of the support, but the vision of S&T at the time was to broaden that into explosives and chemical support work within that region so we chose to leave Countermeasures Test Bed within S&T and just leverage that.

As we revisited the needs within DNDO, we realized we needed strong State and local partnerships and regional partnerships and with the emergence of things like the test series, the Securing the Cities initiatives I talked about, we recognized the presence of EML and the support they had already provided in the past was a very valuable activity. I had heard some rumblings that there were studies underway within S&T to maybe change that landscape. I cautioned against that. I even had a short discussion with the Secretary, suggesting that this needed to be fully vetted before any action was taken.

I later found that there was a briefing and it was in preparation, I think you heard reference to it this morning, to make a recommendation from the Under Secretary at the time to go to the Secretary to possibly make a recommendation to close the lab. Within that briefing, when I got a copy of it, it said that there had been no near-term requirements identified for the laboratory and specifically cited DNDO as one of those entities that had no near-term requirements. I had not been personally consulted at the time, so that was when I wrote the letter to the acting Under Secretary at the time, outlining what we thought our specific needs were, which equated at the time between nine and twelve people to provide the support to the three programs I mentioned in my opening statement. So we have found them to be more than competent in the changing landscape that we confront right now in the New York region.

Chairman MILLER. And I know it sounds redundant, but they had skills, they expertise that was important to your office, important to what you were doing?

Mr. OXFORD. Absolutely. I am a big believer in bringing together the combination of technologists and operators, and by having people that have the trust of the New York City officials, as you heard from Assistant Commissioner Duecker this morning, the bridge that the technical expertise—there are vendors in this world, as you probably know, with the committee oversight that you have, that will sell almost anything to anybody and the operators are particularly prone to that kind of marketing. EML helps provide the bridge between my office and the New York City officials who are deluged with these kind of marketing schemes to provide technical assistance on a daily basis to make sure that as we develop

systems and they acquire systems, they get the right equipment, so it was very valuable.

Chairman MILLER. Okay. And we have heard different testimony about how EML was regarded by first responders. I understand that your office works closely with the first responders, the first responder community, particularly in New York. Do you know, based on your own dealings with the first responder community, how EML is viewed by New York's first responders?

Mr. OXFORD. As you say, Mr. Chairman, we work very closely with the State and local community up there. I have developed personal relationships through the Securing the Cities relationship with the Port Authority of New York and New Jersey, the Office of Emergency Management, the fire department, as well as regional partners in New York State and New Jersey State, as well as Connecticut. This is all under the umbrella of the Securing the Cities and the police commissioner.

However, I can tell you that they call upon EML on a daily basis to provide the technical consultation that I have talked about, not only in the development of systems, but also in looking at a regional deployment architecture where detection systems may be the most efficient and effective, as well as to provide this technical support; if they ever do get alarms, how fast can we respond?

Chairman MILLER. Thank you very much, Mr. Oxford, and I hope that, under your leadership, we can make EML an asset to our national security and our homeland security.

Admiral Cohen, thank you also for being here and I know that we talked this morning about what has happened in the past with respect to EML and the problems and I certainly hope that you can get things on track. You apparently share the view that things have gone off track with respect to EML and that EML is a value to the Nation's security and homeland security. Am I correct in taking your testimony today as a pledge to make the EML an asset, a contributor to our response to the threats that we face?

Admiral COHEN. Absolutely, Mr. Chairman. If I may just follow up a little bit on Mr. Oxford's testimony of the value of EML to New York and also to homeland security and the first responders in the tri-state area, when I was Chief of Naval Research, about a month after the tragic events of 9/11, I was asked by the Police Commissioner of New York to come up to his office, look at Ground Zero, which of course, we did, and as Mr. Oxford has indicated, so many people offered so many solutions; Radiacs, and we saw this after 10 August where I was inundated with handheld devices for liquid explosives.

In the enabling legislation here at DHS, not only am I the executive for Science and Technology for the Department, but you have given me two department-wide responsibilities in addition, which I value very much. One is the Test and Evaluation Executive setting the policy throughout the Department and the other is for standards, working alongside the National Institute of Standards and Technology. This is an area that was not widely exercised before my arrival as part of the realignment that we talked about and we have that all in writing in what I call the STORM, the Science and Technology Regulations Manual, so everyone knows what their re-

sponsibilities are, what the chain of command is, that for the liquid explosives, we asked people to come in.

We sent them to Sequoia, New Mexico shortly after 10 August. We actually did standardized testing and no surprise, I think Mr. Oxford would agree with these statistics. We found about half didn't work even though they looked very good on CNN. And the other half, some variation of those were easily spoofed, putting a liquid dye in a clear liquid. When the liquid was clear, they could determine what it was, but once you put a dye in it, they couldn't. And so about a month after 9/11, I was invited, as Chief Naval Research, in a naval research laboratory right here on the Potomac reported to me at that time to go to New York.

The police commissioner takes me into a room, table about twice this size, and it is just full of handheld Radiac, these are radiation detection devices. And he said Admiral, he said we—and Mr. Chairman, you have to remember at this point, the anthrax attacks are continuing. You don't know when the next shoe is going to fall. And so he says we want to equip all of our squad cars with a Radiac and he said we don't know what to buy. Admiral, would you help me? And I said absolutely. I said if you will just have a qualified patrolman, whoever you want, bring these to the Potomac Naval Research Lab. I will test them compared to what the manufacturer says they are going to do and I will let you know. I will not, however, make recommendation.

We did that for the New York City Police Department, so it is no surprise to me, when I came into this new job, not having prior knowledge of EML, to know that we had a group there where when you looked at the concentration of people, the efforts that DHS and other activities government agencies are making, the high probability of the threat to the tri-state area, that this was a jewel that we needed to maintain, but as been testified to earlier, we needed to work with EML so that they could support both DNDO and its very important areas which I no longer, based on the fiscal year 2007 legislation, have responsibility for nuclear radiological. All those reside with DNDO. And in my area, especially if test and evaluation for many of the different sensors that we are bringing to bear, as Mr. Oxford indicated, we want to expand that not just from nuclear, but to include chem, bio and explosives, which are my responsibility. So I am committed to it, sir, but it does take time to change the culture of a land.

Chairman MILLER. Admiral Cohen, unless you just especially want to show us your charts, I am happy to excuse the two of you now.

Admiral COHEN. Thank you, sir.

Mr. OXFORD. Thank you.

Chairman MILLER. I want to thank all the witnesses. I have to say I am disappointed in the way the EML has been regarded in the last few years. I am glad that I am able to express disappointment rather than outrage, as we piece together, months after a radiological attack, what might have been done different. And I hope that the errors that we have made at this point we can correct and I appreciate the commitment by Mr. Oxford and Admiral Cohen to correct those errors. My able staff, the able staff of our committee, when they heard me talking about the contraption that I saw in

Hawaii, through the wonders of the Internet were able to find out what the contraption was. And it is massive. Admiral, I don't have a chart for you.

It is a heavy lift vessel, the Blue Marlin, and on a deck and that is where I saw it. I saw it on the Blue Marlin. The Sea-based X-band radar, as it completed the photograph, as it completed the 1600 mile journey from Corpus Christi, Texas and then it would go on from there to the Bering Sea. According to Wikipedia and so we assume that no one had gone on Wikipedia and changed the numbers. At that point, this one contraption had cost $900 million. That does not count the annual operating cost. That is the radar to support a missile defense system that we have never made work. It seems to me that it is very unlikely that our nation will be struck by a nuclear weapon fired from a missile from the soil of another country.

It is not unlikely because we will intercept it out of the air, that we will hit that bullet with a bullet. It is unlikely because the Nation that fired the missile would cease to exist because of retaliation. They say that if you owe a bank $20,000 you have got a problem; if you owe a bank $200 million, the bank has got a problem. It appears that if your program is $7 million a year and not many people have heard of it, it pretty much doesn't matter what it does, what its value is, that program is at risk. If you spend $7 billion on a program, almost despite the evidence that that program is never going to do anything, it never goes away.

I hope that we do go forward and recognize that this lab, although small, although before this hearing it may be even with this hearing, obscure, does play an important role in our ability to respond to the most likely threats we face. To prepare for, we hope, we pray to prevent and then to respond to the most likely threats that we face; a dirty bomb; God forbid, a nuclear device, not fired from the soil of another country, but in a freighter, smuggled into the United States in a truck. And that the neglect that we have shown to this lab in the next three years will not be something that we review again, wondering what if, whether these three years or four years of neglect would not have led to a different result. But thank all of you for being here and thank you for your testimony today.

Admiral COHEN. Mr. Chairman, if I just may, what you see here is a picture of a meeting that we had. I believe it is the first ever meeting on the 1st of May, just two days ago. These are all of the lab directors, principals only of all the DOE labs, as well as my organic labs. You can see Adam Hunter. He is standing just to the left of the fellow in the light shirt. Adam is the Acting Director of EML. He, Transportation Security Lab, my End Back and my Plum Island labs were sitting at the table. Thirty-five people, 35,000 people. They had the same vote and we are now aligned as we have aligned the Centers of Excellence and we appreciate so much North Carolina's contribution to that, so that we are supporting, in the basic research area, those critical initiatives to make the Nation safer. So this meeting was scheduled long before we had knowledge of this hearing. It is the last piece of the puzzle, in my alignment, and now it is up to me, working with Vayl, to make it a reality and we look forward to working with you, sir.

Chairman MILLER. Thank you, Admiral Cohen. I am delighted that you were able to use the easels that you brought here this morning.

[Whereupon, at 1:05 p.m., the Subcommittee was adjourned.]

Appendix:

Additional Material for the Record

DOCUMENTS FOR THE RECORD

1. E-mail message on the decision to close EML from John Clarke to Scott Smith (September 14, 2005).
2. E-mail message on Dr. Fainberg's resignation from Tony Fainberg to Maureen McCarthy (April 4, 2005).
3. Top Down Review of EML PowerPoint presentation by Marc Mandler and John Clarke (October 28, 2004).
4. E-mail messages on EML FY05 Budget including John Clarke, Mitchell Erickson, Catherine Klusek, etc. (April 2005).
5. Summary for MAPEP Survey of DOE Quality Assurance Stakeholders.
6. Mr. Joseph Bruno, New York City Office of Emergency Management letter to Dr. Charles McQueary, Under Secretary for Science and Technology, U.S. Department of Homeland Security (December 21, 2004).
7. E-mail messages on the Technology Liaison Office (TLO) between Kevin Clark and John Clarke (November 21, 2005).
8. E-mail on Clarke re: EML including Maureen McCarthy, Huban Gowadia and Adam Hutter (April 4, 2005).
9. Department of Homeland Security, Environmental Measurements Laboratory (EML) Communications Plan (November 3, 2007).
10. Closure of EML Human Resource Plan, Alyce Bridges (June 30, 2005).

Attachment #1

-----Original Message-----
From: Clarke, John [mailto:John.Clarke@dhs.gov]
Sent: Wednesday, September 14, 2005 1:08 PM
To: Smith Scott C GS-12 USAF/TMSL
Subject: RE: EML Future

Scott,

The following information is CONFIDENTIAL-FOR OFFICIAL USE ONLY.

In our last conversation, I informed you of the possibility of an EML closure and, as part of our review, asked about the potential effect on your program.

Our year long review has now concluded and the programmatic decision has been made to close the EML. We are now in the final stages of the internal DHS approval process that should lead to the closing of the Environmental Measurements Laboratory. However, DHS is not yet ready to make a public announcement or to inform the staff at the EML until all of the HR approvals and authorities have been obtained.

The most definitive thing that I can say at this point is that, in all likelihood, the closure process will take place during FY-06.

We have already begun to clean up portions of the lab that no longer have any useful purpose and from this the staff has a pretty good idea of what's coming. Many of the senior staff has already inquired about retirement. We are trying to be as sensitive as we can to the impact on the staff by developing a systematic approach to the personnel transition. One thing that could complicate a smooth transition process would be premature disclosure while the HR preparations are underway.

I therefore ask your cooperation in keeping the above information confidential.

Regards,

John

John F. Clarke, Sc.D.
Department of Homeland Security
Science and Technology Directorate
Washington, DC 20528
202-254-5778 Phone
202-557-6081 Cell
john.clarke@hq.dhs.gov

Attachment #2

Fainberg, Tony

From: Fainberg, Tony
Sent: Monday, April 04, 2005 11:57 AM
To: Mccarthy, Maureen
Cc: Linden, Carol; Parker, Gerald; Hooks, Robert
Subject: My resignation
Importance: High

Maureen,

I know you are in London, and I apologize, but things have come to such a pass that, pending a discussion with you when you return, I intend to at least relinquish my role in managing the RN program, if not my position in ORD. I would prefer to do this as soon as possible, perhaps within 2 weeks. I have very much enjoyed working for you over the past 2+ years and will be eternally grateful to you for getting me out of TSAI IN recent months, as I told you, ORD has seemed to me to have been an island of sanity surrounded by chaos. Unfortuantely, this has recently changed, and a minor problem has become overriding.

In brief, John Clarke is reaching into my program and preventing me from carrying it out, under the guise of exercising his authority over EML. Apparently, there is no countervailing authority or supervision telling him the limits of his power, which he seems to consider absolute. I have tried to accomodate him and to work with him for 6 months, but his only reaction has been to insert himself more and more into the NYC Thrust Area of the RN program, cross-examining me on funding lines at the level of 20-50K expenditures, with the clear aim of eliminating as much of EML's work for me as he could. Apparently he feels he can decide on what is appropriate, what requirements are to be met, what expenditures are to be allowed, and what customers for EML work are appropriate, overriding the ORD-PPB relationship.

Two weeks ago, following a meeting with him, in which he questioned several EML projects for my program at the 100K and below level, I informed him and Caroline Purdy that I had $50 M of programs to manage, and I could not afford to spend all the time and energy that his objections to my program were costing me; I suggested he take responsibility for the work done at EML. But I did this under the understanding that CMTB support, UDP, and the neutron ship effect had been approved by you. I was told this by Bob Hooks in mid-March. Following this, meeting, the last straw for me has been his "decision" to prevent Paul Goldhagen from purchasing a neutron detector to finish his ship effect work quickly, increasing data acquisition by a factor 5. I thus cannot get money out to fund this project. He seems to feel that his authority over EML and infrastructure allows him to micromanage my R&D program, which, incidentally, he is not competent to do, apart from lacking any authority I am aware of. I cannot manage, nor take responsibility for the RN program under this constraint. Clarke's influence on my program has gone beyond disruption to destructiveness, and is unacceptable to me.

In addition, there are issues with other programs EML was executing for me under requirements from PPB, and Clarke's interference with them. I understand that he has told EML (Klusek and Caroli last Thursday) that EML can only serve requirements from an operational end user and that PPB, per Sonya, is not a valid customer for any of their work, and he would not approve such work. If this report is true, and I think it is, this seems to me not to be the mode under which ORD works with PPB. This affects, for example, the Playbook Project, that you specifically approved and in which requested us to involve EML, and the characterization and testing of teh LLNL RADNET detector. It also affects primary reachback, but I do not know how this is being handled, you probably know better than I. I suspect the outreach to NYC first responders may also be eliminated, which might have serious repercussions for us. There are other issues as well, which I can discuss with you when you return.

I would be willing to continue with the Explosives Countermeasures program, at least for a while, providing I am assured I will have no interference from Clarke. Beyond this, again pending a discussion with you when you return, I intend to submit my papers for reitrement as soon as is feasible.

I would also be happy to give you my take and my ideas about EML, which are different from Clarke's. From all appearances (and many have come to the same conclusion as I), his objective appears to be to close EML, and

my view is that the Nation's and the Department's interest would be rather to use the EML collective asset to the best advantage. I am quite concerned that a shutdown of EML, in fact, if not in word, could have a serious negative effect on our relations with the New York community, and that in the middle of the Secretary's 90-day review.

Tony Fainberg
Program Manager, RN and Explosives Countermeasures
Programs
Office of Research and Development
S&T Directorate
Dept. of Homeland Security
Washington, DC 20528
202 254 6019

Attachment #3

Top Down Review of EML

28 October 2004

Marc Mandler, John Clarke

Sensitive Information
Not for Dissemination outside of S&T

Tasking

- Top to Bottom Review of EML
- Can EML provide more support to testbed?
- What work is ongoing and proposed?
- Is this priority work for DHS?
- What funding is coming from rad/nuc, standards and test bed programs?
- What are the priorities of this work?
- What is EML's approach to becoming a more strategic resource to DHS?

Sensitive Information
Not for Dissemination outside of S&T

Sources of Information

- Clarke/Mandler visit to EML
- ORD program reviews
- EML and S&T project documents
- Discussions w/
  - Director, EML (Mitch)
  - Countermeasures Testbed Mgrs (Huban, Howard Hall)
  - Standards Deputy Portfolio Manager (Pam Greenlaw)
  - ORD Rad/Nuc Program Manager (Tony)
  - Adam Hutter

Sensitive Information
Not for Dissemination outside of S&T

Material Reviewed

- FY04 PEPs
- FY05 PEPs
- FY04 SOWs and funding documents
- EML monthly progress reports
- EML quarterly cost reports
- Mandler/Clarke cost analysis of EML

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Proposed FY05 Funding Compared to FY04 Actuals

($000)

	FY05	FY04
O&M	$2,769	$2,766
Pay and Salaries	$6,300	$4,602
IT Upgrade	$1,550	
Total	$10,619	$7,368

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O&M Costs

($000)

	FY05	FY04
On-site contractors	$233	$258
Computer refresh	$40	$33
Mgmt Travel	$67	$13
Supplies and Services	$548	$503
Training	$60	$48
GSA Rent	$1,821	$1,912
	$2,769	$2,767

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FY04 O&M Carryover
($000)

	Funded	Carryover	Carryover as % of total
O&M	$2,769	$1,159	41.9%
Pay and Salaries	$4,602	$0	

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Project Funding

		FY05 [1]		FY04
Rad/Nuc (incl SED funds)	Sys/Arch/Pilot Deploy.	$2,346,000		$1,803,893
	Incident Mgmt/Recov	$1,863,000		$2,371,107
		$4,209,000		$4,175,000
Standards	EP&R	$537,000		$94,000
	R/N Countermeasures	$179,000		$196,000
		$716,000		$290,000
HE	Truck Bombers	$37,000		$40,000
		$37,000		$40,000
TVTA	WMD OIM	$305,000		
		$305,000	WFO	$165,546
		$5,267,000		$4,670,546

[1] FY05 totals are based on PEP submissions.

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FY04 Project Carryover

		Funded	Carryover	Carryover as % of total
Rad/Nuc	SysArch/Pilot Deploy.	$1,803,893	$226,747	12.6%
	Incident Mgmt/Recov	$2,371,107	$847,469	35.7%
		$4,175,000	**$1,074,216**	**25.7%**
Standards	EP&R	$94,000	$39,995	42.5%
	R/N Countermeasures	$196,000	$35,154	17.9%
		$290,000	**$75,149**	**25.9%**
HE	Truck Bombers	$40,000	$40,000	100.0%
		$40,000	$40,000	100.0%
WFO		$165,546	$0	0.0%
		$4,670,546	**$1,189,365**	**25.5%**

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FTE

	FTE
TOTAL	**51.1**
RAD NUC	**21.1**
System Architecture and Pilot Deployments	8.8
PANYNJ	4.8
NYC Test Bed	4.0
Incident Management and Recovery	12.3
Neutron Studies	4.0
Urban Dispersion	2.3
Technical Assistance	6.0
Standards	**11.2**
EP&R	6.0
R/N Countermeasures	5.2
High Explosives	**1.6**
Truck Bombers	1.6
O&M	**16.2**

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Staffing Multiplier

	FY05	FY04
Tech Salaries (34.9 FTE)	$4,525,043	$3,142,913
Admin Salaries (16.2 FTE)	$1,774,957	$1,458,888
O&M	$3,719,000	$2,766,291
Staff Cost Multiplier	2.21	2.34

Multiplier = (Total Salary Account + O&M) / Technical Salary Account

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Actual Project Costs

- Cost of technical staff is added to projects based on project FTE estimates.
- Administrative/overhead costs are distributed across the programs based on number of FTE consumed.
- Average cost of Tech FTE = $90,055
- Burdened cost of Tech FTE = $90,055*2.34 = $210,729

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Reported vs "Actual" Project Costs FY04

	FTE	Reported Cost	Real Cost
Rad/Nuc	21.1	$4,175,000	$8,621,376
Standards	11.2	$290,000	$2,650,161
HE	1.6	$40,000	$377,166
WFO	1	$165,546	$376,275
	34.9	**$4,670,546**	**$12,024,978**

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Reported vs "Actual" Project Costs FY05

Rad/Nuc	22.2	$4,209,000	$8,649,160
Standards	8.7	$716,000	$2,456,063
HE	1.6	$37,000	$357,012
TVTA	2.4	$305,000	$785,017
	34.9	**$5,267,000**	**$12,247,252**

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Findings
EML/Brookhaven Partnership

- EML and Brookhaven partnership is promising.
  - Partners developed proposal for the Northeast Regional Technology Center (NERTC)
  - Rad/Nuc PM is funding 9 month study ($200K)
  - S&T stakeholders must be actively engaged in this study.

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Findings
Countermeasures Testbed

- Countermeasures Testbed needs greater level of support from EML.
  - Currently 4.8 FTE assigned. 8-10 staff are actually needed
  - Skills/attitudes of current EML staff do not align w/ needs of Testbed Program
  - Testbed Program Manager (SED) seeking more field support for rad/nuc portals and for soon-to-be-deployed explosives, bio and other sensors
  - Hiring actions ongoing at EML to support testbed

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Findings
Standards

- FY04 Funding: $290K
- FY05 Request: $716K
  - FY05 funding for EML not yet determined
- Standards funding has been a "gratuity"
  - EML playing support role in Standards.
  - Skills are not well suited.
- NIST and Nat'l labs have the expertise

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Findings
Rad/Nuc Portfolio

- FY05 funds for EML have not yet been determined.
- Rad monitoring equipment evaluation funding is a "gratuity"
- Neutron ship effect ends in FY05
- Urban dispersion ends in FY06
  - EML playing a support role to Nat'l Labs
- Not clear what EML will do in outyears

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Findings
EML Relationships at Local Level

- Have heard mixed reports about credibility of EML with local responders
- Adam Hutter viewed as highly credible by locals (Port Authority)
- The other "faces of EML" may be viewed less favorably
  - More assessment is needed

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Findings
EML Skill Mix

- Current skill mix (and potentially staff attitudes) not suited to support countermeasures testbed
- No unique skills versus other laboratories
- EML environment not suited to efficient utilization of existing skills
- EML staff pride is in their individualism

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Findings
EML Culture

- Some evidence to suggest that:
  - there is much idle staff time at EML
  - staff "work to rule"
  - resistance to contracting for technical expertise
  - resistance to travel

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Findings
Customer Focus

- EML staff and mgmt sometimes get confused about who the customer is and what the product is, e.g.
  - "OEM is our customer"
  - No OEM deliverable
- Facile in spinning customer's words to justify funding "pet" projects
- For a variety of reasons, EML staff are unable to understand S&T customer requirements

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Findings
EML View of the Future

- EML does not know what it wants to be when it grows up
- There is a stated willingness to develop a new business model
- EML expects that an "external force" will bring resolution
- EML leadership lacks the skills to reinvent the lab
  - "Tough love" required

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Recommendations

- Encourage (pressure) EML to rely on contractors to provide appropriate technical support to projects
- Temporarily suspend the hiring at EML until a strategic and business plan are developed (as described below)
- Clearly articulate "value proposition" for a DHS NY capability
  - This requires strong ORD involvement
- Involve EML in a process of strategic and business planning to help:
  - move the current DHS NY capability closer to aligning with the S&T strategy and
  - increase likelihood that the DHS NY capability can create that value proposition
- Provide ORD support to this process (perhaps $)

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Recommendations (cont'd)

- Engage HSARPA, SED, PPB and others in this process.
- Vet NY capability strategic and business plan throughout S&T to obtain buy-in
- Once plans are approved, provide funds to develop a NY capability consistent with the DHS value proposition

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Attachment #4

mitchell.erickson@dhs.gov, 12:27 PM 3/2/2007, Fwd: FW: FY05 PEP

To: mitchell.erickson@dhs.gov
From: "Mitchell D. Erickson" <mitchell.erickson@dhs.gov>
Subject: Fwd: FW: FY05 PEP
Cc:
Bcc:
Attached: C:\Program Files\Qualcomm\Eudora\attachments\FY05 Deliverables EML and CMTB Thrust2.xls;

Date: Mon, 04 Apr 2005 10:09:16 -0400
To: John.clarke@dhs.gov
From: "Mitchell D. Erickson" <mitchell.erickson@dhs.gov>
Subject: Fwd: FW: FY05 PEP
Cc: caroline.purdy@dhs.gov, Gerald.Parker@dhs.gov, robert.hooks@dhs.gov, tony.fainberg@dhs.gov, Maureen McCarthy <maureen.mccarthy@dhs.gov>, klusek@eml.doe.gov, joseph.caroli@eml.doe.gov

John: I understand that you sent a message "FY05 PEP" to me on 23 March. I never received the message; my secretary was checking messages daily for just this sort of time-sensitive material while I was on vacation. I now have the message from Catherine.

Please check your e-dress for me

mitchell.erickson@dhs.gov

or the old address

erickson@eml.doe.gov

I am now back from my vacation and engaging with Catherine and Joe on the meeting you called in my absence.

X-Sender: klusek@mail.eml.doe.gov
X-Mailer: QUALCOMM Windows Eudora Version 5.0
Date: Mon, 04 Apr 2005 09:26:29 -0400
To: erickson@eml.doe.gov
From: Catherine Klusek <klusek@eml.doe.gov>
Subject: Fwd: FW: FY05 PEP
X-RCPT-TO: <erickson@eml.doe.gov>

Subject: FW: FY05 PEP
Date: Tue, 29 Mar 2005 08:04:47 -0500
X-MS-Has-Attach: yes
X-MS-TNEF-Correlator:
Thread-Topic: FY05 PEP

Thread-Index: AcUvuVJS1xsvJSOcSU25MmEzW9rKAEEMy5AACVducA=
Priority: Urgent
Importance: high
From: "Clarke, John" <John.Clarke@dhs.gov>
To: "Klusek, Catherine" <Catherine.S.Klusek@dhs.gov>,
<Catherine.Klusek@DHS.gov>
X-OriginalArrivalTime: 29 Mar 2005 13:04:47.0681 (UTC) FILETIME=[E284AB10:01C5345F]
X-RCPT-TO: <klusek@eml.doe.gov>

John F. Clarke, Sc.D.

Department of Homeland Security

Science and Technology Directorate

Washington, DC 20528

202-254-5778 Phone

202-557-6081 Cell

john.clarke@hq.dhs.gov

-----Original Message-----
From: Clarke, John
Sent: Monday, March 28, 2005 2:16 PM
To: Klusek, Catherine
Subject: FW: FY05 PEP
Importance: High

Catherine,

I have been trying to contact Mitch about the recent budget deductions and what we need to do in response. I have just learned that he is on vacation for another week but we need to get moving on a number of things.

Please give me a call as soon as you have looked at the attached and we can discuss.

Regards,

John

John F. Clarke, Sc.D.

Department of Homeland Security

Science and Technology Directorate

Washington, DC 20528

202-254-5778 Phone

202-557-6081 Cell

john.clarke@hq.dhs.gov

-----Original Message-----
From: Clarke, John
Sent: Wednesday, March 23, 2005 10:02 AM
To: Erickson, Mitchell
Cc: Purdy, Caroline; Parker, Gerald; Hooks, Robert; Fainberg, Tony
Subject: FY05 PEP

Mitch,

I gather that you have heard from Tony that a number of decisions have been made on the EML FY05 budget. Tony was part of the decision process but is so consumed by his DNDO work that he has asked Bob Hooks and Gerry Parker to assign me to manage the consequences.

In summary, some proposed projects have been rejected because we believe that they are outside of our mission space or inconsistent with the future roles that we can envision for our NY staff (see below). The requested funds for some other activities, which appear to be useful but involve only staff time, have been withheld pending clarification of the nature of the expenditure.

We have also withheld funds for the deployment of the NYC radiological network pending discussions with NY OEM and appropriate DHS operational elements (e.g. DNDO, PSD, FEMA, RPPO, EP&R, AIP). Based on these discussions EML needs to develop a Program Definition Document (PDD) for concurrence by the appropriate DHS operational element and a draft MOU with OEM on liability, maintenance and transfer or other disposition of the network.

Finally, as we discussed on your last visit with Gerry Parker and myself, we want you to put forth a vigorous effort to decommission and dispose of . . . not mothball . . . old laboratory facilities and equipment that has no longer has a useful purpose in the conduct of specific funded activities. We have reserved funds for this purpose.

Our review of possible missions for an ORD presence in NY has identified training and technological support in support of other DHS operational elements and facilitation of urban test bed projects involving developmental technology in support of ORD. Of course, EML has been active in all of these activities when they required radiation expertise. The major change that we seek in the future is to have EML management and staff work through DHS operational elements to support a wider variety of programs, which those DHS operational elements may decide to establish with state and local authorities. We think that the effectiveness and impact of our S&T capability will be much greater when embedded and actualized within larger, more coherent DHS programs that are well coordinated with state and local authorities.

We have a great deal of work to do in the next few weeks to resolve the questions that remain for this year s budget. Our goal should be to preserve continuity of existing efforts where appropriate but to begin a definite transition toward a greater coordination with other DHS elements in the future.

I ll call you when you have had a chance to digest all of this.

Regards,

John F. Clarke, Sc.D.

Department of Homeland Security

Science and Technology Directorate

Washington, DC 20528

202-254-5778 Phone

202-557-6081 Cell

john.clarke@hq.dhs.gov

Catherine S. Klusek
Deputy Director
U.S. Department of Homeland Security
Environmental Measurements Laboratory
201 Varick Street, 5th Floor
New York, NY 10014-7447
Voice mail: 212-620-3231
Fax: 212-620-3651
Email: Catherine.Klusek@dhs.gov

Mitchell D. Erickson, Ph.D., Director
Environmental Measurements Laboratory
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201 Varick St.
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V: 212-620-3619
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Mitchell D. Erickson, Ph.D., Director

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www.eml.doe.gov

Larsen, Richard

From: Mitchell D. Erickson [Mitchell.Erickson@dhs.gov]
Sent: Friday, March 02, 2007 10:17 AM
To: Erickson, Mitchell D; Hutter, Adam R; Greenlaw, Pamela; Bath, Raymond; Richard Larsen
Subject: Fwd: RE: Authorization to D&D Chemistry Laboratories at EML

FYI. I will get hard copy for the submission

Subject: RE: Authorization to D&D Chemistry Laboratories at EML
Date: Tue, 5 Apr 2005 17:55:00 -0400
X-MS-Has-Attach:
X-MS-TNEF-Correlator:
Thread-Topic: Authorization to D&D Chemistry Laboratories at EML
Thread-Index: AcU568puyF1jnk5XR4SunfHOptrJgQAPGgpw
From: "Purdy, Caroline" <Caroline.Purdy@dhs.gov>
To: "Mitchell D. Erickson" <mitchell.erickson@dhs.gov>
Cc: <klusek@eml.doe.gov>,
<joseph.caroli@eml.doe.gov>,
"Parker, Gerald" <Gerald.Parker@dhs.gov>,
"Linden, Carol" <Carol.Linden@dhs.gov>,
"Hooks, Robert" <Robert.Hooks@dhs.gov>,
"Clarke, John" <John.Clarke@dhs.gov>
X-OriginalArrivalTime: 05 Apr 2005 21:55:01.0776 (UTC) FILETIME=
[1E169100:01C53A2A]
X-RCPT-TO: <erickson@eml.doe.gov>

Mitch:

Carol Linden and I tried to return your call today to speak to you directly to answer questions. However, I am finally catching up on today's emails.

Generally, Gerry Parker will be giving you direction for your program. But John Clarke does have the task of gathering information for the "value proposition" study and therefore is communicating extensively with you as well. To further define roles, ONL's mission is to manage the S&T RDT&E infrastructure. Therefore, I will be providing written authorization for the D&D of the chemistry laboratories at EML via this email. Yes, at the present time ORD does intend to D&D the chemistry laboratories at EML. We request that your office provide ORD D&D project plans and a cost estimate for this effort in 2 weeks. Upon receipt of those plans, we will give you further direction for the D&D schedule.

If you have any questions, call me. I should be around my office most of tomorrow.

Caroline

From: Mitchell D. Erickson [mailto:mitchell.erickson@dhs.gov]
Sent: Tuesday, April 05, 2005 10:26 AM
To: Purdy, Caroline
Cc: klusek@eml.doe.gov; joseph.caroli@eml.doe.gov
Subject: Authorization to D&D Chemistry Laboratories at EML

Caroline:

John Clarke has indicated that no decisions have yet been made regarding the value proposition study for the development of a Technology Operational Platform in NY. Nevertheless, numerous decisions about technical programs and administrative management are being made and communicated to EML management and staff.

In an email dated 23 March and in a meeting on 31 March with Catherine Klusek and Joe Caroli, Dr. Clarke has directed EML to put forth a vigorous effort to decommission and dispose of . . . not mothball . . . laboratory facilities and equipment that has no longer has a useful purpose in the conduct of specific funded activities. We understand this to include the D&D of all of EML's chemistry laboratories. This would constitute an irrevocable elimination of capabilities. Before we initiate this process that will eliminate a DHS/S&T/ORD capability and incur substantial costs, I need authorization with this decision.

Upon receiving written authorization, I will direct my staff to get cost estimates and develop D&D plans for approval by the Office of Stewardship Planning.

I want to also bring to your attention that John Patrick Donnachie, CHP, Physical Scientist, LSS Technical Data Assessment & Teleforensics Center, DHS - Customs & Border Protection has requested that EML support CBP-LSS in dealing with cases which may require radiological analysis support. We are gathering more information on the request and will advise ORD as appropriate when we understand the nature and magnitude of the request.

Mitchell D. Erickson, Ph.D., Director
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U.S. Department of Homeland Security
201 Varick St.
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www.eml.doe.gov

Richard Larsen

Date sent: Fri, 22 Apr 2005 12:52:57 -0400
To: alcres@eml.doe.gov,larsenr@eml.doe.gov,raccah@eml.doe.gov
From: Catherine Klusek <klusek@eml.doe.gov>
Subject: Fwd: RE: Laboratory D&D Schedule
Copies to: jcaroli@eml.doe.gov

Guys,

Please let me know if this is substantially different from what you are currently doing.

Catherine

>Subject: RE: Laboratory D&D Schedule
>Date: Fri, 22 Apr 2005 12:10:12 -0400
>X-MS-Has-Attach: yes
>X-MS-TNEF-Correlator:
>Thread-Topic: Laboratory D&D Schedule
>Thread-Index: AcVGkFafPVZHMK+/Rzaa9MmrgupTdgAnTRxg
>From: "Clarke, John" <John.Clarke@dhs.gov>
>To: "Catherine Klusek" <klusek@eml.doe.gov>
>Cc: "Helt, James" <James.Helt@dhs.gov>,
> "Purdy, Caroline" <Caroline.Purdy@dhs.gov>,
> "Mitchell D. Erickson" <mitchell.erickson@dhs.gov>,
> "Hooks, Robert" <Robert.Hooks@dhs.gov>,
> "Parker, Gerald" <Gerald.Parker@dhs.gov>
>X-OriginalArrivalTime: 22 Apr 2005 16:10:13.0637 (UTC)
>FILETIME=[C404D350:01C54755]
>X-RCPT-TO: <klusek@eml.doe.gov>
>
>Catherine,
>
>This is basically a note of clarification, since I want to avoid any
>misunderstanding.
>
>Per our discussions, the chemical laboratories are slated for
>decontamination and disposition (D&D) NOT the extended shutdown
>(mothballing), which is referenced in your email below.
>
>Previously, Richard furnished me with a copy of LLNL 12.7, "Procedures
>for Shutdown of Facilities", and indicated that he was following the
>"Extended Shutdown (Mothballing) Process".
>
>Since mothballing is not what we intend, Richard should not be following
>this procedure . . . if that's indeed what you were referring to.
>
>The more relevant DOE procedures for D&D are reflected in LLNL Document
>12.8
>"Decontamination and Disposition of Process-Contaminated Facilities
>and Associated Equipment", which I attach. It also has reference to the
>detailed DOE requirements, which we will be following.
>
>In preparing for D&D, Al Crescenzi and Richard should review this
>document and proceed with the D&D preparations (records, isolation of
>sources, etc.) that are indicated.
>

>Also, please note, that the D&D process outlined in LLNL Document 12.8
>should be tailored to fit the specific operation based on the type and
>extent of contamination identified within your laboratories. Once you
>have packaged and isolated the known contaminants, Jim Helt will arrange
>a survey of the laboratories to identify the specific level of residual
>contamination and cleanup that is required.
>
>Thanks,
>
>John
>
>John F. Clarke, Sc.D.
>Department of Homeland Security
>Science and Technology Directorate
>Washington, DC 20528
>202-254-5778 Phone
>202-557-6081 Cell
>john.clarke@hq.dhs.gov
>
>-----Original Message-----
>From: Catherine Klusek [mailto:klusek@emi.doe.gov]
>Sent: Thursday, April 21, 2005 12:34 PM
>To: Helt, James
>Cc: Clarke, John F
>Subject: Laboratory Schedule
>
>Jim:
>
>Following up with our conversation Wednesday, Joe and I met with Richard
>
>Larsen. Rich is the head of the Chemical Sciences Division and the lead
>on
>the extended shutdown of the chemistry laboratories. His current plan
>is
>to have the work completed on the six laboratories by the end of July
>(possibly sooner).
>
>Catherine
>_____
>Catherine S. Klusek
>Deputy Director
>U.S. Department of Homeland Security
>Environmental Measurements Laboratory
>201 Varick Street, 5th Floor
>New York, NY 10014-7447
>Voice mail: 212-620-3231
>Fax: 212-620-3651
>Email: Catherine.Klusek@dhs.gov
>
>---
>[This E-mail has been scanned for viruses]
>

Department of Homeland Security
Environmental Measurements Laboratory
201 Varick Street
New York, NY 10014-7447

March 1, 2004

The Department of Energy's (DOE) Quality Assessment Program (QAP), managed by the Environmental Measurements Laboratory (EML), will be terminated after we issue the report for this current performance sample distribution (QAP60).

The Program was established in 1976 to test the quality of the environmental radiological analysis being reported to DOE by its contractors for site cleanup and regulatory compliance. Since the Program's inception, DOE/EML successfully prepared, analyzed, and distributed thousands of performance samples to DOE contractors and other participants in the program. DOE/EML then collected, compiled, assessed, and reported the resulting analytical data, which was used by DOE program managers to select qualified contractors, monitor contractors' performance, and assure data quality. QAP data show continuous improvement in radiochemical analyses as labs gained proficiency and EML's QA scientists encouraged better performance through consultation, feedback, and new methods. Detailed information on QAP, including full reports, is available at http://www.eml.doe.gov/qap/.

EML is proud to have successfully managed the Program for 27 years on behalf of DOE; helping the Nation by ensuring that the quality of the radiological analysis from DOE contractors was demonstrated. We would also like to take this opportunity to thank all those individuals and organizations that have helped and supported us over the years.

EML transferred to the Science and Technology (S&T) Directorate of the Department of Homeland Security (DHS) on March 1, 2003. As we continue to respond to the challenges of our new mission, we need to redirect our proficiency testing (PT) activities to reflect our new mission. We will keep you informed as these new PT activities develop.

cc: Maureen I. McCarthy, Director, Office of Research and Development, S&T Directorate, DHS
Caroline B. Purdy, Acting Director, Office of National Laboratories, S&T Directorate, DHS
Tony Fainberg, Director, Office of Homeland Security Laboratories, S&T Directorate, DHS

Richard Larsen

Date sent:	Mon, 24 May 2004 09:54:35 -0400
To:	Leroy.Stewart@rw.doe.gov
From:	Anna Berne <aberne@eml.doe.gov>
Subject:	Re: Elimination of QAP Program
Copies to:	larsenr@eml.doe.gov

QAP 60, with samples shipped on March 1, 2004, and data due June 1, 2004, is the last test of the program. Depending on the needs of your institution, you may want to look at the MAPEP program out of RESL in Idaho Falls, and/or private vendors. Since you are a DOE site, you should first talk to George Detsis at EH (tel 301-903-1488, email George.Detsis@eh.doe.gov), where the quality assurance of the analytical programs for DOE resides now. Good luck

Anna

At 12:54 PM 5/20/2004 -0400, you wrote:
>Hello Ms. Berne: I've learned that DOE will eliminate the EML QAP program
>in a few months. If true, do you have a recommendation for an alternate
>institution that can provide the same service?
>Thanks
>Leroy Stewart, RW-40E
>(20) 586-2797
>
>
>
>---
>[This E-mail has been scanned for viruses]
>

Anna Berne, Ph.D.
Environmental Measurements Laboratory
U.S. Department of Homeland Security
201 Varick Street
New York, NY 10014-7447
tel: (212) 620-3665
fax: (212) 620-3611

[This E-mail has been scanned for viruses]

Attachment #5

Summary for MAPEP Survey of DOE Quality Assurance Stakeholders

1. Identification information

		Total Emailed:	77
		Number bounces	3
		Total Emailed :	74
23%	17	**Total Returned**	

2. How will the termination of the Quality Assessment Program (QAP) affect your site/program?

24%	4	Little or no impact
65%	11	Significant impact (explain why)

3. Your site/program is involved with radiological analyses for which of the following (please select all that apply):

0%		Not Applicable
94%	16	Department of Energy
0%		Nuclear Regulatory Commission(NRC)
0%		Army Corp of Engineers
0%		Armed Services
12%	2	Other Federal Agencies
18%	3	Other (please specify)

LLNL site-wide waste characterization for offsite shipments, EPA, State of Colorado, local governments

4. List (if applicable) the primary DOE sites/programs that involve your organization:

6%	1	Not applicable
82%	14	ORO EM Program, Fernald Closure Project, Pantex, EM, Site Closure Verification, FRMAC, Consequence Management, Office of Legacy Management all sites, Office of EM, Nevada Test Site, Tonopah Test Range, Pantex, Sandia, Los Alamos, Hanford, RESL, DOELAP, MAPEP, INEEL, Hanford programs

5. Please select the appropriate response:

12%	2	DOES NOT require NRC license
94%	16	DOES require NRC license
0%		Not applicable

6. Your site/program requires external performance evaluation samples for (select all that apply):

100%	17	Radiological analytes
88%	15	Stable Inorganic analytes
88%	15	Organic analytes
29%	5	Other (please specify)

IH and materials testing (ASTM), asbestos, general chemistry parameters

7. List (if applicable) the sample matrices for which your site/program requires external radiological performance evaluation material:

A. Department of Energy

88%	15	Water
82%	14	Soil
76%	13	Air Filters
47%	8	Vegetation
18%	3	Other

Biota and waste, bicassay, debris

B. Other Federal Government (agencies, armed services, etc):

12%	2	Water
12%	2	Soil
12%	2	Air Filters
6%	1	Vegetation
0%		Other

C. Other Government (State, Local, etc):

12%	2	Water
12%	2	Soil
12%	2	Air Filters
12%	2	Vegetation
0%		Other

D. Other (Academic, commercial, etc)

12%	2	Water
12%	2	Soil
6%	1	Air Filters
6%	1	Vegetation
0%		Other

8. Does your site/program require a performance evaluation sample that contains additional radionuclides not currently included in MAPEP (if "yes" please specify the radionuclide and the matrix, e.g., Pb-210 in soil)?

35%	6	No, additional radionuclides are not required.
59%	10	Yes (please specify)

Ra-226, Ra-228, Tc-99 in soil, air filter matrix uranium, uranium isotopes, gross alpha, gross beta. Water matric gross alph, gross beta. Soil matrix with naturally occuring nuclides, I-129, C14 (soil & water)... see complete list

9. Typically, what specific activity ranges do you require in a radiological performance evaluation sample? Please indicate the specific activity range and matrix (e.g., 100 – 1000 Bq/L water, 10 – 200 Bq/kg soil, etc.) Please use Becquerels for the activity units.

		Nuclide Type	Specific Activity Range	Units	Matrix
65%	11	Alpha	0.004 - 2000	Bq/L	Water
			1-20000	Bq/kg	Soil
			0.007-100	Bq/kg	Vegitation
			0.1 - 1	Bq/filter	Air filter
53%	9	Beta (Sr-90)	0.02 - 240	Bq/L	Water
			20-20000	Bq/kg	Soil
			80-240	Bq/kg	Vegitation
			1-5	Bq/filter	Air filter
35%	6	Beta (Tritium)	15-20000	Bq/L	Water
35%	6	Beta (Tc-99)	0.4-5000	Bq/L	Water
			100-100,000	Bq/kg	Soil
53%	9	Gamma	0.040-2000	Bq/L	Water
			0.001-20000	Bq/kg	Soil
			0.01-1800	Bq/kg	Vegitation
			0.04-100	Bq/filter	Air filter

10. Is one annual external performance evaluation for each radiological matrix type identified above adequate for your external quality or contractual requirements? The performance evaluation sample distributions would be staggered throughout the year, i.e., all matrices would not be distributed simultaneously.

0%		Not applicable
59%	10	Yes, one external PE sample per matrix type per year is adequate.
24%	4	No (for sites/programs doing DOE work, please explain why)
6%	1	No (for sites/programs that do not perform DOE work, please explain why)
0%		If no, what frequency is required?

11. Addition comments suggestions will not be summarized here. See complete comment list.

COMMENTS FROM LABORATORIES PERFORMING DOE WORK

1. **QAP Lab Code:** TM MAPEP Lab Code is TMAE01

Laboratory Name: Eberline Services, Inc. - Albuquerque Laboratory

Eberline Services, Inc. - Albuquerque Laboratory is completely satisfied with the current structure of MAPEP studies. It is the laboratory's opinion that the RESL facility fully addresses the quality assurance needs of commercial laboratories. Each final MAPEP study report that is issued to our laboratory from the RESL facility is concise, straightforward, and fully explains the statistical evaluation approach of the study.

Our laboratory feels that the MAPEP PE studies should be the only DOE performance evaluation program necessary to fulfill quality assurance objectives regarding laboratories. Eberline Services, Inc. is a designated small business. As a small business the laboratory cannot absorb any costs that may be associated with participation in a DOE PE program. We sincerely hope that the Department of Energy would continue to fund a MAPEP PE program.

2. **QAP Lab Code:** TO ... MAPEP Lab Code is TMAO01

Laboratory Name: Eberline Services - Oak Ridge Laboratory

DOE selects labs to provide analytical services based on their experience and States certification. The most common certification nationally, is the NELAC Certification (which DOE also looks at it with regard). One of the basic NELAC certification requirements is the successful completion -Annually- of two rounds of PE samples for the parameters and the methods a lab is certified for. The PE samples must be provided by a NELAP approved provider. Currently for the radiochemical analysis, there is ONLY ONE such provider and ONLY water matrix PT. (P.S. for the general chemistry parameters, there are few provideres and few matrices available commercially)
I think it would be a great services for the Radiochemical labs, if any of the DOE PE programs can establich an agreement of recognition with NELAP. The vaiety of the matrices provided by the DOE PE programs is NOT available any where else.
The MAPEP PE samples are very practical in their range of activities, While the EML program (was) unique in its ability to provide all matrices twice a year. A PE program that combines both features of frequency and level of activity, and ALSO carries the stamp of approval by NELAP (EVEN AT A COST) would be the ideal situation for those participating in the RAD side of the program.

COMMENTS FROM LABORATORIES PERFORMING DOE WORK

3. **QAP Lab Code:** LB1

Laboratory Name: Lawrence Berkeley National Laboratory

Since EPA Las Vegas discontinued the PE preparations, we (the labs) have not had a completely reliable outfit preparing our PE samples. There is only one outfit licensed to provide PEs and their prices are very high. In addition, we were not very impressed with the outcome of some PEs. We would be willing to pay a small fee for samples similar to the MAPEP and QAP programs prepared by government's labs. The other comment is that the State Certification programs for Drinking or surface water require that we process PEs containing radionuclides at environmental levels, e.g., 1-10 Bq/L
PE Distribution frequency: ... we also maintain a State of California Certification for water and that program requires at least 2 passing tests per nuclide per year.

4. **QAP Lab Code:** SD ... MAPEP Lab Code is CORE02

Laboratory Name: STL Denver

It is vitally important that the MAPEP program continue and be strengthened. The improvements I would like to see are a) inclusion of gross alpha and gross beta PTs and b) semiannual frequency.
PE Distribution frequency: Twice per year is more likely to detect systematic problems.

5. **QAP Lab Code:** CH

Laboratory Name: California State Dept. of Health Services, Sanitation and Radiation Lab

The MAPEP and QAP are excellent programs that has served the field of environmental radioactivity measurements and related State oversight programs well. We would like them to continue. We receive samples of all matrices (water, soil, wipes, vegetation, biota (fish, shellfish), and without a QC program we would not know the quality of our data. Although we would like to request one external PE sample matrix type per year, based on our results (i.e. if we receive a failing grade on an analyte) we would like to have the option of getting another sample of that type within that year and re-do the analysis.

COMMENTS FROM LABORATORIES PERFORMING DOE WORK

6. **QAP Lab Code:** lS

Laboratory Name: STL St. Louis

Regarding item 6, no specific activity ranges are necessary for our laboratory. Our main concern would be the lack of radiological solid, vegetation, and air performance samples, which are not available from commercial vendors.
PE Distribution frequency: To keep in line with NELAC requirements, performance evaluation samples are required twice per year per matrix.

7. **QAP Lab Code:** SS

Laboratory Name: GEL Laboratories of Ohio, LLC

We also need the ability to submit multiple results for a given analyte /nuclide which has been run by multiple methods and have each method's results evaluated uniquely.

8. **QAP Lab Code:** AN … MAPEP Lab Code is ARGO 01

Laboratory Name: Argonne National Laboratory-West

We would like to have a air filter pep sample.

9. **QAP Lab Code:** WC Fluor Hanford WSCF

Laboratory Name: Waste Sampling and Characterization Facility

Only EML QAP program provides vegetation matrix PE samples semi-annually. There are a lot of vegetation samples for radionuclides analyses including Pu, Am, Sr, Co, Cs, and K at the Hanford site.
PE Distribution frequency: Semi-annual would be adequate.

10. **QAP Lab Code:** BA

Laboratory Name: Bettis Atomic Power Laboratory

We must have air filters for analysis; also, gross activity alpha/beta measurements would be desirable. More than one annual PE sample is necessary to identify any problems or trends.

COMMENTS FROM LABORATORIES PERFORMING DOE WORK

11. **QAP Lab Code:** UY and UP

Laboratory Name: BWXT Y-12 Analytical Chemistry Organization Laboratory

Request that reporting units be changed to pCi because routine customer work is requested in these units
Address the need for the capability to peform multiple technique reporting for an individual lab
Address the need for low concentration performance samples
Address the need for performance samples that monitor isotopic measurements for uranium
Request performance samples that are uranium metal, uranium oxide, and high enrichment isotopic
PE Distribution frequency: The local Sample Management Office uses the data from performance evaluation samples to rate laboratory capability and can deny work for poor performance. The laboratory would have to wait until the next year to demonstrate corrective actions and would not be eligible to perform work until the next report is received. This could impact laboratory workloads and customer schedules.

12. **QAP Lab Code:** MI

Laboratory Name: Massachusetts Institute of Technology

We would prefer the twice a year PE sample but once a year woud be ok.

13. **QAP Lab Code:** AU

Laboratory Name: ORISE

Ra-226 and Ra-228 in water

14. **QAP Lab Code:** NR

Laboratory Name: Naval Reactors Facility Chemistry

We need an air filter for gross beta.

COMMENTS FROM LABORATORIES PERFORMING DOE WORK

15. **QAP Lab Code:** WA

Laboratory Name: Environmental Radiation Laboratory, State of Washington

PE Distribution frequency: Two are recommended by state program

16. **QAP Lab Code:** OU

Laboratory Name: Outreach Laboratory

PE Distribution frequency: At a min 2x per year with option to purchase a 3rd if needed.

17. **QAP Lab Code:** PA

Laboratory Name: BWXT-Pantex

Do you provide air samples?

18. **QAP Lab Code:** LA

Laboratory Name: Los Alamos National Laboratory, NM

PE Distribution frequency: Semi-annual would be preferred for all matrices.

19. **QAP Lab Code:** HC

Laboratory Name: LLNL Hazards Control Analytical Laboratory

Our lab only does Gross Alpha/beta and tritium in water and tritium in Silica Gel and Molecular Sieve. The counting is done in a counting lab that also counts filters routinely.

20. **QAP Lab Code:** NR

Laboratory Name: Naval Reactors Facility Chemistry

We need an air filter for gross beta.

COMMENTS FROM LABORATORIES NOT PERFORMING DOE WORK

1. **QAP Lab Code:** ND

Laboratory Name: Department of Environmental Health & Safety - N.C. State University

The need for proformance evaluation samples is to support the environmental monitoring program for the North Carolina State University PULSTAR Nuclear Reactor license. The results of these analyses are provided in an annual report to the US NRC.
From cover letter: The performance evaluation samples are a necessary component of this program. I will greatly appreciate any consideration that can be given to this request.

2. **QAP Lab Code:** AF

Laboratory Name: AFIOH/SDRR

Is there a fee associated with this program? Are you able to send only rad samples instead of the samples with organic and inorganic compounds present? Are we able to test for only those analytes we wish to achieve accreditation?
PE Distribution frequency: For us to achieve and keep NELAC accreditation we are required to have two sets of proficiency samples sent per year.

3. **QAP Lab Code:** WN

Laboratory Name: State Health, Radiation Protection Section, Madison, WI

What is the projected cost for participation?
PE Distribution frequency: If only the present two matrixs are provided, a frequency of 2 times per year per matrix would be preferred. If the four matrices that I have listed would be offered, one external PE sample per matrix type would be acceptable.

4. **QAP Lab Code:** WO

Laboratory Name: Wisconsin State Lab of Hygiene

what is the cost?
PE Distribution frequency: I would like to have quarterly PE samples to check the work. I would settle for 2x per yr.

COMMENTS FROM LABORATORIES NOT PERFORMING DOE WORK

5. **QAP Lab Code:** NJ

Laboratory Name: New Jersey Department of Health & Senior Services

PE Distribution frequency: Twice yearly P.E.'s for other matrices, except water, is desired. This schedule is consistent with those of the past. The data from these P.E.'s are used by other State of New Jersey agencies to determine our capabilities regarding non-aqueous matrices and is part of our Quality Control Program.

6. **QAP Lab Code:** NP

Laboratory Name: JAF Environmental Laboratory, Energy Nuclear Northeast (Previously, New York Power Authority

PE Distribution frequency: Frequency required for PE samples is quarterly for water , air filter, charcoal cartridge, milk. Semiannual for soil and vegetation

7. **QAP Lab Code:** BC

Laboratory Name: SBCCOM Radiation Laboratory, APG, MD

PE Distribution frequency: Our quality assurance standards currently require PEs be done twice a year.

8. **QAP Lab Code:** NARL01

Laboratory Name: USEPA/NAREL

PE Distribution frequency: At least quarterly. We require one PE per analyte per analyst every 6 months at the minimum (internal QA policy.) A year is too long to go between external PE's.

COMMENTS FROM DOE QUALITY ASSURANCE STAKEHOLDERS

1. **Organization:** DOE-Remote Sensing Laboratory
Point-of-Contact: Erik Nielsen

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) ... Demonstrates capabilities of laboratories that would be used in an emergency response to a radiological incident.

2. **Organization:** INEEL SAM
Point-of-Contact: Amy Sumariwalla

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) The QAP program included submission of air filter and vegetation samples to participating labs and for the INEEL it is important. The need for the air filter PE data was greater than the need for vegetation PE data as only one INEEL program collects vegetation samples. It is important to ensure that a lab can demonstrate successful analysis for activity on air filters (INEEL requests site specific air filter PE samples to include as double blind samples also).

Activity levels in the MAPEP soil and water samples have been fine and support INEEL data needs. As far as the PE sample data needed in #9, the INEEL works with RESL to fulfill the PE sample needs of our programs on a constant basis. Past PE requests can be used to represent INEEL needs, however the PE sample needs evolve and continue to expand as clean-up moves forward.

3. **Organization:** DOE Idaho Operations Office Quality, Safety & Health Division
Point-of-Contact: Geoffrey L. Beausoleil, Director

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) Loss of the EML QAP has the potential to impact, from a flow down of expectations and requirements to the Radiological and Environmental Sciences Laboratory (RESL) at the INEEL.

COMMENTS FROM DOE QUALITY ASSURANCE STAKEHOLDERS

4. Organization: Rocky Flats Environmental Technology Site
Point-of-Contact: Bob Shannon

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) In losing the QAP, the complex loses its most effective and probably economical quality tool for environmental decision makers to assess laboratories capabilities. The program is also important since it communicates operational quality requirements to laboratories and provides them with a tool to develop testing capabilities at truly environmental levels. MAPEP (an excellent program in its own right) does not address many of the more important aspects needed to accomplish this. This is primarily related to the levels of contaminant present in the intercomparison samples. MAPEP is designed as a surrogate for waste samples and contains radioactive contamination at levels typically present in wastes. Although the levels are low compared to many actual wastes, they are orders of magnitude above commonly determined environmental levels. The QAP, in contrast, is designed to be representative of environmental samples where no or very low levels of contaminant may be present. It has provided the radioanalytical and environmental community with the single most realistic and challenging test at levels which are commonly observed in and around DOE sites. Having samples at this level, and publishing the results openly, has done more to improve the quality of environmental radioanalytical data than any other single QA measure put in place. Data users can assess whether a laboratory is capable of performing a test in the matrix type at envoronmental levels. The DOE has also profited from improved data quality from laboratories who use the samples to ensure that their systems are 'up to snuff', and who also know that substandard results are publically available to all customers. Compared to the cost associated with substandard analytical data (especially false positive and false negative determinations) at DOE sites, the cost of such a program should be considered trival. DOE should continue to support this or another similar program as a very cost-efficient investment in risk management.

PE Distribution frequency: QAP and SOWs and EPA require at least twice annual participation. The risk involved in potentially not identifying a problem for a year are high.

MAPEP addresses the more elevated activity end of the spectrum. While this provides a measure of accuracy not available at low levels, it does not demonstrate that a laboratory is capable of making low-level measurements. It may be very difficult to provide low-level samples if contaminants are to be added by fortification, especially in realistic soils matrices. This is extremely important. Decision makers should also not exclude the possibility that the preparation and performance of a new QAP-like study might be subcontracted economically to an outside vendor, as long as quality requirements are adequately defined. One very important quality factor that the QAP could have addressed, but never did adequately, was verifying the statistical nature of a laboratory's results. Results should be assessed against associated statistical values such as total uncertainty. While bias should be minimized, it is more important that a lab's data properly reflect the uncertainty associated with any result. This allows proper use of data in assessing data. The other, and clearly more controversial parameter that could be tested involves the MDC. Although it is not proper to do so, DOE sites and regulators use the MDC as a

detection limit. As such, it might be worthwhile to do some assessment of whether this is adequate using intercomparison as a tool. It might also be possible to promote use of the critical level.

5. **Organization:** Fluor Fernald, Inc.
Point-of-Contact: Amy Meyer, Keith Tomlinson

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) We have internal procedures in place that we use to qualify radioanalytical (commercial) laboratories for $2 Million worth of annual analyses and we also use the QAP to make sure those labs maintain their quality semiannually to continue approval to receive samples.

Hopefully, historical samples will be maintained so one could acquire, on occasion, an old or previously used sample when needed to assist in solving an analytical problem or qualifying a new laboratory.

6. **Organization:** ORO
Point-of-Contact: David Carden

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) The MAPEP and EML program combined are needed to cover the range of concentrations/analytes and types of matrices that are of concern.

PE Distribution frequency: One per year does not provide adequate oversight to detect performance variability issues.

7. **Organization:** CH2M Hill Mound, Inc.
Point-of-Contact: Gene Jendrek

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) QAP is used by our site as one of our key indicators of lab QC performance for our in-house and contract laboratories.

COMMENTS FROM DOE QUALITY ASSURANCE STAKEHOLDERS

8. **Organization:** Stoller-Navarro Joint Venture
Point-of-Contact: William C. Nicosia

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) QAP is part of the evaluation process to determine if the laboratory is acceptable.
Although one annual external performance evaluation is adequate, if MAPEP continues to send out different matrix samples at different times of the year, why not send both matrices out each time?

9. **Organization:** Stoller Grand Junction Team
Point-of-Contact: Steve Donivan

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) The EML program offered sample matrices and nuclides that more closely met our needs whereas MAPEP does not. Examples are: Air filter matrix all analytes, esp. uranium, uranium isotopes, gross alpha, gross beta, Water matrix with gross alpha, gross beta, Soil matrix with naturally occurring nuclides.

10. **Organization:** 222-S Laboratory, CH2M Hill Hanford
Point-of-Contact: Glen A. Clark, Ph.D.

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) The QAP was the only PE program we participated in for radionuclides.

1. In addition to the nuclides shown on the first page of this survey, the 222-S Laboratory is regularly called upon to analyze for the following nuclides: Ra-226, Th-232, U-235, Np-237, Cm-242, Cm-243; Se-79, Ru-106; Nb-94, Sb-125, Sn-126, I-129, Ce-144, Eu-152, Eu-154, Eu-155. Inclusion of a sub-set of these nuclides in the MAPEP samples would be beneficial to our program.
2. The 222-S Laboratory is a "high-level" facility. Analytical sensitivities have been adversely affected by the fact that "typical" samples analyzed are in the milli-curie or higher activity range. From our answers to question 9, it should be apparent that the laboratory needs more activity than usually supplied for your average environmental client. We would appreciate receiving two aliquots of sample for these performance evaluations so that we might be able to present a sample with sufficient counts to our detectors.

COMMENTS FROM DOE QUALITY ASSURANCE STAKEHOLDERS

11. **Organization:** Hanford Site
Point-of-Contact: Mark Marcus

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why) The QAP program was the only PE program used by Hanford's high level laboratory for radionuclides. The program is also contractally required for our commerical laboratories and plays a key role in our evaluation of these laboratories performance.

222-S regularly analyze the following nuclides and would benifit from PE's for: Ra-226, Th-232, U-235, Np-237, Cm-242, Cm-243, Se-79, Nb-94, Sb-125, Sn-126, Ce-144, Eu-152, Eu-154, Eu-155. High level PE are needed as our samples are typically milli-curie or higher. WSCF needs vegation samples that include: Pu-238, Pu-239, Am-241, Sr-90, Co-60, Cs-137, and K-40.

12. **Organization:** DOE Contractor Fluor Fernald
Point-of-Contact: James Chambers

How will the termination of the Quality Assessment Program QAP) affect your site/program?
☒ Significant impact (please explain why)

PE Distribution frequency: 2 program as defined in DOE order.

13. **Organization:** Pacific Northwest National Laboratory
Point-of-Contact: Dorthy L. Stewart-Groundwater Performance Assessment Project

PE Distribution frequency: Contractually, this is adequate, but one PE sample per matrix per year is a rate that is too infrequent to provide confidence in technical adequacy.

COMMENTS FROM DOE QUALITY ASSURANCE STAKEHOLDERS

14. **Organization:** DOE Albuquerque
Point-of-Contact: Gary Dechant

PE Distribution frequency: NELAP requires participation of twice a year for all analytes.

At issue is not organics, inorganics, or most of the natural occurring isotopes. What's missing is things like plutonium isotopes. We have plenty of options for the rest.

15. **Organization:** Bechtel Nevada (Environmental Technical Services)
Point-of-Contact: Ted Redding

I review subcontract lab results and the most common problem I see is in the Gamma Analysis. Pb214 is misidentified as Bi211, and Pb212, Pb214 are misidentified as Eu155. Also, U235 is not always corrected for Ra226. 1 think it would be a good idea to have a PE sample with various concentrations of these isotopes.

16. QAP Lab Code: YP

Laboratory Name: US Army Proving Ground, Yuma, AZ

PE Distribution frequency: Currently our contract requires us to pass 2 performance evaluations per yer. So while not absolutely required, we would definitely prefer to maintain the twice per year schedule.

Attachment #6

NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT
[illegible]
[illegible]

JOSEPH F. BRUNO
COMMISSIONER

December 21, 2004

Dr. Charles E. McQueary
Under Secretary for Science & Technology
U.S. Department of Homeland Security
Washington, D.C. 20528

Dear Dr. McQueary:

I take this opportunity to express my enthusiasm and deep appreciation for the work being done by the U.S. Department of Homeland Security's Environmental Measurements Lab here in New York. One program in particular, the Comprehensive Radiation Sensor (CRS) program - is about to go online as the first fixed-station radiation monitoring network for incident management in the City of New York. The New York City Office of Emergency Management has been partnering on this program with EML. With the initial equipment deployments progressing on schedule, I think that it is timely to reaffirm my support of the program.

When the first six-stations in the system are fully activated in March of 2005, they will begin sending information on radiation levels to OEM's Watch Command on a 24/7 basis – a first time ever achievement. OEM plans to integrate and expand the EML radiation monitoring network with at least two other active DHS/S&T programs – the Regional Radiological Pilot Program (RRPP) and the Urban Dispersion Program (UDP) in an integrated system providing data to OEM from fixed and mobile radiological detection assets. EML and OEM are coordinating the deployment of all radiological detection equipment in the City and the region within the concentric-ring defense zones established for RRPP. Further, we have an active partnership with EML by tying component data into a regional system that will work in concert with BioWatch and other

regional, public / private partner sensor deployments and incident management data networks within the New York and New Jersey Region.

We are deeply appreciative of all the efforts of Dr. Mitch Erickson and his dedicated and skilled staff. In addition to their work in the RRPP, CRS and UDP programs, we are also very thankful for their continuation of the New York Area Science and Technology (NYAST) conferences and their work in the Countermeasures Test Bed (CTB). In all the work they do, we consider DHS/EML a crucial resident asset in helping to ensure that New York City is as prepared as possible for radiological as well as other types of emergencies.

I look forward to a continued federal-city partnership with DHS and in particular these elements of the Science and Technology Directorate that have been so helpful to us here in the City of New York.

Sincerely,

//S//

Joseph F. Bruno

JFB/kc/kc

cc: Edward Gabriel
Kevin Clark
Mitch Erickson

Attachment #7

Clark, Kevin

From: Clark, Kevin
Sent: Monday, November 21, 2005 5:36 PM
To: Gabriel, Edward; Benson, Sam
Cc: Nardella, Rita
Subject: TLO presentation (Further RE: OEM Correspondence #611/05 and EG# 05-199)
Attachments: Joseph Bruno to Charles McQuery 12212004.pdf

FYI:

The message below provides further response in the context of OEM Correspondence #611/05 and EG# 05-199.

I had dinner with John Clarke of DHS/S&T last Wednesday while in Washington D.C. My message below documents the essence of the dinner conversation.

Kevin Clark
Preparedness Specialist
NARAC/LINC Team Leader - NYC
NYC Regional Radiological Pilot Program Manager
Urban Dispersion Program Manager
NYC Office of Emergency Management
11 Water Street
Brooklyn, New York 11201
(718) 422-4826 office
(347) 386-4942 cell

From: Clark, Kevin
Sent: Monday, November 21, 2005 5:11 PM
To: 'Clarke, John'; Clark, Kevin
Cc: Purdy, Caroline
Subject: RE: TLO presentation

John,

Thank you for the opportunity to discuss your TLO presentation last Wednesday night in D.C.

As Commissioner Bruno made clear to Under-Secretary McQueary late last year; DHS/EML performs a number of very useful functions for the emergency response and management community here in New York. I am including another copy of the Commissioner's letter together with the following bulleted list I promised you in our meeting last week. We need to see that the following existing DHS/EML programs are sustained as we move forward:

1) NY/NJ Countermeasures Test Bed support
2) New York Area Science and Technology Conferences
3) Local National Lab screening
4) Radiological Emergency Management System (REMS, referred to as the CRS program last year)
5) Local technical reach-back and support

We look forward to further discussing how the TLO program can be accomplished with integrated local input and how the existing DHS/EML regional support structure can be sustained.

Finally, as I have not shared your last TLO presentation with anyone other than my immediate chain of command, I hope that you can provide a revised presentation that can be shared regionally. In addition to the important services it provides to the City of New York, DHS/EML services have great importance in the region as well.

I look forward to working with you further on the TLO program.

V/r

Kevin

Kevin Clark
Preparedness Specialist
NARAC/LINC Team Leader - NYC
NYC Regional Radiological Pilot Program Manager
Urban Dispersion Program Manager
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From: Clarke, John [mailto:John.Clarke@dhs.gov]
Sent: Tuesday, October 11, 2005 4:06 PM
To: Clark, Kevin
Cc: Purdy, Caroline
Subject: TLO presentation

Kevin,

It was good touching base with you again.

I attach a PowerPoint Presentation that summarizes our thoughts on the Technology Liaison Office that we want to develop in New York. If viewed as a slide show in PowerPoint the overlays and sequential development of the thoughts will help lead you through it . . . besides which at this stage of development paper copies are discouraged.

The purpose of the TLO is to facilitate the many relationships that are needed to identify, develop and transition useful Homeland Security technology. It's easy to say in general but complicated to describe in detail. The presentation has the simplified picture but the Backup has an animated depiction of the TLO, which attempts to lead one through the many relationships sequentially and in more detail.

I hope this helps to orient you and I look forward to discussing this with you next week.

Regards,

John

John F. Clarke, Sc.D.
Department of Homeland Security
Science and Technology Directorate
Washington, DC 20528
202-254-5778 Phone
202-557-6081 Cell
john.clarke@hq.dhs.gov

Attachment #8

Adam Hutter

From: Gowadia, Huban
Sent: Monday, April 04, 2005 8:45 AM
To: adam.hutter@dhs.gov; Mccarthy, Maureen
Cc: Hooks, Robert; Purdy, Caroline
Subject: RE: Clarke re EML

Importance: High

Maureen -

I know John Clarke has a difficult and rigorous task to deal with, but we are now at a loss for how to deal with him. Please see below.

It would help Adam and myself immensely if we were allowed to understand his thought processes and drivers. His efforts are beginning to create a lot of clean-up work for Adam and myself - disruption we could both do without. I want to reduce the burden on the EML members of my team, Maureen. They are juggling an immense workload amid all this turmoil. I would appreciate it if John could deal with me on these matters so that my team is not caught in the middle.

Please can you advise us on how we should proceed with working with John at this time? What can we do to facilitate his charter so that the CMTB does not get in his way?

Many thanks.
hg

From: Adam Hutter [mailto:arh@eml.doe.gov]
Sent: Mon 4/4/2005 7:54 AM
To: Huban Gowadia
Subject: Clarke re EML

Huban,
Apparently John had a meeting with Catherine and Joe Caroli last Thursday and expressed that he is "furious" with our CMTB efforts re the CMTB Ready Room that we recently reported on. He purportedly said CMTB does not have this operational mission. Obviously, he needs to be corrected on this matter. Can I direct him to Maureen?

I've been told that he also expressed his desire to close EML or drastically reduce in size (conflicting message there), but this is the first I've heard about CMTB bashing.

Adam

Attachment #9

Environmental Measurements Laboratory (EML)- Communications Plan
"A History of Mission Accomplishment"

Date: 03 November 2005

Contact: David Lovato (BAH), Office of Research and Development External Affairs (202-254-6399 or 703-772-6733)

BACKGROUND:

The EML's historic mission has been sueeessfully accomplished. This will be the keynote message related to the reason for its retirement. DHS work at the EML has also been completed and, upon approval of the Secretary, EML operations will cease with the exception of a small number of staff involved in collateral projects that will be transferred to new management. The competitiveness of larger and more sophisticated service laboratories has radically improved in the last decade. Services once unique to the EML are now readily available at a considerable savings. This plan can be used to assist staff educating various levels of internal and external audience unfamiliar with the EML's history or its past significance in support of national security at a time of great uncertainty, most notably during the "Cold War".

HISTORY:

EML traces its roots to the Medical Division of the Manhattan Project during and after World War II. The Division focused on industrial hygiene, radiation protection and safety. In 1946, the Atomic Energy Commission (AEC) was created. The lab was renamed the Health and Safety Division of the AEC. In 1953 it became the Health and Safety Laboratory, or HASL. Fallout from nuclear weapons tests became a major concern and the lab's focus shifted to measurements of fallout and the radioactivity levels in various food products.

HASL acquired a reputation as the world leader in environmental radiation measurements. In the 1960's, the lab began taking measurements of radon in mines to assess the health risks of miners. When the Atomic Energy Commission was closed in 1975, the Health and Safety Laboratory became part of the Energy Research and Development Administration. In 1977, the Energy Research and Development Administration was absorbed by the Department of Energy, and the Health and Safety Laboratory changed its name to the Environmental Measurements Laboratory (EML).

In 1997, the lab moved from the DOE Office of Energy Research to the Office of Environmental Management. EML's primary focus was to support environmental monitoring, decommissioning, decontamination, and remediation efforts. This work required a wide range of low-level radiation and radioactivity assessments. EML also continued its low-level radiation measurement activities and the development of instruments in support of the nuclear non-proliferation treaty.

In 2002 the Environmental Measurements Laboratory became a field activity of the Department of Homeland Security under the Science and Technology Directorate. The EML's long and varied history as a service laboratory to the Department of Energy and predecessor agencies ended with its core mission fully accomplished. From the uncertain post-war days of the 40's when the laboratory's analogue equipment and brilliant staff pioneered low-level radiation measurement techniques, through the period of systematic and laborious radioactive sample measurement during the 'Cold War' and on to the dawn of the information age, the EML's small but determined group of highly-specialized professionals has labored to great effect. Now, in competition with the nation's comprehensive science and technology base in radiation measurement, which has been developed since the origins of HASL nuclear research, the EML will be retired after 60 years of distinguished service to the nation.

OBJECTIVES:

- Proactively explain the reasons behind the retirement of the EML in New York City taking into account its unique history, many contributions and the facts regarding the comprehensive S&T Complex that has subsumed its original mission.
- Communicate a frank 'appeal to the facts' explanation of the EML's closure that invites constructive discussion, generates acceptance and encourages buy-in with key sponsors, partners, stakeholders and audiences.
- Establish a timeline to publicly communicate the background, rationale, responsibilities and the benefits of the EML closure in New York City.
- Describe the credible Human Resource options available to displaced staff to demonstrate DHS and S&T's commitment to their employees' welfare especially in the case of an activity-closure.
- Ensure effective information exchange, information availability and message alignment among partners responsible for supporting education of the executive, the workforce and other interested parties including external observers.
- Reinforce the reality that the EML can no longer effectively support the S&T ORD mission, having lost its primacy to numerous alternate service laboratories of much greater sophistication for some years past.

- Position the directorate as a responsible, judicious and considerate steward of best business practices supporting important S&T initiatives, making the tough decisions concerning the utility of field activities when necessary to meet national security requirements with limited resources.

STRATEGY:

ORD External Affairs will coordinate with the Office of Public Affairs (OPA) Science and Technology to communicate EML retirement core messages and ensure key internal and external audiences understand the rationale, purposes and imperatives of the decision to close the activity. ORD External Affairs will cooperate closely with the S&T Public Affairs Office to develop aligned communications and updated messages, exchange timely and accurate information, and disseminate products within the framework of DHS corporate PA guidance.

CORE (TOP-LINE) MESSAGES:

- The retirement of the DHS EML in New York City is a necessary step in improving the efficiency of science-based operational technology by targeting and focusing our investment in specific research and development needed to improve DHS mission effectiveness.
- The EML has fulfilled its historic 'Cold War' oriented mission but can no longer effectively provide the full range of new science-based Homeland Security operational support technologies.
- The relevant lessons-learned, the intellectual capital created by the dedicated staff of the laboratory and historically significant data generated over the 60-year life of the EML have all contributed to building the extensive capability in radiation measurement now resident in the private sector and the DOE National Laboratories.
- The EML's service laboratory and measurement functions are now provided from significantly more efficient and cost-effective modern national and other laboratories thus aligning mission requirements with appropriate capabilities.
- DHS will conduct a Human Resources 'full-court press' to assist the remaining EML staff in relocation, re-hiring at other activities, retirement and deciding upon other federal or industry career options.

ASSUMPTIONS:

- EML staff will be discomfited to learn officially that the laboratory is slated for retirement.
- EML staff and other observers will point to the long history of the laboratory as justification for continuation.

- EML staff and other observers will question the relationship between their closure and the TLO stand-up.
- Elected officials will take a dim view the closure of a DHS facility in New York City.
- The majority of complaints concerning the decision-making process will be generated by staff and local, state and other elected representatives.
- The Human Resources options offered to displaced staff will be critically important to salving the reaction to the closure.
- Direct communication by the appropriate leaders (face-to-face) will be an important indication of our commitment to the EML staff facing displacement or re-location.
- Upon announcement of the closure local media interest can be expected.
- The news of the EML closure will be tied to wider issues such as developments at Plum Island and the EOI for the NBAF.
- Should the topics be linked expect to see commentary that establishment of the much smaller TLO is a poor substitute for the funding lost to the New York Area by closing the EML.
- Neutral audiences can be persuaded to understand, ascribe to and support the notion that the EML mission has been successfully completed and that its closure is necessary to preserve scarce fiscal resources.

Implementation Guidance: ORD ONL will initiate the plan and coordinate action items with the appropriate respective offices. The EML Communications Plan is formally initiated upon S&T OPA approval. ORD Office of National Laboratories (ONL) is the lead, responsible for review of and tracking action items.

Appendices Provide Additional Information

Appendix A: Talking Points	Last up-dated _____
Appendix B: Questions and Answers	Last up-dated _____
Appendix C: Notable Quotables	Last up-dated _____
Appendix D: TLO Briefings (Int/Ext)	Last up-dated _____
Appendix E: Press Kit	Last up-dated _____

Additional Resources: Latest Talking Points, Plan Updates, Proposed Article/Discussion/Presentation ideas and other information scheduled for release is available from the Primary Point of Contact listed above.

Appendix A: EML Talking Points

- ORD's strategic goal is to maximize DHS mission performance by better aligning its technology development activities with operational needs.
- A year-long top-to-bottom review process at DHS S&T ORD Office of National Laboratories (ONL) found that the mission of the Environmental Measurements Laboratory could be accomplished with significantly improved efficiency and with notable dollar savings at several alternative state-of –the-art laboratories elsewhere.
- Although separate in its mission focus, scope and in its core functions, the requirement for establishment of the DHS Technology Liaison Office (TLO) in New York City was identified from many of the same criteria used to study the on-going utility of the EML to the department.
- As a result of the exhaustive 12-month review it was concluded that the EML could not realistically be re-engineered to bring it into alignment with either local tactical science and technology support requirements or the DHS S&T Directorate's strategic mission.
- Specific issues identified in the top-to-bottom review included duplication of effort with other highly-efficient laboratories, slow development of the new non-DOE customer base relevant to the DHS mission in Homeland Security and a skill-set largely focused on technologies overtaken by rapid development in more sophisticated service laboratory centers elsewhere.
- Customers did not see value in extending the activity of the laboratory vice creating new capabilities of greater relevance to the urban security landscape for which DHS has direct responsibilities.
- Despite strenuous efforts to create an improved value proposition for the long-establisbed Manhattan laboratory, operator feedback and program management review findings clearly indicate the EML has fulfilled its mission and should be disestablished.
- The TLO is a future-based, science and technology coordination activity that meets homeland security customer needs for advanced technology concept-identification and developmental realization.
- The TLO, which will be based in New York City, will combine technology development and local operational expertise to identify science-based opportunities for developing and transitioning technology that will improve homeland security mission performance in the complex urban environment.

Appendix B: EML Questions and Answers

Q&A on the retirement of the Environmental Measurement Laboratory: General non-technical audiences. Nota Bene: Our Public Affairs guidance on the retirement of the EML and the establishment of the TLO is that these are separate decisions based on separate drivers and do not constitute a quid pro quo or exchange or replacement.. There is no causal relationship between one development and the other excepting that cited in 'Talking Points': Both decisions are based on the same study of DHS S&T support requirements in the New York area.. Please see the TLOCOMPLAN for guidance specific to the TLO establishment. Since there may be some perception of a connection between the two issues, we include some Q&A material with assumptions that may be presented to you in discussion or argument.

-QAP ? -AFTAC ? .on-technical Audiences

n New York and I'm impressed by their outstanding near 60-year record of achievement and ion measurement and national defense issues. What makes you think we no longer need such an activity?

:s the EML has made many contributions to national programs in radiation protection, nuclear fallout detection and, more recently, environmental radiation measurement. However, the science and technology related to these areas has matured and there are many other organizations in the public and private sector that are available to provide whatever services are still required in these areas.

Q: How many people work at the EML now?

A: Currently, there are forty seven people employed at the EML.

Q: Have you found someone who can do low-level radiation measurement better and more cheaply?

A: There are many other organizations, in both the public and private sector, which are available to provide whatever low-level radiation measurement services are required for the Homeland Security mission. In the public sector several Department

of Energy National Laboratories have larger programs and more modern facilities, as well as capabilities to provide a much wider range of related services.

Q: If you decide to close the EML, what do you propose to do with the experienced scientists and technicians that will be displaced?

A: We take this responsibility very seriously. Our core values dictate that we do the right thing, and that we take care of our highly dedicated and might I add, highly-successful scientists, expert technicians and support staff. The EML workforce is relatively senior and many are fully eligible to retire. We will be requesting authority to offer early retirement to a number of others. Some of the staff will be transferred to the DHS organizations that they have been supporting while stationed at the EML. The remainder will be offered the opportunity to compete for positions at other DHS and federal facilities in New York and New Jersey. Finally, for those who wish to leave the Federal Service, we will be seeking authority to offer a buyout to ease their transition.

Q: Don't government workers get to transfer to another job?

A: Many of the technical skills represented in the EML workforce are in demand in other Federal facilities in the NY/NJ area and there is a realistic prospect that former EML staff compete successfully for these positions.

Q: Has DHS already made the decision to close the EML?

A: The Secretary of Homeland Security has approved the decision to close the EML.

Q: Is the decision to close the EML being made because it's in downtown New York City in Manhattan?

A: No, there were other factors. The decision was based on the findings of a year long review to determine the DHS Science and Technology needs in the New York area. The review found that the specialized EML staff and aging facilities were not aligned to those needs and could not realistically be re-directed to them.

Q: Is the EML a health danger?

A: The EML facilities have always been operated in accordance with stringent Department of Energy standards for facilities working with radioactive materials. A recent radiation survey has found a very low level of contamination in a few spots that will be cleaned up as part of the close out process but these provide no health threat to the staff or public.

Q: Who in DHS makes this kind of decision?

A: The Undersecretary for Science and Technology is responsible for managing the facilities needed to carry out the research and development mission of the Department. Based on the findings of a year long top-to-bottom review to determine the DHS Science and Technology needs in the New York area, the Undersecretary decided that the highly specialized EML low-level radiation measurement facilities could not optimally address those needs and recommended closure to the Secretary.

Q: If the EML is not closed down, what will they do to be cost effective?

A: Providing the science and technology for Homeland Security in New York will require a broad range of technical facilities, operational experience and scientific skills. Neither the EML facilities nor its dedicated staff is oriented to provide the range of differing skills required to satisfy these requirements. A stringent management review has determined that New York will be better served by accessing and applying the integrated technical capability of the extensive Homeland Security Laboratory Complex coordinated by a new Technology Liaison Office.

Q: Can't all the scientists and technicians at EML be used on other DHS projects or initiatives?

A: It is possible that some will seek to do this. All of the scientists and technicians at EML who so desire will have the opportunity to apply for positions in other federal facilities.

Q: Are our political representatives at the federal, state and local levels in agreement with the rationale for the closure of this laboratory?

A: All of the political representatives have been informed about this decision and its effects on the EML staff. However, this is not a political matter. The EML is being closed because it does not deliver the breadth of experience or the technical capability to effectively carry out the Homeland Security mission in New York.

Q: How do you know that we will not need the capabilities the EML brings to the fight against nuclear threats to the U.S.?

A: We have considered this decision very carefully and fully. I am pleased to say that there are many other organizations, in both the public and private sector, immediately available to provide whatever low-level radiation detection services are required for the Homeland Security mission.

Q: I looked on the EML website and I thought the EML was a big success. What exactly has the EML been doing if it's now found excess to requirements?

A: Of particular note in the near 60-year history of the laboratory, the staff genuinely distinguished themselves in the earlier days of the Cold War and sustained their effectiveness for many decades. As the science and technology base of the country matured and expanded, many alternative facilities with similar and latterly superior capabilities were established.

The EML's former mission of conducting environmental radiation measurement for facility cleanup purposes was concluded when it was transferred from the Department of Energy to the Department of Homeland Security. For the last three years the Science and Technology Directorate has funded some of the EML staff to support the radiation detection functions of the S&T Countermeasures Test Bed. Others contributed to the S&T Standards Program. Some of this work will continue by transferring the necessary staff to those projects.

The remainder of the EML staff worked on various initiatives related to the science and technology of radiation measurement and also participated with other laboratories in providing related technical support to local agencies. The EML radiation measurement work related to Homeland Security will be completed this year and more comprehensive technical support will be provided directly in the future by the Homeland Security Science and Technology Laboratory Complex.

Q: The EML has a very comprehensive website outlining many initiatives and partnerships. What will happen to these if you close the laboratory?

A: Historically significant documentation will be preserved and, if relevant, exploited in pursuit of the advancement of science and technology. Many of the laboratory's established scientific relationships, which related to their previous mission for the Department of Energy, will continue through other channels.

Q: The EML has built up many valuable functional relationships with local officials, groups and communities of interest. How will you replace those if you close the laboratory?

A: Many DHS and DOE laboratories, which support the homeland security mission, currently provide a wide range of technical services to local agencies in New York. This will continue and DHS will strengthen its coordination to bring the best of our national technical capabilities to bear on Homeland Security needs in New York. By using national assets, the lessons learned from these activities and developments in New York will, as you can imagine, benefit many other cities in the US.

Q: How many jobs will be lost locally, regionally and nationally if the EML is closed down?

Essentially none. The closure of EML represents a refocusing, not a reduction, of DHS efforts to improve the application of our national science and technology capability to the Homeland Security mission. Aside from the EML staff transferred to other DHS positions, vacant positions will be used to staff activities which are more fully-aligned with Homeland Security's priorities.

Q: What savings to the federal budget can be realized by closing down the EML and transferring its functions elsewhere?

A: The cost of maintaining the EML is about $11M/year for salaries, benefits and overhead not counting program expenses. Since there is no further need for this facility's laboratory services, these funds can be devoted to higher priority Homeland Security activities.

Q: Are these putative federal savings being re-invested in our local area?

A: Refocusing the Homeland Security science and technology support efforts in the New York area will improve operational efficiency for both DHS and related state and local operations and contribute to the increased safety of all New Yorkers. Advanced science and technology developments rooted in the operational requirements of New York's numerous security and response organizations will ultimately improve civil defense in urban areas across the nation.

Q: What is the replacement for the EML in New York?

A: EML has completed its missions for both the Department of Energy and the Department of Homeland Security. There will not be a direct replacement for this facility.

Q: Is there danger of a radiation leak from the EML?

A: No, all radioactive material at the EML facility is the property of the Department of Energy and has been maintained according to that Department's stringent safety standards. All radioactive material will be returned to that Department's custody as part of the closure process.

Q: How do you cleanup a lab that has been working with irradiated (radioactive) materials for as many years as the EML?

A: The EML laboratories have always been operated in accordance with stringent Department of Energy standards for facilities working with radioactive materials. A radiation survey has been performed by an independent team from the Brookhaven National Laboratory who found a very low level of contamination in only a few spots. These few spots provide no health threat to the staff or public and will be cleaned up and the radioactive contamination removed as part of the close out process.

Q: If the EML is shut down, who gets their office space?

A: The Secretary of Homeland Security has made the decision to close the laboratory. The EML occupies space in a General Services Administration (GSA) building and the space will be returned to GSA.

Q: If the EML is of no further use, how was it allowed to become redundant and who is responsible for this?

A: The Environmental Measurement Laboratory and its distinguished staff have seen many successful years of operation, most notably in the 'Cold War' and the decade preceding the turn of this century. But the truth is that the EML facility and staff represent a very specific technical competency in low- level radiation measurement. Over the years that competency has been applied to an evolving series of missions for different government programs. Over the same time with the growth of the nuclear enterprise in the public and private sector that same competency has been acquired by many other organizations, which also possess other complimentary competencies needed for the Homeland Security mission. Given its location in a major metropolitan area, EML was not able to expand its capabilities to keep pace with this development and has fully accomplished its mission.

Q: I heard you closed the EML in New York City to get money for the TLO. What makes the TLO so much better than the EML, which seemed to have a long and distinguished history?

A: The EML facility had a long and distinguished history in providing low level radiation measurements to a variety of national programs under the Atomic Energy Commission (AEC), the Energy Research & Development Administration (ERDA) and the Department of Energy. However, it is no longer competitive with a number of larger and more capable and more flexible institutions. The EML facility has simply reached the end of its useful life. The TLO is a different organization with a different mission, which is to coordinate the full capability of the integrated national laboratory complex in addressing the science and technology needs of Homeland Security in the New York area.

Q: Is the establishment by DHS of a TLO in NYC related to the closure of the EML?

A: No. The TLO is a different organization with a different mission, which is to coordinate the full capability of the integrated national laboratory complex in addressing the science and technology needs of Homeland Security in the New York area. If it is successful in this mission, the TLO could serve as a model for similar offices based in other major urban areas.

Q: If DHS is starting up a new office in NYC can it employ the same guys made redundant in the EML closure?

A: It's possible that a few staff may transfer to TLO, but in general the answer is, "not likely". The TLO is a different organization with a different mission, which is to coordinate the full capability of the integrated national laboratory complex in addressing the science and technology needs of Homeland Security in the New York area. The required core competencies and technical skill mix are distinctly different from those of the EML staff.

Q: Is DHS using money procured for the EML to fund the TLO?

A: All federal funds are fungible but there will not be a direct transfer of funds from the EML to the TLO.

Q: What activities from the EML in NYC will transfer to the TLO, if any?

A: None of the core functions of the EML transfer to the TLO. The EML was a laboratory designed to provide low level radiation measurement services. The TLO is an S&T management organization whose purpose is to coordinate the full

capability of the integrated national laboratory complex in addressing the science and technology needs of Homeland Security in the New York area.

Appendix C: ORD Director Quotes

"An important aspect of what we do is managing and if needed creating science and technology based facilities that fully meet current and anticipated homeland security and national defense requirements at the lowest life-cycle cost. We are future-oriented but do not ignore the hard-won achievements of the past. The EML has an excellent history, and it has fulfilled its mission. I am confident that it will be fully recognized as the success it truly was." (*October 2005.*)

"We have carefully and thoroughly considered the operational Homeland Security requirements of the large urban environment offered by New York City. We have recognized that there are unique advantages to a close and symbiotic relationship between our technology development experts and the frontline operators themselves. It means a change of direction for us in New York City, the stand-down of the EML being one part of that change." (*October 2005.*)

"The Environmental Measurements Laboratory will close in 2006. This does not mean that DHS or the Science and Technology Directorate will not be involved with important work in the city. While the future has caught up with some of our facilities and we are working to rationalize our capability, the significance to us of large urban areas as test-beds for emerging science-based technologies is fully recognized." (*October 2005)*

"It is not enough to understand the homeland security threats we face today. Protective countermeasures in an urban environment must be capable for today, and, through research and development, must be prepared for tomorrow. New York City's DHS TLO will be stood up to ensure that the right operational ideas meet the right science and technology resulting in the most advanced technology for the most effective homeland security and defense operations possible anywhere." *(October 2005)*

Appendix D: EML Briefing (External)

Public Affairs Guidance: The attached presentation is intended for public release in its original form. It should always be distributed as a PDF that cannot be altered, edited or changed once it has left DHS. A separate presentation has been created for internal use and can be obtained from the primary point of contact listed above.

Slide 1

Releasable Decision Background…

Final Recommendations On The Future Of EML

Dr. John Clarke
Chief, Office of Asset Development
Office of National Labs
Office of Research and Development
Science and Technology Directorate

September 29, 2005

Homeland Security

Pre-decisional– FOUO

Slide 2

Identifying the Needs for an S&T Capability in NYC

In the process of developing an EML Value Proposition, an ORD team conducted extensive interviews across DHS to identify the needs for an S&T capability in NYC

DHS operational end-user preferences identified specific needs for improved technology support that they believe are not being met:

- Operational elements want improved technology-enabled operations
- Operational elements see value in spiral development that supports developmental programs (as distinct from operational testing and evaluation programs)
- Operational elements want access to specialized technical expertise in many and varied S&T subject areas

EML can not serve these customer defined needs

- EML, which has historically been a specialized low-level radiation measurement laboratory, does not have the required breadth of expertise or operational experience.

Homeland Security

* S&T Technology Support Platform Study, ONL/BAH , 2004/2005

Pre-decisional– FOUO 2

Slide 3

ORD Recommendations

The extensive year-long ORD review process found no viable role for a low-level radiation measurement laboratory in downtown Manhattan

ORD Recommends that S&T Phase-out The Environmental Measurement Laboratory

Homeland Security

Pre-decisional – FOUO

Slide 4

Timeline for Facility/Staff Transitions

ORD Facility & HR Assessments Revealed that the Existing EML Facilities Can Be Phased Out And The Staff Transitioned By 2007

Programs

- Current EML projects will be completed in FY-06 with FY-05 funds
- No FY-06 funds will be provided to support new activities at EML

Facilities

- Environmental surveys for facility cleanup have been initiated
- Radio-Chemistry Laboratory closure in process
- GSA requires three months notice for facility closure

47 Staff

- 12 EML Staff have requested retirement information (3 of 6 EML Managers)
- 3 staff have already identified assignments outside of EML (S&T, Standards, CMTB) and can be reassigned
- An additional 4 FTEs are currently supporting CMTB and 4 staff could be transferred to SED
- The 28 remaining EML Staff can be supported during transition to other Government, DHS or S&T activities

Homeland Security

Pre-decisional– FOUO

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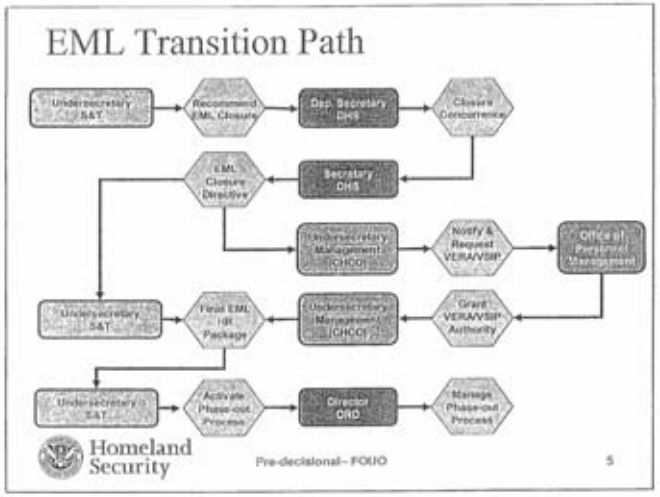
Slide 5



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Slide 6

ORD's Proposed Action Plan

Subsequent to a DHS decision, ORD will proceed along three coordinated, parallel paths:

Coordinated Congressional/Public Communication Plan
Message: EML phase-out is part of a restructuring that will ultimately increase the effectiveness of S&T operational support in the NY area

EML Phase-Out:
Implement HR Transition Plan During FY-06
Implement Facility Closeout Plan By End of FY-06

Provide enhance S&T operational support in the NY area
Develop a structured liaison function to coordinate S&T Complex technology development with DHS operational elements

Homeland Security

Pre-decisional– FOUO

6

Slide 7

The Realignment **Enhances** DHS Mission Performance

In summary, realignment in NYC will improve S&T's ability to identify, develop and transition technology to enhance DHS mission performance

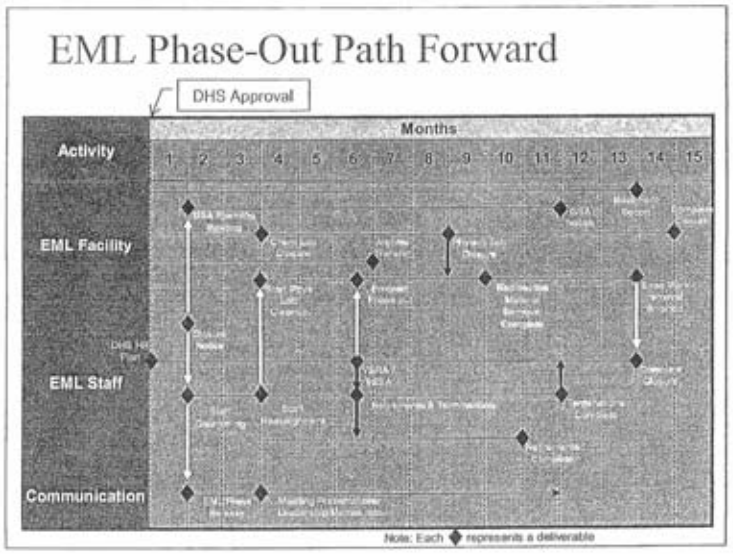
- S&T benefits by saving ~$11M/year in staff and operating cost to be applied to higher priority tasks
- EML staff will be fully supported in transition and ultimately benefit from re-engagement to activities with both current and future utility
- ORD, S&T, DHS and local end-users will benefit from redirecting management efforts toward:
  - Enhancing the visibility and effectiveness of the S&T Complex as a source of transformational technology
  - Providing the comprehensive technological expertise that meets the evolving needs of DHS operational end-users

Homeland Security

Pre-decisional– FOUO

7

Slide 8


EML Phase-Out Path Forward
DHS Approval
Months
Activity
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
EML Facility
EML Staff
Communication
Note: Each ◆ represents a deliverable

Attachment #10

CLOSURE OF EML
HUMAN RESOURCE PLAN

Alyce Bridges

June 30, 2005

Step 1

- **Develop a Communication Plan to officially announce the closure of EML.**
  - Address the impact to the EML workforce.
  - Contact DHS Management and DHS Personnel.
- **See Communications Plan**

Step 2

- **Notify EML Management of the decision to close EML.**
  - Notify the Director that EML is being closed and provide an estimated date.
  - Explain the HR impact and process that will be implemented.

Step 3

- **Coordinate the Official Notification to the EML Union**
  - Notify the union that EML is being closed and provide an estimated date.
  - Explain the HR impact and process that will be implemented.

Step 4

- **All Hands Meeting**
  - Notify employees that EML is being closed.
  - Inform the workforce of the procedures that management will be taking to close down the facility.

Step 5

- **Directed reassignment**
  - Reassign employees currently supporting valid programs under S&T
  - Transfer qualified employees into valid vacant positions in other locations e.g. PIADC, S&T Directorate, other DHS offices.

Step 6

- **Offer Early retirements and buyouts**
  - Obtain DHS and OPM's approval to offer early retirement under the Voluntary Early Retirement Act and lump sum buyouts up to $25,000 under the Voluntary Separation Incentive Pay Authority

Step 7

- **Reduction in Force**
  - Initiate a Reduction in Force (RIF) for those employees remaining at EML.
  - Offer severance and entry into the Career Transition Assistance Program for surplus and displaced employees.

Risk Management

- Opposition from EML employees and union
  - Closure review decision process has been systematic, broad based and well documented
  - As of Aug 1st DHS HRmax rules supersede any prior agreements with Unions
- Political opposition
  - Simultaneous increased support (UDP) and standup (TSP options) of more effective programs in NYC
  - Systematic Communication Plan