

TESTIMONY

of

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Before the

Homeland Security Committee

U. S. House of Representatives

**Status Report on Federal and Local Efforts to  
Secure Radiological Sources**

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I am pleased to have this opportunity to discuss the efforts the New York City Department of Health and Mental Hygiene (the Department), in conjunction with its federal, state and local partner agencies, has made to ensure the security of radiological materials.

The Department plays a unique role in regulating radiological sources. New York City is one of only a few cities that have direct regulatory oversight of nearly all radiological sources. New York State is an Agreement State, which means that the State and the United States Nuclear Regulatory Commission (NRC) have entered into an agreement under the former Atomic Energy Act to delegate authority to New York State (NYS) to regulate radioactive material at non-reactor sites within its jurisdiction. The New York State Agreement comprises three regulatory programs – administered by the New York State Department of Health, New York State Department of Environmental Conservation, and New York City Department of Health and Mental Hygiene. Under this structure, the Department, through the Office of Radiological Health (ORH), regulates radioactive material for medical, research and academic purposes within the five boroughs of the City. The Department’s regulatory requirements for radioactive material are contained in Article 175 of the New York City Health Code.

The Department has taken a comprehensive approach to improving security for both large and small quantities of radioactive materials. First, the Department is responsible for regulating the public health and safety aspects related to the use of radioactive materials. This includes all non-exempt radioactive materials, not just materials in quantities of concern. Second, the Department works cooperatively with the New York Police Department (NYPD) to address law enforcement aspects of security and public safety. Third, the Department works cooperatively with the regulated community, providing information on best practices and facilitating access to highly-trained experts outside the regulatory environment.

The Department’s regulatory oversight of radiological materials allows it to expand upon federal requirements and foster ongoing working relationships among the regulated community, the NYPD, and other first responders; this collaboration could serve as a national model for how to approach radioactive materials security. While placing appropriate priority upon resources and efforts to secure the facilities with the highest-risk materials, New York City’s approach has been to take a more expansive view of potential risks and provide multiple avenues to help the regulated community to understand the measures it can take to properly secure radioactive material.

In addition to inspecting the regulated communities for compliance with federal standards, the Department has developed new systems to track the location, quantities, and types of radiological materials located in New York City; provided local facilities with access to security experts to evaluate their security measures; and sponsored symposia and educational forums for the regulated community and first responders. By ensuring regulatory compliance as well as augmenting the best industry practices for

physical security, we can reduce the risk of criminal activity involving any amount of radioactive material.

I will now highlight critical aspects of the Department's oversight of compliance with NRC-required security initiatives and efforts to augment and support the federal regulatory framework:

### **NRC Required Security Initiatives**

#### **Increased Control:**

In 2005, the NRC required that Agreement States initiate the Increased Control (IC) requirements for their licensees that have certain radionuclides in quantities of concern. The Department identified 32 facilities representing 47 licenses that met this criterion or could meet the criterion based on the limits on radiological materials in their licenses. On October 20, 2005, the Department held a meeting to educate and inform its largest licensees about IC requirements. This meeting was also attended by the NYPD.

In December, 2005, the Department issued a Commissioner's Order to those licensees meeting the NRC's criterion to institute the Increased Controls (IC) by June of 2006. Since that time, the number of licensees subject to the IC requirements has been reduced to 20 facilities because some either legally disposed of radioactive materials or amended their licenses to reduce their possession limits for the radionuclides of concern.

In preparation for the expanded inspection of IC facilities, three Department staff members attended an NRC-sponsored IC training in 2006. In compliance with NRC inspection mandates, the Department inspected all of the facilities required to meet the IC requirements. These inspections, performed jointly with the NYPD Counter Terrorism Division, were completed by March of 2007. The second round of joint IC inspections was completed by August of 2008, and the NYPD also participated in these inspections. The third round of IC inspections is underway, and the Department is well ahead of NRC timeframes.

The Department's inspections indicated that while all facilities inspected were in substantial compliance with the NRC's IC requirements, violations -- either of rules and regulations or of security requirements in need of upgrading -- were found in about 25 percent of inspected facilities.

#### **Fingerprinting and Criminal History Check Requirements:**

The NRC also requires fingerprinting and criminal background checks for all individuals with unescorted access to radioactive materials in quantities of concern, under authority granted by Section 652 of the Energy Policy Act of 2005 (EP Act). Criminal histories obtained from the Federal Bureau of Investigation are used, along with other factors, to determine whether these individuals should continue to have such access. The NRC has imposed this fingerprinting requirement upon all licensees who are subject to Increased Controls, including Agreement State Licensees. Background checks were to be completed by June 2, 2008.

On April 25, 2008 the Department's Office of Radiological Health advised its IC licensees of this requirement, and that we would be initiating appropriate rule-making to include it in Article 175 of the New York City Health Code. In September, 2008, the NYC Board of Health approved the addition of the fingerprinting language to Article 175, and it became effective in October, 2008.

While the Department's inspections have found that all facilities have made substantial progress toward compliance with the fingerprinting requirements, many facilities require improvement in documentation.

**National Source Tracking System:**

NRC initially deployed the National Source Tracking System (NSTS) in December of 2008 to track the deployment of Category 1 and 2 sealed sources from cradle to grave. Category 1 and 2 sealed sources are listed in 10 CFR 20 Appendix E. Agreement State licensees are required to use the system to report inventories of these sealed sources directly to NRC and to update the inventories as needed. The Department issued 39 license amendments to licensees that possessed these categories of sealed sources, requiring them to use the NSTS for reporting purposes, between March and June of 2009.

Overall, we find substantial compliance with federal regulatory mandates, but we have developed several important local initiatives that support and augment the federal regulatory framework, which I will now describe.

**New York City Department of Health and Mental Hygiene Security Initiatives**

The Department has initiated a series of efforts that support and augment the federal regulatory framework for ensuring the security of radioactive materials, as briefly described at the opening of my statement. I will highlight several of these efforts.

**NYCRADDS:**

Using Federal grant monies from the Center for Disease Control and Prevention and city tax levy funds, the Department is developing the New York City Radiation Data System (NYCRADDS). The system serves as a single repository of all licensing, permitting, inspectional activity and radioactive materials inventory in New York City. Included in NYCRADDS is the ability for a facility, through a secure web site, to report radionuclides on hand, their activities, and specific on-site locations of the material. Facilities are requested to make quarterly reports so that it is a near real-time inventory of radioactive material in New York City that can be shared with our partner local, state, and federal agencies as needed.

**Grant-funded Security Reviews of New York City Hospitals:**

In 2004, with the assistance of the U. S. Department of Homeland Security (DHS), the Department visited seven IC facilities in New York City, and made recommendations for security upgrades to the licensees. The results of these visits indicated the value of expanding these reviews to other licensees. DHS provided a grant to the Department to

widen the security assessment visits and we contracted with Brookhaven National Laboratory to support our efforts. A security review team consisting of a staff person from the Department, an NYPD officer from the Counter Terrorism Bureau, a private security specialist, and a health physicist from Brookhaven National Laboratory, visited licensed facilities. This project provided detailed security assessments to 80 facilities, including 20 licenses that are required to comply with the Increased Controls. In addition to the on-site consultations performed, licensees were also given a Radioactive Materials Self Audit Checklist to use for self audits, training materials for security staff, and written guidance representing radioactive materials security best practices. The Department is presently working with Brookhaven National Laboratory to complete a written guidance document *Best Practices for the Security of Radioactive Materials*, and will distribute this guidance to all or most of the approximately 360 licensed facilities in New York City.

**DOHMH sponsored meetings and symposia:**

In September 2007, the Department conducted a training session for the radiation safety officers of our larger facilities on use of the NYCRAADS Radioactive Materials Inventory web site. Testing of this system is almost complete, and a final training package is being prepared for the remainder of our licensees.

In 2008, the Department participated in a pilot project sponsored by DHS in which three of our hospital licensees had security enhancements made to their Cesium-137 irradiators.

On April 1, 2008, the Department hosted a symposium entitled “Radiation Security: Preventing Radioactive Materials from Getting Out and Preventing Radioactive Contamination from Getting In.” There were 110 attendees, including radiation safety officers, security personnel, NYPD, and FDNY. The purpose of the symposium, funded by the DHS Urban Areas Security Initiative, was twofold: (1) to reiterate the security requirements for those institutions subject to the U.S. Nuclear Regulatory Commission’s Increased Controls Program; and, (2) to provide an update and highlight best practices of a Department grant-funded program that provided participating hospitals with area monitors capable of detecting radioactively-contaminated persons entering their facilities. NYPD’s Counter Terrorism Bureau discussed protocols to be followed in the event of equipment alarms going off. The Department plans to pursue additional federal funding for future programs dealing with security and detection of radioactive materials in the City.

**Non-regulatory approaches to augment Federal regulatory efforts:**

The Department has initiated non-regulatory reviews of security efforts at IC and non-IC facilities, providing facilities with access to a team made up of a regulator, a physical security expert, an NYPD officer, and a specialist in radiation protection. This effort has provided direct assistance and educational materials to foster the development of best practices among facilities managing smaller quantities of radiological materials of concern, such as research labs that are not required to meet enhanced Federal security mandates. The Department believes that the incorporation of non-IC facilities into its

security efforts is critically important to ensure the security of radioactive materials in New York City.

By conducting these visits outside the regulatory process, the Department gained voluntary access to these facilities, and could facilitate improvements at many IC and non-IC facilities in New York City. These detailed on-site evaluations employed a graded approach to security for these materials, which helped facilities identify typically inexpensive physical security upgrades and/or changes to administrative procedures. For example, the Department has developed a best practices manual that provides easy-to-follow security check-lists, which facilities can use to evaluate their own security measures and to self-identify enhancements.

The Department has emphasized reducing vulnerabilities by increasing controls and administrative improvements, such as improved access control, background checks, enhanced material control and accountability, coordination with local law enforcement agencies, proper display of picture identification badges, background checks for unescorted access to materials, key control and accountability, and discontinued dual use of space for radioactive sources. The Department's approach has resulted in documented improvements in controls, and has had a positive influence on facilities with both high activity and low activity radioactive sources.

In conclusion, the Department believes that its strategic vision, employing an asystematic approach, has reduced the probability of domestic radiological threat from materials used in New York City.

Thank you for the opportunity to testify on the Department's radioactive materials security initiatives. I will be pleased to answer any questions you may have.

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