



**Statement of the Association of Public Health Laboratories
Meeting of the Science Advisory Board, Homeland Security Advisory Committee
United States Environmental Protection Agency
July 15, 2005**

The Association of Public Health Laboratories (APHL) works to safeguard the public's health by strengthening public health and environmental laboratories in the United States and throughout the world. In collaboration with members, APHL advances laboratory systems and practices, and promotes policies that support healthy communities. APHL is committed to promoting a strong public health system that integrates public health and environmental laboratories as a vital resource to protect against diseases and other health threats. The Association connects US public health laboratories in all 50 states and 6 territories, linking them with federal partners, such as the Centers for Disease Control and Prevention (CDC), the Environmental Protection Agency, the Centers for Medicare and Medicaid Services (CMS), and the Federal Bureau of Investigation (FBI).

Currently, methods, analytical standards, proficiency testing and certification programs are critically lacking for the analysis of environmental samples (e.g. air, water, soil, food, etc.) for chemical agents, including chemical warfare agents. By most significant measures, such as funding, validated test protocols, availability of standards, facility security and personnel safety, state laboratory preparedness for a chemical terrorism event trails considerably in comparison to bioterrorism readiness. Without substantial improvement, this disparity between testing clinical (e.g. blood, urine, etc.) and environmental samples will continue to seriously compromise the state of preparedness in our nation. At this point in time, testing capability for the analysis of chemical warfare agents exists only within the United States Department of Defense (DoD).

As you know, in 1999, the Centers for Disease Control and Prevention's National Center for Environmental Health (CDC-NCEH) initiated development of methods for determination of chemical terrorism agents in human clinical samples and is currently transferring this technology to state public health laboratories. Aimed at assuring competent testing and adequate nationwide capacity, this transfer of human clinical methods is intended to establish geographic coverage in response to a terrorist event. **In contrast, no federal support has been provided to states or federal agencies to develop methods, safe-handling protocols, containment facilities, or to purchase instrumentation for the analysis of environmental samples for chemical terrorism agents.**

Homeland Security Presidential Directive-5 (HSPD-5) designates the EPA as responsible for efforts linked to "environmental monitoring; to decontamination; to long-term site clean-up in the event of a terrorist attack resulting in environmental contamination; to surge capacity for environmental analysis in a chemical terrorism event; and to providing support to states". In addition, the U.S. EPA's 2004 Homeland Security Strategy describes 5 Mission Critical Areas (MCA) which include but are not limited to "responding and recovering from any chemical, biological, radiological, or nuclear terrorist event" and "synthesizing and communicating

2025 M Street, NW
Suite 550
Washington, DC
20036-3320

202.822.5227 phone
202.887.5098 fax

www.aphl.org

complex information related to human health and the environment”. In the current absence of environmental sampling and testing capability and capacity, it remains unclear as to how these critical tasks can be accomplished at the state-level, given that only one government entity, the DoD, is capable of performing analyses of environmental samples for chemical warfare agents. To date, analytical standards, as well as protocols for safe, secure, and expeditious handling of unknown/mixed matrix environmental samples that may contain chemical terrorism agents do not exist in the civilian sector. As such, no public or private laboratories can perform validated environmental chemical terrorism testing.

In the midst of all of this, state public health and environmental laboratories are responding to requests from the Federal Bureau of Investigation, local water supply agencies, and state law enforcement officers who need unknown samples analyzed from credible chemical terrorism threats. State laboratories frequently assume the responsibility for testing these samples because there is literally nowhere else to send them. In the absence of appropriate funding, methods and certification standards, validated test protocols, and suitable facility/worker safety procedures, state laboratories are forced to adapt methods intended for traditional environmental chemical analyses in an attempt to address environmental testing for chemical warfare agents. This approach is not only ineffective and inconsistent, but seriously compromises workplace safety and may result in missed identification or incorrect analyses of a chemical threat. A lack of understanding and a lack of dedicated resources at the federal level continue to stand in the way of adequately addressing this issue. The need for EPA to assume responsibility and implement a solution in terms of environmental sampling for chemical terrorism is of utmost urgency. State laboratories are in need of EPA’s leadership in emergency response efforts now more than ever before.

APHL is determined to support EPA in any efforts made to move forward on addressing the grave existing gaps related to environmental agents. We as a nation cannot afford to ignore

