Department of Defense
Hazardous Chemicals Needs Statement

The Department of Defense (DoD), Rapid Reaction Technology Office (RRTO) Innovation Outreach Program will conduct a Solutions Meeting in the Washington, DC area in the December/January timeframe. The Meeting provides selected innovative companies with an opportunity to make short technical presentations to government representatives and Subject Matter Experts about their technologies and products. There is a potential for companies to be selected for pilot projects or experimentation if their technology appears to match DoD's Hazardous Chemical needs.

The Department seeks innovative technologies that address the challenges of detecting, attributing, neutralizing, destroying, or denying access to known hazardous chemicals. Currently, DoD has a number of programs and resources that address these issues but is looking for new or innovative approaches that provide improved portability, improved processing capability/capacity, and decreased timelines. A related area of interest is dealing with unknown chemicals, again from detection to destruction or denied access. Capabilities are desired for short- and long-term timeframes so both current technology and research ideas are encouraged.

The Department is specifically interested in technologies that support potential responses to hazardous chemical existence and/or deployment:

1. Detect
2. Attribute
3. Neutralize
4. Destroy
5. Access Denial

Background Discussion:

Hazardous chemicals of interest may contain known or unknown substances. Their quantities range from trace amounts to large stockpiles and may be of recent manufacture or decades old. Their stability may vary widely due to these variables. They may be stored in a wide range of environments from austere inaccessible rural areas to large populated cities.

Detection of hazardous chemical includes both active and passive measures. Active detection may include techniques may range from swabbing (physical contact) to laser illumination to cause gaseous dispersion. Passive detection may include techniques such as use of cavitands in microsystems, fluorescence, supply chain tracking, social media, and transaction monitoring.

Attribution technologies link chemicals to particular sources geographically or to individuals and groups. Attribution techniques could include chemical tags or analysis of contaminants. Trace detection enables chain of custody tracking. Social media analysis and exploitation may identify individuals or organizations acquiring and transporting chemicals.

Neutralization and/or destruction techniques may involve portable incinerators, biological approaches, or chemical reactions. Solutions might include commercial processes used to destroy or neutralize industrial chemicals.

Technologies to deny access to storage areas would also be of interest in situations where neutralization and/or destruction may not be feasible.

Companies interested in participating in the Hazardous Chemicals Solutions Meeting should submit an application to RRTO Innovation via e-mail at osd.pentagon.ousd-atl.mbx.rrto-innovation@mail.mil.

The following information is required in the application:

1. Email subject line "Hazardous Chemicals Workshop Application"
2. Company name
3. Website address
4. POC, email, phone number and an alternate POC if desired
5. A succinct description (less than 200 words in length) of the company's technologies, products and capabilities including a mapping to the six needs areas addressed

All applications must be received on or before 5:00 PM EDT, Monday, September 23, 2013.

Selected companies will be responsible for their travel and all other expenses associated with participation in the Solutions Meeting to be held in the Washington, DC area.