



News Release

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ECBC Issued U.S. Patent for Improved Sorbent to Be Used in Chemical Decontamination

Aberdeen Proving Ground, Md. — The U.S. Army Edgewood Chemical Biological Center (ECBC), the premier national resource for chemical and biological defense, announced that the U.S. Patent and Trademark Office awarded the Center with a patent for the invention of a sorbent technology designed to improve efforts to decontaminate highly toxic materials. U.S. patent number 7,678,736 marks the sixth U.S. patent issued to ECBC during the 2010 fiscal year.

The new sorbent — a material used to absorb liquids or gases — accelerates the decontamination of substances such as chemical warfare agents (CWA), industrial chemicals, insecticides and VX, one of the most toxic and well-known nerve agents.

“The increased efficiency reduces the amount of sorbent required to decontaminate affected surfaces and, therefore, the costs involved,” said ECBC Technical Director Rick Decker. “But more importantly, every step we take towards enhancing decontamination technology of chemical warfare agents takes us one step closer to protecting the warfighter and civilian population.”

Delivered as fine aerosol mists, CWAs deposit on surfaces of equipment and hardware including buildings, uniforms, weapons, vehicles and shelters — which presents serious inhalation threat to U.S. troops and first-responders of terrorist attacks. Capable of absorbing and converting extremely toxic materials into less toxic products, the modified reactive sorbents of the invention neutralize VX-contaminated surfaces 1,000 times faster than existing sorbent materials, according to George Wagner, Ph.D., the research chemist credited with the invention.

“While researching and developing a new sorbent technology, we aimed at making the CWA decontamination process more efficient,” said Wagner, who works in the Chemical Biological Detection, Protection and Decontamination Division of ECBC’s Research and Technology Directorate. “Each second counts when it comes to reducing the hazardous conditions our warfighters and homeland are exposed to.”

ECBC is currently seeking commercialization partners to complete the development of its newest sorbent technology through a Collaborative Research and Development Agreement (CRADA)

which provides a means for private industry to collaborate with Army research and development activities. With numerous existing CRADAs with a variety of companies ranging from small businesses to Fortune 500, ECBC welcomes companies interested in a partnership to contact the Technical Industrial Liaison Officer via e-mail: technical.outreach@apgea.army.mil or by phone: 410-436-2031.

For more information about ECBC, visit <http://www.ecbc.army.mil/>.

ECBC is the Army's principal research and development center for chemical and biological defense technology, engineering and field operations. ECBC has achieved major technological advances for the warfighter and for our national defense, with a long and distinguished history of providing the Armed Forces with quality systems and outstanding customer service. ECBC is a U.S. Army Research, Development and Engineering Command laboratory located at the Edgewood Area of Aberdeen Proving Ground, Maryland. For more information about the Edgewood Chemical Biological Center, please visit our Web site at <http://www.ecbc.army.mil> or call (410) 436-7718.

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