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Company works to keep homeland secure

By ANDREA TANTILLO , News Editor

Researchers continue to fight to keep up with the constant threat to American people, and Becky Elmore, project manager for homeland security, international petrochemical and world funding agencies with Agilent Technologies, technology is being developed and honed to meet the demand. Elmore spoke to the Pasadena Kiwanis Club recently. "When Sept. 11 happened, everyone's world changed," said Elmore.

She explained that she and her son were watching television following the terrorist attacks and he asked her to explain "CBREs."

She said that CBREs, which were being mentioned frequently in the media after the Sept. 11, attacks, are Chemical, Biological, Radiological and Explosive weapons, adding that the company she works for focuses on the "C" side of the CBREs. Chemical weapons include nerve agents, blistering agents, blood agents, vomiting and choking agents, incapacitating agents and riot control agents.

"We want to be able to detect (what chemicals are present), fast," Elmore said. "Any chemical (even gasoline) can poison a lot of people in the wrong hands.

"When you smell something in the air," Elmore continued, "someone has to go test it to determine if it's harmful."

And, she said, refineries along the Houston Ship Channel are diligent with their testing of air quality and potential environmental impact releases.

Elmore said that many government agencies, such as the Centers for Disease Control, the Food and Drug Administration, the Environmental Protection Agency and the U.S. Army, know how to test for dangerous chemicals in laboratories. However, she said, the government and the public need a more portable method of testing security.

"They want us to do rapid screening, as well as bio screening," Elmore said.

She said that the U.S. military is prepared with portable equipment, with each troop unit including a backpack with air and chemical testing equipment.

She added, however, that the portable technology is a long way from the monitoring and analyzing equipment that can be seen in popular science fiction. She said that there is no instrument like the tricorder in Star Trek that allows a user to simply scan an area or a person to determine what exposure or exposure level has occurred.

Yet, she said, even though today's technology is not as advanced as that of science fiction, the technology is improving everyday. And, she credits television crime dramas, such as "Law and Order" and "CSI," with giving the general public a realistic view of what technology is available.

She said that she was watching "Law and Order" one night and one of the investigators referred to a GC with a sniffer. She explained that the GC, or gas chromatograph with a sniffer, or mass spectrometer, is a real tool that investigators use. She said that the sniffer is a small vacuum that collects samples for testing. According to Elmore, the investigator on the television series appeared to have used the instrument correctly and ended up with results appropriate to the GC's capabilities.

Agilent is also working to match current technology with law enforcement efforts. Elmore said that first responders to "an event" are always the most vulnerable should there be a chemical or biological release as a result. Armed with portable GCs, first responders can test the location.

Once a site is secure, she said, the first responders can develop a triage system, determining if the threat is chemical,

biological, radiological or explosive. They can also try to determine if the threat is a result of terrorism and what actions should be taken.

With emerging technology, Elmore said the government is constantly working to prevent terrorist attacks and to protect the population in the event that such an attack should occur.

She said that Sept. 11, changed the landscape of priorities for research and information. She said that prior to Sept. 11, 2001, the CDC spent less than \$3 million annually to implement testing centers throughout the United States. After Sept. 11, the price tag for implementing testing centers has risen to \$10 million each year.

She explained that implementing testing centers throughout the country is critical to continued security and protection. She said that on Sept. 11, when the planes crashed into the towers, investigators were unsure if there were any agents on the planes that could have caused an even greater threat to the population. Samples were taken, but the only center available to review the samples was the CDC in Atlanta, Ga. All of the planes were grounded. So, it took 48 hours for the samples to be taken to the CDC.

"Sept. 11 was an eye-opening experience," Elmore said.

Government agencies, according to Elmore, now investigate more than 100 CBRE threats each month. And though some are unfounded, the agencies take each one seriously.

However, Elmore said despite the constant threat, she does feel a certain degree of safety.

"I feel as safe as any American who is free and lives in an open country or society can," Elmore said.

The Pasadena Kiwanis Club meets each Thursday at 11:30 a.m. at Golden Corral, 4021 Spencer Highway. The club will not meet this week, but will instead host its 22nd annual Prayer Breakfast at 6:30 a.m. today at the Pasadena Convention Center. For more information about the Kiwanis Club or the Prayer Breakfast, call Ken Unfried at (713) 675-2341.

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