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News Release

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E-Plan Emergency Information System
Aiding in Response to Hurricane Katrina

Database Developed by UTD and EPA Contains Inventory
Of Contents of Gulf Coast Chemical Industry Facilities

RICHARDSON, Texas (Sept. 8, 2005) – An emergency information system known as E-Plan, developed by The University of Texas at Dallas (UTD) and the United States Environmental Protection Agency (EPA), is expected to be a valuable resource to emergency responders assessing the extent of damage to chemical industry plants and other facilities in Gulf Coast states in the wake of Hurricane Katrina.

The unique database, which contains an inventory of the chemical contents of thousands of facilities in a number of states, including Louisiana and Alabama, will provide emergency response personnel with information on the location and nature of hazardous materials before they enter chemical plants that may be contaminated as a result of damage due to high winds and flooding.

"The information available through E-Plan will be vital to first responders in planning safe initial approaches to these facilities, as well as advising personnel on how to deal with any chemical spills," said Dr. E. Douglas Harris, executive director of the CyberSecurity and Emergency Preparedness Institute at UTD.

E-Plan is a highly reliable, highly secure, Internet-accessible repository of facility and hazardous material information housed in the Erik Jonsson School of Engineering and Computer Science at UTD. Created in 2001, E-Plan provides information to emergency personnel in several states, particularly along the Gulf Coast, about hazardous materials stored in various types of facilities, from water treatment plants to oil refineries. The information system was designed by UTD for the EPA, with the assistance of police and fire departments in a number of Texas cities, including Plano, Richardson and Corpus Christi.

Jim Staves, E-Plan project sponsor for EPA's Region 6, said "in addition to providing first responders with information they will need to make safe entry into damaged facilities, E-Plan should prove invaluable in locating the likely sources of chemical contamination, spills, or 'orphan' containers that may be found." Staves said that in the Midwest floods of 1993, thousands of orphan chemical containers, such as drums and small tanks, were found. Identifying the owners of those containers, or arranging for government-funded disposal, took months after floodwaters had receded, he said.

E-Plan contains more data on hazardous materials than any other commercial or governmental system in use by government agencies. Its database covers 40,000 facilities in 14 states and contains information on more than 20,000 unique chemicals.

"One of the most important factors in a successful response to a hazmat accident is the speed with which the first responder can obtain hazardous-materials information quickly, completely, accurately and in an easily understood format," Harris said. "The information in E-Plan is immediately available via the Internet to first responders, enabling them to protect themselves, accident victims and surrounding communities better and faster than ever before."

According to Harris, because E-Plan is easy to use and requires a minimal amount of computer knowledge, first responders can learn to use the system in a matter of minutes.

E-Plan was created primarily for use by emergency personnel in "routine" chemical spills and localized incidents in order to identify hazmat materials at a single location. The Katrina disaster created a need for greater information over a broader area, which was not initially available via E-Plan. On request from EPA headquarters in Washington, D.C., UTD faculty and staff responded immediately to provide additional functionality to the system.

According to Harris, UTD software developer Phani Kotharu worked throughout the Labor Day holiday to input additional data on more than 4,000 facilities in Louisiana, including the latitude and longitude of those facilities and their locations on aerial maps. Other newly developed features include an enhanced search function that allows responders to identify all facilities with a specified chemical in a specific county or parish.

Dr. Gopal Gupta, UTD computer science professor, working with graduate research assistants Ajay Bansal and Siddharth Deepak, added information to the database on 137 facilities in Alabama within two hours of receipt of the data from state officials.

UTD's CyberSecurity and Emergency Preparedness Institute was created to help deal with rapidly growing homeland security problems, such as cybercrime, information assurance and emergency preparedness. It has three centers — the CyberSecurity Research Center, the Global Information Assurance Center and the Emergency Preparedness Center.

About UTD

The University of Texas at Dallas, located at the convergence of Richardson, Plano and Dallas in the heart of the complex of major multinational technology corporations known as the Telecom Corridor®, enrolls more than 14,500 students. The school's freshman class traditionally stands at the forefront of Texas state universities in terms of average SAT scores. The university offers a broad assortment of bachelor's, master's and doctoral degree programs. For additional information about UTD, please visit the university's website at http://www.utdallas.edu/.

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