



# DIRECTOR'S CORNER



Since our last newsletter, there have been many newsworthy happenings. Rather than go over the highlights and accomplishments in my notes, I will let you read it for yourself.

What I would like to discuss and bring your attention to is my recent trip to Washington, D.C., on Wednesday, December 12, 2007. I traveled, to testify before a House subcommittee citing the potential for acts of terrorism on any of the thousands of chemical processing plants throughout the country and urged Congress to give the Department of Homeland Security permanent and continuing authority to regulate chemical security in the United States. My complete testimony is available on the Mary Kay O'Connor Process Safety Center website. This testimony came as part of a congressional hearing on the "Chemical Facility Anti-Terrorism Act of 2008," a proposed amendment to the Homeland Security Act of 2002 that provides for the regulation of certain chemical facilities. The subcommittee, chaired by Rep. Sheila Jackson Lee, is part of the larger Committee on Homeland Security that was created by the U.S. House of Representatives in 2002 in the aftermath of September 11, 2001 to provide Congressional oversight over the development of the Department of Homeland Security.

In addressing members of the subcommittee, I said that while many U.S. facilities have voluntarily begun implementing appropriate security measures, I remain concerned that many have not yet adopted such measures. Because of that discrepancy, a regulation that establishes a minimum and level playing field is critical.

In my written testimony, I state:

"The fact is that chemical infrastructure and all components, including the individual sites, supply and delivery systems, were never built with terrorism

in mind. Research must be conducted to determine how we might have designed and built the chemical plants and the infrastructure had we considered these threats."

As vital as regulation of these facilities is, I explained that effective regulation must be science-based and cautioned that the proposed act or any actions resulting from the act should not create unintended consequences, which might increase the opportunities for attacks rather than mitigate them.

Providing an example of such an instance, I detailed a hypothetical substitution of hydrogen fluoride with sulfuric acid for refinery alkylation processes. While sulfuric acid is less toxic than hydrogen fluoride, the amount of sulfuric acid needed to do the same amount of processing is 25 times greater than hydrogen fluoride. Because of that, a change to the less-toxic sulfuric acid would require large storage facilities and increased transportation – both of which could result in greater opportunities for terrorists as compared to a well-managed plant utilizing a smaller amount of hydrogen fluoride.

Among my conclusions I noted that hazardous materials in transit throughout the United States represent a highly visible target with a far greater degree of vulnerability to an act of terrorism than stationary facilities. What's more, this specific category of hazardous materials is arguably the least prepared to deal with intentionally caused catastrophic scenarios. In addition, I emphasized the inclusion of water processing facilities in the act as important and necessary though not traditionally considered a chemical processing plant.

"As the 9/11 events have shown, terrorists are more likely to use easily available materials to strike at us."

*M. Sam Mannan*