

# case study



## Chemical Plant Security System

The U.S. Department of Homeland Security's Information Analysis and Infrastructure Protection Directorate is focused on securing the nation's critical infrastructure and key resource sectors. Chemical facilities are one specific sector of significant focus. The DHS is responsible for coordinating government efforts to protect critical infrastructure across the chemical sector. The Department develops and coordinates plans to aggressively reduce the nation's vulnerability to acts of terrorism in the chemical sector.

### Chemical Plant Security System, Various Locations



### CHALLENGE

Terrorists undoubtedly regard chemical plants as target opportunities. The consequences of an attack could be significant, especially with regard to chemical plants located in densely populated areas. Prior to the formation of the DHS, responsibility for the nation's critical infrastructure was scattered over a patchwork of various federal agencies.

### SOLUTION

As a consequence, the DHS has established a significant Federal role in the chemical sector by creating cooperative relationships with chemical plants. Owners, operators, and the DHS have made considerable investments to enhance physical security by strengthening buffer zones, improving access control, implementing detection technologies, and increasing response preparedness capabilities. Chemical facility site visits are conducted by Federal, state and local officials to address vulnerabilities with owners and operators. Buffer Zone Protection (BZP) planning develops protective measures that extend from the critical infrastructure site to the surrounding community to deny terrorists an operational environment. The Department provides training workshops, seminars, technical assistance and a common template to standardize the BZP development process.

Duos' role in chemical plant hardening is turn-key design and installation of ten remote viewing security systems at high risk chemical plants. The systems consist of state-of-the-art video cameras, processing equipment, and a specially designed network infrastructure to provide secure connectivity and communications utilizing secure encrypted virtual private network (VPN) tunnels to distribute remote digital video imagery in real time simultaneously to multiple state and federal government agencies. Authorized users access a secure web site via Microsoft Internet Explorer web browser or a proprietary client software application.

This project was deployed by the Epsilon/Duos Technologies team utilizing Duos' proprietary **rvspro™** digital video servers and browser based software that allows an unlimited number of simultaneous users.

### BENEFIT

The **Chemical Plant Security System** detects threats and significantly decreases vulnerability within and surrounding the chemical plants, including but not limited to suspicious persons, explosives, nuclear and hazardous materials and chemical/biological agents.

