

Case Study.

Engro.

Pakistan.

Chemicals.

Achieving growth through a world-class safety system

When Pakistani managers of Exxon Chemical in Pakistan bought out Exxon's shares and started Engro Chemicals in 1991, they had a trailblazing vision for their new venture. But by 2000, it became clear to Engro's leadership that the safety standards developed for the plants by Exxon prior to the takeover did not align with their vision for a safe and healthy workplace. The decision was made to develop a world-class safety system. Working with dss+, Engro has transformed itself from a successful in-country business to a world-class leader by matching employee safety with productivity.

In 2003, Engro decided to align with [dss+], having top-notch, best management practices in the field of safety."

RAMEEZ AHMED FRAZ, HEALTH, SAFETY AND ENVIRONMENT MANAGER, ENGRO CORPORATION LTD



Challenge

The Engro Chemical plant in Daharki, southern Pakistan, produces one million metric tons of urea fertilizer per year and has 550 employees. Sixty to seventy contractors also work on the site on a daily basis. Workers have the potential to be exposed to the dangerous release of gases, fire and explosions, as the production of urea fertilizer requires the use of ammonia and carbon dioxide. The plant is located in a rural region with limited access to higher education. Furthermore, communication and training can be challenging due to the large number of local languages spoken by plant employees. During the 1990s, Engro relied on health and safety practices of Exxon, in place since the 1980s. But around 2000, Engro management decided they needed to reach top international safety standards. Laws and requirements for factories set by the Pakistani government were insufficient for the forward-thinking company. Engro decided to work with dss+ to transform its safety practices.

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Solution

The first dss+ audit of the Daharki plant took place in 2003. "The dss+ consultants came to the site and interacted with the workers - all of the workers, from the most unskilled junior worker to the management. They started from the shop floor and worked their way upward, to the plant manager and the president of the company," Safety Manager Fraz said.

The dss+ solution addressed two major areas: process safety procedural changes, and personnel safety, including the adoption of a safety culture. But one of the first priorities was ensuring complete commitment from management to implement changes and adhere to best practices

"We were very lucky because there was real commitment from the management. They are what you would call trailblazers," said Asma Kazmi, project manager for the dss+ team in Pakistan.

Engro's top and middle management received training from dss+ safety specialists. To pass this crucial knowledge onto floor workers, Engro employed several strategies developed by dss+ Managers began classroom-style trainings of shop-level employees as well as all new hires. Employees were taught to practice self-audits of their safety practices on a daily basis. Engro's Health, Safety & Environmental Policy was translated into local languages and prominently displayed around the plant.



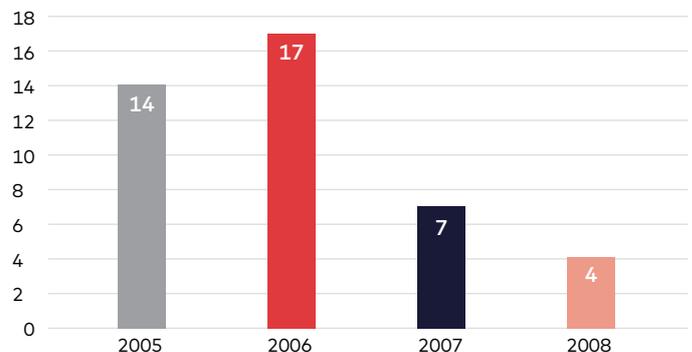
We were very lucky because there was real commitment from the management. They are what you would call trailblazers."

ASMA KAZMI, PROJECT MANAGER, dss+ TEAM IN PAKISTAN.

Results

Engro's safety record has improved significantly since the initial implementation of dss+'s safety programme in 2006/2007. In 2005, the Daharki plant experienced 14 injuries, and 17 in 2006. By 2007, the plant had only 7 injuries, and 4 in 2008 – a 76 percent decrease between 2006 and 2008. The four injuries in 2008 included only one lost workday case, and the total recorded injury rate was reduced to 0.28 that year. Compliance with behavioural safety audits, carried out by dss+, improved by 43 percent between Q1 2006 and Q2 2009, from 57 percent compliance to 100 percent in 2009.

Number of injuries



Engro decreased injury rates by 76% between 2006 and 2008.

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Along with the positive changes in safety statistics, Engro Chemical Pakistan Limited has posted impressive business growth data. Company profits increased by 34 percent from 2007 to 2008, to US\$54 million (after tax). Company management has also acknowledged a more safety-oriented culture on the plant floor.

Engro Chemicals is now affiliated with the United Nations Environment Programme, and has also participated in the UN Global Compact programme since 2006, thereby demonstrating its commitment to human rights principles supporting health and safety of people at work.

Insurance for the future

Engro's experience with dss+ has proven so positive that the company is implementing its new safety practices for its other operations in Pakistan. Engro also signed an additional three-year contract with dss+ in 2009. dss+ practices will play a major role in the construction and commissioning of Engro's newest factory, a urea fertilizer plant that will be one of the largest plants of its kind in the world.

"Our journey is continuing and we do not want to stop. We want to step forward and go beyond the basic minimum requirement of OSHA. Our ultimate target is to go for world class [safety rankings]."

**RAMEEZ FRAZ, HEALTH SAFETY AND ENVIRONMENT
MANAGER, ENGR0 CORPORATION LIMITED**



Engro Chemical Pakistan Limited is the second largest producer of urea fertilizers in Pakistan, manufacturing one million metric tons of urea fertilizer. It also has the capacity to produce 160,000 tons of blended fertilizer. The company currently holds 15% of the urea market share. Engro Corp. was incorporated in January of 2010 and fertilizer business transferred to Engro Fertilizer Limited.



Assignment

Transform safety practices.



Offering

Safety audit. Process safety procedural changes, Personnel safety changes - adoption of culture transformation.



Impact

- Injury rates decreased by 76% between 2006 and 2008.
- Compliance with behavioural safety audits improved by 4% between Q1 2006 and Q2 2009, from 57% compliance to 100% in 2009.
- Company management acknowledged a more safety-oriented culture at the plant.



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