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## 2011 eNEWSLETTER – VOLUME I

As a new year begins, so does a new era for DuPont Sustainable Solutions; in January, we announced the acquisition of a MECS - the global leader in sulfuric acid plant design. In this issue, we delve into the details of what this acquisition means for our business and our customers. Further, we inaugurate a new series of articles - Safety Contacts - that will highlight a different safety-related theme in each issue. Moreover, we feature a case study that details how one company cultivated a robust safety culture and announce the opening of the call for applications for the 2011 DuPont Safety Awards.

If you would like further information on these topics, you may contact a DuPont representative through our website [www.safety.dupont.com](http://www.safety.dupont.com).

### Safety Contact



#### **Traffic Accident Reduction: A Global Strategic Priority**

Over 1.2 million people die in traffic accidents every year. See what you can do to stay safe, and encourage your employees to stay safe as well.

### Feature Article



#### **DuPont Expands Sustainable Solutions Capabilities**

We are pleased to announce the acquisition of MECS. This article explains the significance of this acquisition.

### Interview



#### **Interview with Ronan Goff – Regional Director, EMEA, DuPont Clean Technologies**

We speak to Ronan Goff about MECS, and its strategic relevance for the DuPont Clean Technologies portfolio.

### Case Study



#### **Achieving Growth through a World-Class Safety System**

Engro Chemicals Pakistan Ltd. takes action to improve safety culture within their company, leading to a significant reduction in accidents and injuries.

### News and Events



#### **2011 DuPont Safety Awards**

The Call for Applications for the 2011 DuPont Safety Awards is now open.

## **Traffic Accident Reduction: A Global Strategic Priority**

According to the World Health Organization (WHO) more than 1.2 million people are killed in traffic accidents every year. Beyond this, as many as 50 million are injured or disabled. For every person killed, injured or disabled, there are countless others that are adversely affected. Survivors, families, friends and caregivers very often suffer from adverse social, physical, economic and psychological effects. The economic toll is substantial: the WHO estimates that traffic accidents cost €378 billion globally. For companies, the cost can also be very high. In the US for example, an on-the-job traffic accident that results in an injury costs the employer an average of US\$74,000, while costs from an accident that results in a fatality can exceed US\$500,000<sup>1</sup>.

All of these accidents are preventable, as are the injuries and fatalities. Indeed, correctly used seatbelts reduce the risk of death in a crash by 61%.

Driving safely is about more than how you drive, but also what you do while driving. The following is a list of actions that should be taken to minimize risk while driving:

- Always wear a seatbelt. Children should be placed in a secure child seat.
- Never talk on mobile phones while driving. Doing so makes it four times more likely that you will have an accident, regardless of whether the phone is hands-free or not.
- All distractions while driving are to be avoided: eating, changing the radio station, etc.
- Do not operate a vehicle if you are impaired, either by alcohol, medication or lack of sleep.
- In winter, use winter tires to minimize risk of sliding on ice.
- Practice defensive driving: avoid aggressive or erratic drivers, do not block the passing lane, do not tailgate and always glance before turning or changing lanes.



Companies can do much to protect their employees, as well as their bottom line. The introduction of a safe driving program, a key prevention tool, can keep employees informed and educated.

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<sup>1</sup> These statistics were obtained from Safety Center Inc.

**DuPont Expands Sustainable Solutions Capabilities**

**DuPont Expands Sustainable Solutions Capabilities and Emerging Markets Reach by Acquiring MECS**

DuPont has completed its purchase of MECS from affiliates of American Securities LLC. The previously announced transaction strengthens the DuPont clean technologies portfolio and will provide access to additional high-growth markets, particularly in developing regions such as Asia Pacific, the Middle East and Africa. Furthermore, the value offering will be expanded to new industries, particularly the fertilizer, metals and cement industries.

Per the agreement, MECS becomes a wholly owned subsidiary of DuPont and part of the company's Sustainable Solutions business effective Dec. 31, 2010. Terms of the agreement were not disclosed.

"We are pleased to being 2011 by welcoming MECS into DuPont Sustainable Solutions," said James R. Weigand, president - DuPont Sustainable Solutions. "This acquisition enables us to diversify our clean technologies portfolio in significant ways. As a result, we estimate an increase in the addressable market for our clean air and clean fuel offerings from approximately \$200 million to \$1 billion. This action also is aligned with our corporate goals that call for using our science and technology to protect people and the environment and to address the needs of developing regions."

MECS ([www.mecsglobal.com](http://www.mecsglobal.com)) headquartered in St. Louis, Mo., is a leading global provider of process technology, proprietary specialty equipment and technical services for sulfuric acid producers. Its offerings help customers - primarily in the fertilizer, non-ferrous metals, petroleum refining and chemical industries - reduce air emissions, improve operational efficiencies, and lower energy use. In addition to its widely recognized sulfuric acid offerings, MECS produces air pollution control scrubbing systems and mist eliminators for reducing particulate emissions in a variety of industries. It also is an industry leader in proprietary heat recovery systems that generate carbon-neutral energy from sulfuric acid plants.



"Joining DuPont will provide growth opportunities as we share expertise and resources, integrate complementary offerings and collaborate in the development of new technologies," said MECS CEO Nick Bhambri. "We are proud to be a part of DuPont and excited about the future with DuPont Sustainable Solutions."

**Interview with Ronan Goff – Regional Director, EMEA, DuPont Clean Technologies**



***How does the MECS acquisition supplement DuPont’s current activities in the field of sulfuric acid production?***

The majority of the world’s sulfuric acid producers use MECS technology to capture sulfur that would otherwise become a pollutant and transform it into sulfuric acid. In acquiring MECS, DuPont has expanded its Clean Technologies portfolio with complementary offerings and provided the company with further access to high-growth market segments, particularly in developing regions like North Africa and the Middle East.

Ultimately, with the addition of MECS, DuPont Sustainable Solutions (DSS) is now better placed to ensure that our clients’ facilities are able to operate more profitably with minimized environmental footprint, energy consumption and risk.

***What value does this bring to your clients in Europe? What about in other markets, such as the Middle East and Africa?***

Sulfuric acid is the most widely used chemical in the world and is crucial to most industries. Indeed, demand for sulfuric acid mirrors that of Gross Domestic Product. As such, the market is expected to expand rapidly in the Middle East and Africa. As the recognized global leader in the design and construction of sulfuric acid plants, MECS is strategically positioned to support capital projects in these regions.

For the European market, MECS offers solutions that allow existing sulfuric acid production lines to meet stringent pollution requirements. Furthermore, MECS provides innovative technologies designed to maximize the efficiency and cost-effectiveness of production facilities. DuPont is currently operating 10 sulfuric acid plants and is recognized as a global leader in safety, operations and maintenance. Combined with MECS best-in-class technology, we are now able to offer integrated solutions for sulfuric acid producers that maximize synergies between technology and services, thus providing the opportunity to streamline operations, minimize cost and lower net environmental footprint.

***Can you describe the range of products offered by MECS?***

The gamut of MECS products is quite wide, though the company is most well-known for its sulfuric acid offerings. For sulfuric acid plants, MECS offers solutions for several processes, particularly sulfur burning, metallurgical and spent acid recovery. To complement these processes and competencies, we offer world-class gas cleaning products for air pollution control, custom-engineered heat exchange products to recover energy, and process technologies for oil refineries.

***What are the major challenges and obstacles for companies in the sulfuric acid production market, and how can DuPont/MECS help?***

Increasingly, sulfuric acid production facilities face challenges in maximizing the amount of energy produced while minimizing the environmental footprint. With over 100 years as an owner/operator of sulfuric acid facilities, DuPont is uniquely placed to address these challenges. Aside from the aforementioned technologies, DuPont is able to leverage its proven methodologies and best practices to improve productivity, minimize risk, reduce energy use and limit environmental impact.



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***What do you see as the future of DuPont Clean Technologies/MECS, especially within the context of DuPont Sustainable Solutions?***

DuPont Clean Technologies and MECS are poised for rapid growth, both due to the rapidly expanding market for sulfuric acid and the need for technologies that help companies to not only optimize assets and processes, but also reduce emissions and produce cleaner fuels.

For more information, please contact us

([http://www2.dupont.com/Sustainable\\_Solutions/en\\_GB/contact\\_us\\_70.html](http://www2.dupont.com/Sustainable_Solutions/en_GB/contact_us_70.html))

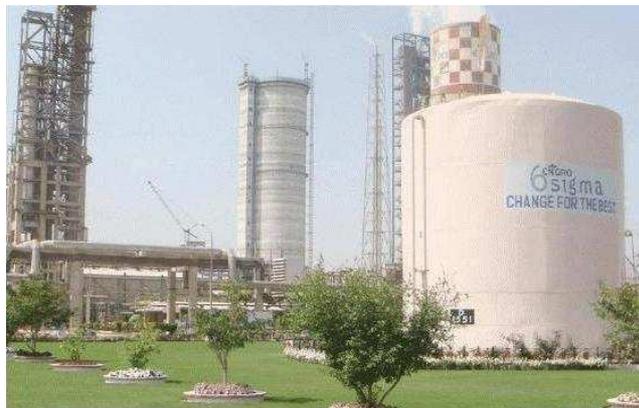
## Achieving Growth through a World-Class Safety System

Engro Chemical Pakistan Limited

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 DuPont, Engro has transformed itself from a successful in-country business to a world-class leader by matching employee safety with productivity.

### **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 DuPont to transform its safety practices.

### **Solution**

The first DuPont audit of the Daharki plant took place in 2003. "The DuPont 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 DuPont 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 DuPont team in Pakistan.

Engro's top and middle management received training from DuPont safety specialists. To pass this crucial knowledge onto floor workers, Engro employed several strategies developed by DuPont. 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.



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Engro's Health, Safety & Environmental Policy was translated into local languages and prominently displayed around the plant.

### ***Result***

Engro's improved safety for its employees has grown 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 behavioral safety audits, carried out by DuPont, improved by 42 percent between Q1 2006 and Q2 2009, from 57 percent compliance to 100 percent in 2009.

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 DuPont 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 DuPont in 2009. DuPont 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.

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.

## 2011 DuPont Safety Awards – Call for Applications



We are pleased to announce the opening of our call for applications for the 2011 DuPont Safety Awards. This prestigious competition is organized every year to highlight innovative safety initiatives from within Europe, Middle East and Africa.

This year, prizes will be awarded in five categories: Sustainable Business Impact, Cultural Evolution, Visible Management Commitment, Innovative Approach and Performance Improvement.

The jury, composed of reputed personalities within the field of occupational safety and health, will select three finalists per category, according to the following five criteria: design & innovation, scope, results, replicability and risk. Of these finalists, one winner will be selected by category at the award ceremony.

The finalists and winners will be officially announced in September 2011.

Should you have any questions, please do not hesitate to contact Ms. Doris Sultan at [info@nexdor.ch](mailto:info@nexdor.ch)

Please wait for updates on the DuPont Safety Awards webpage.  
([http://www2.dupont.com/Sustainable\\_Solutions/en\\_GB/dupont\\_safety\\_awards\\_62.html](http://www2.dupont.com/Sustainable_Solutions/en_GB/dupont_safety_awards_62.html))

