

## MARSH INSIGHTS: CHEMICAL RISK UPDATE

### JANUARY 2013

Marsh's Chemical Risk Update discusses twice a year the general business conditions for the chemical sector with a focus on industry trends and emerging issues.

### CHEMICAL BUSINESS OUTLOOK

The US chemical industry managed to grow at a steady pace in 2012, despite strong headwinds from the European debt crisis, weak demand in the US economy, and a relative slowdown in emerging countries, such as China. Most companies are expected to follow the course in 2013 and drive their strategic agenda. Companies in the industry continue to invest in emerging economies, acquisitions, and product innovation, especially around global mega-trends such as sustainability and green chemistry, alternative energy supply, and increased availability of clean water and food.

As expected, M&A activities have slowed down significantly in 2012 following a record breaking year in 2011. The value for mega-deals (transactions greater than \$1 billion) is expected to reach between \$25 billion and \$30 billion, roughly a third of 2011 value. Large deals continue to be dominated by strategic buyers that are looking to take advantage of low borrowing cost and accelerate their growth prospect.

Driven by the recovery in several end-use markets, including automotive and construction, and the continued expansion of shale gas production, the US chemical industry is expected to see stronger growth in 2013. Access to shale gas is being viewed as one of the most significant developments in domestic energy in decades, and is likely to have a major impact on the US chemical and manufacturing sectors in the future. Having a larger supply of low-cost natural gas — commonly used as a feedstock and energy source by chemical companies — is providing a meaningful competitive advantage over foreign companies that rely on more expensive oil-based feedstock.

Despite these positive signs, many businesses within the chemical industry remain cautious about the outlook and are prudent in their investments, especially with the uncertainties related to the economy, as well as the uncertainty about policy decisions that could emerge from Washington, D.C. in 2013.



## 2013 OUTLOOK AND PREDICTIONS

### **Global economic uncertainty.**

The lingering European debt crisis, political debate about the US fiscal cliff, and weak manufacturing demand in many developed countries, continue to represent potential headwinds for the industry. Given the industry's sensitivity to the global economy, any negative development in the macro-economy would be reflected in the growth prospects of companies in the sector.

### **Limited growth prospect in most developed economies.**

Chemical production in the European Union remains 8% below its pre-recession level, as austerity measures adopted to address the high sovereign debt levels have led to higher unemployment levels and weak demand. A recent report from the European Chemistry Council (Cefic) predicts that European chemical output contracted 2% in 2012, and is expected to grow by a modest 0.5% in 2013. By comparison, US chemical output grew by 1.5% in 2012 and is expected to rise to 1.9% in 2013 and 2.3% in 2014.

### **Healthy growth in emerging markets.**

Companies will continue to focus on Brazil, Russia, India, and China — countries with higher chemical market growth rates. According to the American Chemistry Council (ACC), chemical manufacturers in the emerging economies have delivered a 6.2% production increase in 2012 and are expected to grow by 7.5% in 2013.

### **Expansion of shale gas production and increased capital spending.**

US shale gas is creating a true competitive advantage for the chemical and manufacturing industries and is expected to drive significant capital expenditures in the US. The cost of ethane is now between 3 and 4 times cheaper in the US than in Europe. The ACC is expecting strong growth in capital spending in the coming years, stemming from new investments in petro-chemicals and derivatives. It estimates capital spending to reach US\$35.5 billion in 2012 and steadily advance to US\$51.5 billion in 2017.

### **Heated discussions expected on chemical reforms.**

Potential reforms include changes to the Toxic Substances Control Act (TSCA) and also EPA chemical management policy, Chemical Facility Anti-Terrorism Standards (CFATS), and greater disclosure of products used during fracking activities.



## 2013 POTENTIAL CHEMICAL REFORMS

2013 could be a busy year for chemical reform given the potential emphasis on regulatory change: The White House is re-energized post election, the EPA is committed to enhance its chemical management program, and some states are increasingly concerned about the lack of movement on long discussed reforms, such as the TCSA.

The recent resignation of Environmental Protection Agency Administrator Lisa Jackson, who faced harsh criticism over climate change and air control regulatory issues, may provide the new EPA leadership team with an opportunity for better dialogue with stakeholders. However, as the House of Representatives and the Senate continue to be divided on many issues, the same gridlock that the chemical industry has experienced over the past few years can be expected, making any significant regulatory changes difficult to achieve. Representatives of the chemical industry have been calling over the years for a balanced approach to regulation. In any event, the industry will continue to focus its efforts on advocacy, compliance, and commitment to health, safety, and product stewardship.

### 1. Toxic Substances Control Act

The need to reform the TCSA remains one of the few legislative constants in the chemical industry. The Act, issued in 1976, provides the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Stakeholders agree on the concept of reforming the TCSA but are certainly not aligned on the details. Several questions remain, including the White House support of true reform, the position of the new EPA administrator, as well as the general scope of the reform — broad and sweeping or tailored and focused. The absence of meaningful TSCA reform could result in a new wave of state regulations. In 2010, California's Department of Toxic Substances Control proposed several iterations of its Safer Consumer Products regulations, implementing the California Green Chemistry Initiative. The latest version, issued in July 2012, includes the identification of chemicals of concern, and the development of alternative assessments for chemicals in priority products. The multiplication of complex chemical regulatory initiatives driven by individual states would not be a positive development for the chemical industry.

### 2. Chemical Management

The EPA's emphasis on Chemical Action Plans scaled back slightly in 2012, mainly due to pushback from the industry and the demand the plans place on the agency's limited resources. Last June, the EPA announced an additional 18 chemical substances scheduled for assessment during 2013 and 2014. The 18 substances include chemicals associated with specific hazards, such as potential carcinogenicity; reproductive, or developmental toxicity; chemicals presenting persistent, bio-accumulative, and toxic potential; and chemicals found in bio-monitoring or reported in consumer products including products for children. Some of these chemicals, such as five chlorinated hydrocarbons, three flame retardants, and four fragrance chemicals, may present the regulator with an opportunity to assess groups of related chemicals together. Nano-scale materials, including nano-pesticides, are also receiving greater scrutiny.

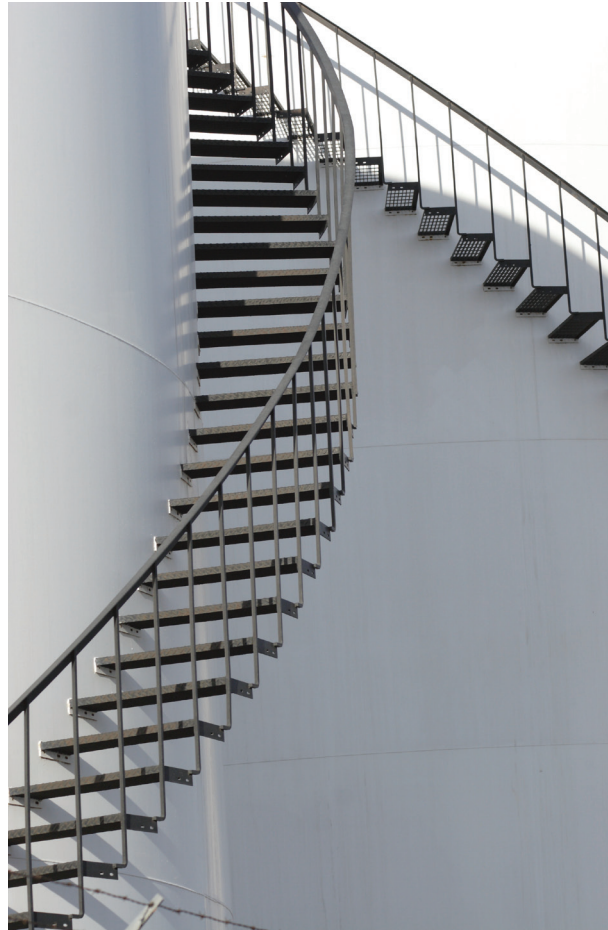
How the new administration will balance innovation with the need for pre-market review is unclear. The administration also needs to consider the impact of new regulations on jobs, while protecting workers and consumers from potential chemical risks.

### 3. Chemical Facility Anti-Terrorism Standards (CFATS)

The prospect of changing CFATS in 2013 is uncertain. The standards, developed in 2007, are a set of security regulations for high-risk chemical facilities such as chemical plants, electrical generating facilities, refineries, and universities. This rule requires covered chemical facilities to prepare security vulnerability assessments, which identify facility security vulnerabilities, and to develop and implement site security plans, which include measures that satisfy the identified risk-based performance standards. The implementation of the program has proven challenging and may lead Congress to reconsider the Department of Homeland Security's jurisdiction over security measures at chemical production, storage, and transport facilities that might be targeted by terrorists.

## INDUSTRY HOT TOPICS

- Uncertainties resulting from the global economy.
- Positive economic impact of shale gas in the US on chemical and manufacturing sectors.
- Looming debate on the cost benefits of selling US liquefied natural gas to the export market.
- Potential chemical reforms from President Barack Obama's new administration.
- Increased number of studies linking chemical substances to specific pathologies.
- Cost-cutting measures and restructuring plan implemented by chemical companies.
- Selective mergers and acquisitions in fast-growing emerging markets.
- Supply chain complexity related to dependence on key suppliers and interdependencies.
- Risks related to new products and technologies, including fracking and nano-technologies.
- Transportation of hazardous materials (TIH) by rail and associated liabilities.



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