MARSH

UNITED STATES INSURANCE MARKET REPORT 2016

CHEMICAL

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FOREWORD

As part of our commitment to keeping you informed, Marsh is pleased to present you with this excerpt regarding the chemical industry from our *US Insurance Market Report 2016*. Through data and analysis, it provides a snapshot of current market conditions and risk trends across major lines of coverage and industry/specialty sectors. The report reflects the experience of Marsh insurance professionals who work daily with the global insurance marketplace and provide clients with risk management advice.

With 2016 under way, the global insurance marketplace appears to be heading in the general direction of soft pricing, reflecting insurer capacity, competition, and relatively low catastrophe losses. At the same time, the insurance industry will continue to be affected by macro dynamics, including global economic, political, regulatory, technological, and environmental developments.

In addition, the insurance industry is also experiencing some significant developments that bear watching throughout 2016, including:

- Large-scale mergers and acquisitions.
- Executive leadership changes.
- A reduction in and changes in underwriting appetite at several companies.
- Some insurers' disposition of unprofitable segments.
- Recent announcements regarding potential and actual reinsurance underwriting.

These developments may ultimately produce positive outcomes, such as a prolonged healthy, competitive market with higher levels of innovation, new product offerings, and improved service.

Companies of all sizes and in all industries around the world choose Marsh for our breadth and depth of experience, expertise, and capabilities. These traits are critical in a volatile market, as is our ability as a trusted strategic advisor to help you navigate complex risk challenges and assess and recommend markets.

We thank you for the trust you place in Marsh every day. Should you have any questions about this report or the industry and market environment, please do not hesitate to reach out to your Marsh representative.

Best regards,

Rob

Robert Bentley
President, US and Canada Division

EXECUTIVE SUMMARY

Following are some key takeaways from Marsh's *US Insurance Market Report 2016*.

RISK ISSUES

Cybersecurity

Cybersecurity is now a mainstream business concern across all industries as most companies have either been the victim of a cyber-attack, conducted business with a company that has been attacked, or expect to be attacked at some point. There is a realization that cybersecurity needs to be managed across the enterprise. From individual employees to the board of directors, everyone has a stake in cybersecurity.

Drones

Insurers are paying increasing attention to the use of unmanned aerial systems — drones. Coverage for the risks presented by drone use may be excluded from casualty policies, and insurers are concerned about personal and advertising injury risks related to drones, although bodily injury and property damage coverage may also apply. In 2016, organizations that use drones may be expected to answer detailed questions from insurers including, but not limited to, questions about drone size and intended purpose.

Mergers and Acquisitions (M&A)

M&A activity in 2015 was exceptionally high in many industries, including insurance, health care, and communications, media, and technology. Activity is expected to be high again in 2016, barring any unforeseen changes. Among the risks heightened by M&A activity are environmental exposures, including legacy pollution issues; technological risks, such as integration of systems, data protection, and cybersecurity; and regulatory issues.

INSURANCE COVERAGE ISSUES

Property

- The US commercial property insurance market continued a two-year softening trend in 2015, one that is expected to continue into 2016, barring unforeseen changes in conditions. Rates are generally decreasing for buyers as catastrophe (CAT) losses were again low in 2015, insurer competition is at a high level, and alternative sources of capital are expected to continue to buoy the market.
- The quality of data that insureds submit to underwriters will continue to play a significant role in determining property insurance pricing, particularly regarding catastrophe risks.
- Cyber issues are playing out in property policies as business interruption losses stemming from cyber-attacks are an increasing concern for many organizations.

Casualty

- The US casualty insurance market generally softened in 2015 and, barring unforeseen changes, these conditions are likely to continue into 2016.
- Automobile liability remains among the most challenging of casualty areas. Nearly half of all auto liability clients renewed with rate increases in the fourth quarter of 2015, with trucking exposures facing a particularly difficult market.
- The workers' compensation insurance market continues to improve, with generally favorable conditions for buyers. Prescription drug prices remain a cost management concern.

Financial and Professional

- Entering 2016, demand for cyber insurance continues to grow across all industries and segments. Demand for protection against data breaches remains strong as concern over business interruption risks is growing. Capacity will continue to increase for most classes, barring unforeseen changes, but organizations should be prepared to fully outline their cyber security controls for underwriters for the best results.
- Employment practices liability insurance rates generally declined in 2015 and are likely to do so again in 2016, barring unforeseen events. Wage and hour claims filings have increased, as have related insurance offerings.
- Directors and officers (D&O) insurance rates are likely to continue to decline in 2016, barring unforeseen changes in conditions. Insurer and broker coverage innovations are also expected to continue.

Aviation

- The airline insurance market is expected to remain soft in 2016, barring unforeseen events. In the fourth quarter of 2015, most buyers renewed with decreases of between 15% and 25%. Competitive markets are also expected for general aviation and aerospace manufacturers.

Captives

- In early 2015, the Internal Revenue Service (IRS) included the formation of small captives on its annual list of questionable tax avoidance strategies. Any company seeking to form a small captive should follow a strict and detailed approach to ensure compliance.
- More captives may access terrorism insurance in 2016 as awareness of the potential benefits increases.

Employee Benefits

- Employers predict that in 2016 their health benefit cost per employee will rise by 4.3%, on average, according to Mercer, one of the Marsh & McLennan Companies.
- Employers are becoming more creative in how they support workforce health. For example, about one-fourth of large employers (24%) encourage employees to track their physical activity with a "wearable" device.

Energy

- Overall energy insurance market capacity increased in 2015, putting downward pressure on pricing. Barring unforeseen events, soft market conditions will likely continue in 2016.
- Energy companies have generally increased their focus on cybersecurity, including on regulations and adherence to certain contractual risk allocations to better manage each party's risk and exposure to cyber loss.

Environmental

- Barring unforeseen changes, the soft environmental insurance market conditions seen in 2015, which were driven by abundant capacity, are likely to continue in 2016.
- The rapid pace of M&A activity has led to an increase in environmental insurance purchases to help facilitate transactions.

Entertainment

- The market for entertainment and events insurance was relatively soft in 2015.
- Drone use and terrorism risk are expected to be prominent issues in 2016.

Marine

- The marine market significantly softened in 2015, largely driven by a continued influx of capacity, a soft reinsurance market, and reduced losses.
- A high number of mergers among marine underwriters in 2015 did not affect the overall market.

Political Risk

- Despite significant global political turmoil and violence, political risk insurance rates generally declined in 2015 and should do so again in 2016, barring a significant change in conditions.
- High risk areas are exceptions. For example, it is difficult to obtain coverage for Russia, while portfolios that included Turkey or Brazil generally saw increases of about 10% in the fourth quarter of 2015.

Surety

- Surety market outlook for 2016 is positive, assuming continued strength in the construction industry.

Trade Credit

- The market for trade credit insurance is expected to remain generally favorable for buyers into 2016.
- Larger rate reductions were possible in 2015 for portfolio programs covering multiple debtors (as opposed to single-debtor programs).

Note: For specific insurance market and risk trends by industry, see the "Industry Specialties" section of this report.

Chemical

AHEAD IN 2016

Underwriters seeking detailed submissions, including critical engineering information.

Excess casualty capacity expected to grow.

Greater awareness of product restrictions in environmental policies.

INSURANCE MARKET CONDITIONS

COVERAGE	SEGMENT	RATE CHANGE Q4 2015	RATE CHANGE Q4 2014
PROPERTY	LARGELY CAT-EXPOSED (GREATER THAN 50% OF VALUES)	10% DECREASE TO 5% DECREASE	3% INCREASE TO 10% INCREASE
	MODERATELY CAT-EXPOSED (10% TO 20% OF VALUES)	15% DECREASE TO 7.5% DECREASE	5% DECREASE TO 3% INCREASE
PRIMARY CASUALTY	GUARANTEED COST	5% DECREASE TO FLAT	2% DECREASE TO 7% INCREASE
	LOSS SENSITIVE	10% DECREASE TO FLAT	2% DECREASE TO 4% INCREASE
EXCESS CASUALTY		5% DECREASE TO FLAT	FLAT
ENVIRONMENTAL	POLLUTION LIABILITY	5% DECREASE TO FLAT	5% DECREASE TO FLAT
	CONTRACTOR POLLUTION LIABILITY	5% DECREASE TO FLAT	5% DECREASE TO FLAT
POLITICAL RISK		5% DECREASE TO FLAT	FLAT

The above represents the typical rate change at renewal for average/good risk profiles.

Market Commentary

Insureds in the chemical sector generally benefited from favorable insurance conditions in the fourth quarter of 2015 and are expected to do so again in 2016, barring unforeseen changes in conditions. Chemical companies with good loss histories, solid financials, and best-in-class operations were typically able to secure competitive terms. Companies with less favorable loss profiles often found insurers to be more aggressive on rates and closely monitoring deductible levels.

The aggressive stance for business by newer market entrants offset the effects of some insurer consolidations in 2015. Insurers generally offered more capacity to better-rated risks and/or companies with thorough underwriting submissions that included detailed engineering reports and loss information.

PROPERTY

Chemical clients generally saw an abundance of capacity and typically achieved double-digit rate decreases in 2015, especially for programs without significant losses. Depending on the hazard class, deductibles varied greatly. For example, insureds with vapor cloud explosion (VCE) risks may not have seen major changes in deductibles compared to insureds with less hazardous exposures. Moving into 2016, it is expected that natural catastrophe perils such as windstorms, floods, and earthquakes will remain a priority for chemical companies and insurers. Barring unforeseen events, the generally downward rate trend is expected to continue in 2016. A robust engineering service program with quality reports and updated maintenance and capital improvement information will likely remain critical to a successful renewal.

CASUALTY

The primary casualty market for chemical companies in 2015 was stable compared to previous years, with most buyers renewing flat or with slight rate decreases in the fourth quarter. Large chemical companies typically self-insured their general liability exposures. As chemical companies are generally confident in their safety protocols, retentions for workers' compensation and auto liability were significant in 2015.

Capacity in the excess casualty market increased as Lloyd's of London underwriters competed aggressively for new business. Some insureds achieved broad coverage and more competitive pricing on lead umbrella layers from Lloyd's syndicates. Assuming the industry's loss history remains positive, this trend is expected to continue in 2016.

Cyber liability and rail risks remained significant concerns for underwriters. Due to hacking and data privacy risks, insurers typically inquired about data sharing, type of data collected, and data security protocols, among other items. And because of growing concerns over losses arising out of overturned railcars, insurers have been asking about specific exposures, including the product carried, size of fleet, and percentage of owned versus non-owned. Auto liability for those excess insurers underwriting lower layers was also a concern. In 2016, flat to increasing rate trends for lead layer attachments below $25 million are expected for auto liability; however, the overall competitive excess marketplace will likely offset potential increases.

ENVIRONMENTAL

Ample capacity and increased merger and acquisition (M&A) activity were key drivers of the environmental insurance market in 2015. In the fourth quarter, rates remained generally flat for programs without favorable loss histories, with some organizations experiencing slight decreases. Short-term, renewable programs were typically favored by chemical firms purchasing environmental insurance. Companies with adverse loss histories typically saw modest increases or exclusions on their policies. Some insurers are restricting coverage for certain chemical products that were recently added to regulatory action lists.

The marketplace for complex, legacy transactions involving mergers and acquisitions (M&A) or brownfields activity continued to be competitive; however, a smaller number of insurers were able to deliver on policy terms in excess of 10 years. There remains significant insurance market creativity in crafting coverages for these risks.

POLITICAL RISK

Chemical companies were typically able to purchase broad coverage for political risk in all geographies at competitive rates in 2015, except in countries experiencing political unrest. Although geopolitical and macroeconomic instability may seem to be increasing, the market remains soft due to several new market entrants over the past three years. Soft market conditions are likely to continue in 2016, although conditions could change if underwriters see significant losses. Companies with significant exposures in emerging markets should ensure they are properly covered well before a potential loss event occurs.

RISK TRENDS

Cybersecurity

The increase in M&A activity in the chemical space — mainly driven by economic challenges and the influence of shareholder activists — has increased chemical companies' cyber exposures. The integration of acquired companies can create cybersecurity vulnerabilities involving the breach of proprietary data. With increased focus on cyber risks, chemical companies are evaluating the operational risks they may face should they experience a breach in cybersecurity.

Product Risks

Product recalls, chemicals presenting a toxic inhalation hazard, the transportation of chemicals by rail, and products that use nanotechnology have become increasingly difficult to insure. Insureds should be prepared to address underwriters' questions regarding such risks and to differentiate their operations from their competitors.

Natural Hazards/Supply Chains

Despite limited natural disaster losses in 2015, catastrophes such as floods, earthquakes, and windstorms can be difficult to insure for chemical companies. Chemical companies' supply chains can be complex, often involving the shipment of materials both to and from the US. Organizations should continue to focus on mitigating preventable risks and preparing for unforeseen events. Chemical companies should review the adequacy of insurance coverage for business interruption risks related to natural catastrophes. Risk managers can work with risk engineers to make recommendations, and with risk advisors to quantify exposures and develop natural hazard modeling to share with underwriters. Providing complete and accurate data from reliable sources regarding loss estimates can help organizations achieve favorable outcomes at renewals.

CONTACT:
MARY RUSSELL
US Chemical Practice Leader
+1 973 401 5097
mary.russell@marsh.com

For further information, please contact your local Marsh office or visit our website at marsh.com