

Environmental Risk

Willis

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Trends in Environmental Risk Management and Insurance

A changing landscape in corporate regulations and in the insurance markets is providing new opportunities for the buyers of Environmental insurance.

Background

The unremitting demand for greater corporate transparency has resulted in new, more stringent governance obligations and more onerous financial disclosure requirements almost everywhere in the world. In the US, for example, the stakes have risen sharply with the passage of the Sarbanes-Oxley Act and its implicit demand for greater transparency with respect to corporate risk exposures.

Furthermore, the intensifying focus on the adequacy of corporate disclosures has prompted increased scrutiny by shareholders, securities analysts and lenders. With environmental liabilities more visible than ever, corporations are under greater pressure to better manage, contain and transfer these risks. This pressure, coupled with increased product familiarity, has resulted in more interest in Environmental insurance.

In addition, gains in M&A market momentum across multiple industry sectors continue to stimulate the use of Environmental insurance as transaction parties and their professional advisors seek solutions for pollution-related deal impediments.

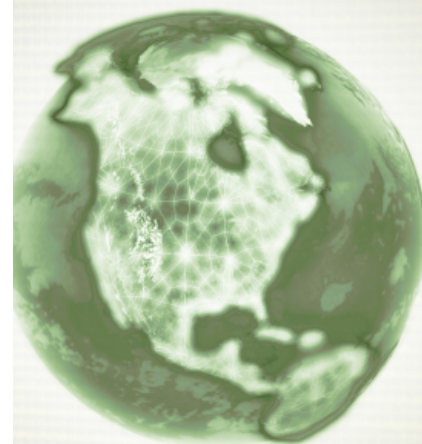
Overview of US and International Insurance Markets

The Environmental insurance market continues to enjoy healthy growth and is becoming a significant line of business for many mainstream insurance companies. Willis estimates the worldwide premium income from Environmental insurance exceeded \$2.75 billion for 2004, more than a 10 percent increase over the previous year. This estimate does not include premium flowing into the various European pollution pools nor the limited pollution coverage granted in some territories under General Liability programs.

At least 90 percent of the premium flow into the specialty Environmental insurance market is generated in the US, where market conditions remain buoyant. We estimate that Europe probably accounts for approximately 70 percent of Environmental premium generated outside the US. Willis is experiencing encouraging growth in European business as the specialty Environmental insurers continue to demonstrate that they can offer more effective and competitive solutions than local pool schemes.

Pricing and Capacity

The Environmental market was not subject to the remarkable premium increases or the subsequent market softening seen in some other insurance market segments in recent years. Environmental premium increases have remained fairly constant with most product lines still showing average increases for 2004 that are under 20 percent. Willis does not expect this situation to change significantly in 2005.



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The worldwide premium income from Environmental insurance exceeded \$2.75 billion for 2004, more than a 10 percent increase over the previous year.

The Environmental market did, however, exhibit a form of hardening during 2003 and 2004 as challenges surfaced in both coverage and engineering requirements. A key factor for the primary insurers has been the stance of the limited group of reinsurers active in the Environmental area. In the past few years, these reinsurers have been seeking opportunities to restrict the terms of their treaty arrangements with primary insurers. However, there are some indications that this pressure has begun to ease.

The total market capacity available from the primary Environmental markets has in the past few years subsided somewhat to around \$500 million, mainly as a result of the general hardening of reinsurance market conditions. Some Environmental insurers are able to provide limits of up to \$100 million on a single placement, and since very few projects require limits higher than this figure, the reduction in total market capacity has not been problematic. Where higher limits are required, it is possible to build capacity by developing layered programs with different insurers. In some cases, it may also be necessary to access facultative reinsurance markets.

Willis expects more capacity to become available for primary Environmental insurance placements as general insurance market conditions continue to improve.

Product Developments

During 2004, Environmental insurers launched a number of new product offerings. They included a new web-based tank program and a number of product line combinations designed to provide more cost-efficient solutions on a single policy form. There have also been a number of significant developments with respect to established product lines. Some of these developments are outlined below:

Clean-Up Cost Cap

Liability Transfer and Guaranteed Fixed Price Remediation programs are playing an increasingly prominent role in the management of legacy liabilities as organizations seek to present clear and credible evidence that these liabilities are being efficiently managed, funded and transferred. A prerequisite for these programs is a Clean-Up Cost Cap policy – often combined with an associated funding mechanism (such as a finite risk insurance policy). Environmental insurers are expanding their presence in this specialty area in response to the upsurge in project opportunities, especially in relation to the increasing number of privatization initiatives.

Secured Creditor

In the spring of 2004, AIG announced that it would be

withdrawing from the Secured Creditor market. Originally introduced in the late 1990s, Secured Creditor policies address lender liability exposures and have become a staple requirement for many financial services companies, especially those concerned about the potential impact of environmental issues on the value of real estate collateral.

Some of the Environmental insurers offering Secured Creditor policies have had adverse loss experiences from this product and have been progressively limiting coverage in past years. There are still a few carriers offering Secured Creditor products. However, given the limited market, buyers can expect fairly rigorous underwriting protocols and increasing rates.



Summary

The continued market growth is fueled by the increasing institutionalization of the purchase of Environmental coverages. The specific drivers of this growth include:

- Increased emphasis on corporate financial disclosure and corporate governance obligations
- Greater penetration of M&A/divestiture market
- Ongoing expansion of privatization initiatives
- Greater use of fixed price contracting within the environmental services industry Increased market awareness and product breadth

Overall, the Environmental insurance market continues to provide competitive pricing and flexible terms and conditions. The likelihood of further market growth is considerable, since overall penetration is still very small (particularly outside of the US). Willis anticipates that premium volume will rise substantially in the coming years. Over time, increased competition and the pressure to innovate can only be good news for buyers of Environmental insurance.

Silica Exposures in Construction

Exposure to silica under high-risk conditions is being examined in light of the insurance industry’s problematic experience with asbestos. The complexities surrounding silica exposure are demanding a new and more creative approach – an approach that may come from the Environmental underwriting community.

Introduction/Background

Silica is one of the most common substances on earth and an essential element in construction, transportation, manufacturing, agriculture and mining. A common compound of silicon and oxygen, silica occurs naturally in crystalline and non-crystalline forms. The crystalline form (also known as quartz) has the potential to cause serious disease.

According to the Occupational Safety and Health Administration (OSHA), even though silica is all around us, physical harm ensues only after prolonged, frequent, repeated or intense exposure in situations where silica particles have become airborne and are small enough to be inhaled. The result of such exposure can be silicosis, recognized by experts as the oldest occupational lung disease. The inhalation of silica has also been linked to cancer, tuberculosis, emphysema, chronic obstructive pulmonary disease and autoimmune diseases.

The most severe worker exposures to crystalline silica result from sandblasting operations. In the construction industry, sandblasting may be used to remove paint and rust from stone buildings, metal bridges, tanks and other surfaces. Other construction activities that may produce crystalline silica dust include jack-hammer operations, rock/well drilling and concrete mixing. Tunneling operations, repair or replacement of rotary kiln linings and cupola furnaces, and setting, laying and repairing railroad tracks are also potential sources of exposure.

Concrete and masonry products contain silica sand and silica-bearing rock. Construction workers may be readily exposed to respirable crystalline silica during activities such as:

- Chipping, hammering and drilling of rock
- Crushing, loading, hauling and dumping of rock
- Abrasive blasting using silica sand as the abrasive
- Abrasive blasting of concrete (regardless of abrasive used)
- Demolition of concrete and masonry structures and dry sweeping or pressurized air blowing of concrete, rock, or sand dust.

Even materials containing small amounts of crystalline silica may be hazardous if they are used in ways that produce high dust concentrations.

Litigation Environment

It is important to understand that there is no silica-related health crisis; data shows that silica-related mortality has declined significantly since 1969. However, even though the number of deaths from silicosis has been declining, the number and rate of insurance claims filed have increased dramatically over the past few years. For example, claims filed against one major silica supplier have increased from 93 in 1997 to nearly 20,000 in 2003. Other major defendants and employers have been subject to similar increases in claims.

Most experts believe the increase in the number of claims has been driven not by the disease itself but by two other factors:

1. The plaintiffs’ bar has intensified its focus on silicosis as an offshoot of asbestos litigation. Many of the same attorneys are involved in both asbestos and silica, and they are actively seeking silica claimants as the asbestos well of defendants starts to dry up due to bankruptcies and other reasons.
2. Doctors and radiologists have greater expertise in looking for and diagnosing silicosis.



Government agencies recommend the use of engineering controls and work practices to control dust exposure, in addition to respiratory protection and air monitoring to reduce hazards to workers involved in high-risk activities. Silica-based products have been banned in the UK and Europe since the late 1950s; such a ban does not exist in the US. Current estimates of the number of US workers exposed to crystalline silica range from one to more than three million workers. This is a very wide range, and the exposure levels and conditions of exposure may vary widely as well.

The Next Asbestos?

Although silica has been compared to asbestos, there are significant differences. Some major points of contrast:

1. Silica is everywhere while asbestos is used on a very limited basis throughout the world.
2. Asbestos defendants are held to a standard of strict liability; silica defendants are held to less stringent standards of strict liability. In fact, some silica defendants have successfully used the “sophisticated user” defense, among others.

Because 30 major defendants have successfully defended themselves, Workers’ Compensation is viewed as more exposed than Third-Party Liability. Although this is not good for Workers’ Compensation costs, it generally provides a less expensive remedy than General Liability coverage.

3. The insurance industry has learned from its asbestos experience and has, for years, excluded silica from high class risks.

Some insurance industry analysts believe that the need for silica reserves has not yet been fully recognized by carriers. Actual liabilities are very difficult to project because of the long latency period and the uncertainty about whether or not strict liability may become the standard. While some experts do not expect silica to rise to the level of asbestos as a social and insurance industry problem, it is, in fact, very difficult to predict what will happen. The key issues appear to be the growth in the number of plaintiffs, the interplay between Workers’ Compensation and General Liability, and the extent to which strict liability emerges as the basis for liability

Insurance Industry Response

Defendants in the silica cases hotly dispute the extent of the injuries claimed by the plaintiffs and defend their own safety records. However, as with other mass tort liabilities such as pollution and asbestos, it is difficult and expensive to avoid

liability. The critical issue for a contracting company may not be whether or not it caused silica injury, but who will pay for the litigation – the contractor or its insurance carriers?

Research has shown that all major construction Casualty underwriters are focused on silica exposures and are explicitly excluding coverage and/or are carefully selecting risks so that silica exposure is mitigated.

The industry is undecided about whether the absolute pollution exclusion applies to silica. Some insurance companies affirm that the pollution exclusion protects them, but there is no clear indication that courts will agree. Some courts have held that the pollution exclusion only applies to environmental pollution and does not extend to include silica. Others have held that the exclusion would apply because silica is listed under OSHA.

Underwriters suggest, therefore, that the best way to avoid the exposure is to exclude coverage for silica rather than rely on court interpretation of the pollution exclusion. Unfortunately, there are no common or standard industry silica exclusions currently in use. However, most insurance companies encourage the exclusion of silica in general liability coverage for general commercial firms, owners and contractors, and for products/completed operations.

Typical company endorsements exclude bodily injury, property damage, or personal and advertising injury related to the actual, alleged, or threatened presence of or exposure to silica in any form, or to harmful substances emanating from silica. This includes the use, consumption, ingestion, inhalation, absorption, existence, presence, proliferation, discharge, dispersal, seepage, migration, release or escape of silica, as well as any contact with or exposure to it.

Clearly, insurance coverage for silica liability is complex. Insurance policies of several years may apply. The more recent policies will likely have an absolute pollution exclusion, and possibly silica exclusions; older policies may be difficult to find. In addition, questions regarding trigger and allocation may dramatically impact coverage issues.

Lines of Coverage Exposed

The major lines of coverage exposed are:

1. **General Liability and Umbrella Liability** – This is the preferred platform for the plaintiffs’ bar because coverage allows pain and suffering as well as punitive damages. To date, the main targets have been suppliers of silica, silica products or sandblasting equipment manufacturing (failure

to warn) or the manufacturers of protective equipment (failure to adequately protect). "Failure to warn" was the basis for the shifting of asbestos claims from WC to Products Liability, which in turn, opened the floodgates to litigation.

- 2. Workers' Compensation** – To the extent that liability cannot be shifted to a third party, Workers' Compensation is the primary coverage that will apply to silica losses. Generally, WC awards are limited in scope, but the plaintiffs' bar has also attempted to circumvent such limitations by alleging that employers were guilty of intentionally harming employees by knowingly exposing them to a harmful substance without proper warning.

A successful liability defense used by suppliers of silica is the "sophisticated user" or "sophisticated purchaser" doctrine. This doctrine takes the position that the users (employers) knew or should have known about the dangers of silica or silica products and that the supplier has no duty to warn the user and by extension, the user's employees. Successful application of this doctrine shifts the burden from General Liability/Umbrella to Workers' Compensation.

- 3. Directors & Officers Liability** – To a lesser extent, there may be exposure from silica under Directors and Officers in the event of adverse impact on financial performance.

Scope of Exposure

As discussed earlier, employees in a variety of industries may be exposed to silica. Workers in the construction industry, including the following, are considered some of the most highly exposed:

- Brick and concrete cutting and sawing
- Concrete drilling
- Concrete mixing
- Earthmoving
- Excavation
- Handling silica containing materials
- Jack hammering
- Masonry work
- Road or highway construction
- Rock/well drilling
- Mining and quarrying
- Furnace installation and repair
- Ship building and repair
- Refractory operations
- Iron and steel works, and foundries
- Industries which use abrasive powders

Possible Insurance Solutions

Contractors with silica exposure find themselves in a precarious position when it comes to transferring or insuring this risk. One possible solution may come from the Environmental underwriting community. As noted earlier, a key question is whether the absolute pollution exclusion applies to silica. The typical commercial General Liability policy contains or is endorsed with the absolute pollution exclusion denying insureds protection for pollution-related losses. However, the interpretation of the exclusion and the definition of "pollutants" can be complex and subject to debate.

Most Pollution Liability policies, such as Contractors Pollution Liability (CPL) policies, consider silica to be a covered pollutant. Although such pollution policies will not generally provide third-party silica coverage for products, they will help fill the gap by providing bodily injury and/or property damage coverage for an event related to a pollution condition. Those interested in exploring silica coverage options should speak with a member of the Willis Environmental Practice.

Summary

Silica continues to be a serious threat to workers in the construction industry. Insurance coverage for silica is virtually non-existent in the current construction insurance marketplace. Strong safety and risk management procedures are crucial for contractors to address and mitigate current and ongoing exposures. Several factors combine to make insurance coverage for past losses very complex. It is still unknown if silica is poised to create a liability crisis similar to that caused by asbestos for the contracting and insurance industries. Willis will monitor the situation closely and provide updates as this intriguing exposure continues to evolve.

This article is a condensed version of a white paper written by Jeff Hilton, CPCU, Senior Vice President, of Willis' Construction Risk Management Group. For more information or a copy of the complete white paper, please contact either jeff.hilton@willis.com or gary.rodrigues@willis.com.

People and Events

Willis is pleased to announce that it has signed on as a 2005 Sponsor (Level 6) for **NAID/ADC**, an association of defense communities. For nearly 25 years, NAID/ADC has been the single source for any organization involved in the economic development, conversion and reuse of military real estate. Today, in addition to assisting communities affected by base closure and realignment, NAID/ADC is helping communities with active installations realize new economic development. For more information, please visit: www.defensecommunities.org.

January 30-February 1: **Rick Craig** (West) and **Mike Balmer** (National Practice) participated in NAID/ADC's 2005 Annual Winter Meeting in Tempe, AZ.

On February 9, **Gary Rodrigues** (National Practice) and **Janet Bos** (Toronto) made a presentation to the Canadian Capital Region Chapter of the Risk and Insurance Management Society (**RIMS**) as part of its Professional Exchange of Risk Knowledge Program. The presentation focused on Environmental Liability protection and was attended by more than 40 local chapter members and guests.

Brian McBride (Southeast) spoke at the Tampa RIMS luncheon on January 19. Among his topics of discussion were the current state of the Environmental insurance market and emerging environmental risks relevant to Florida such as silica, underground storage tanks, mold, environmental closure financial assurance, contaminated property transfers and Sarbanes-Oxley issues.

On April 7, **Robin Kelliher** will be sitting on the Brownfields Panel of the **56th Atlantic Builders Convention** being held in Atlantic City, NJ from April 5-8, 2005. This convention addresses the region's housing industry and is expected to draw more than 10,000 participants, including builders, developers, remodelers, subcontractors and consulting professionals from a six-state region.

Rich Sheldon (Mid-Atlantic) will be leading a panel on "Designing an Effective Pollution Liability Insurance Program" at **RIMS 2005** in **Philadelphia**. Other participants will include corporate risk managers of leading international engineering services and high-tech design/manufacturing companies.

Willis is also pleased to announce it has signed on as a Sponsor for the **2005 RTM Conference "Contaminated Property Transactions: Deals for Redevelopment"** to be held in Washington, DC from April 6-8. **Rich Sheldon** will lead a

presentation on "Environmental Insurance Tools for Contaminated Property Transactions – Consummating the Deal." For more information, please visit www.rtmcomm.com.

Robin Kelliher (NJ) will be the Prime Contractor Session Chair at **EPCON 2005**, the **Environmental Procurement Conference**, being held in New Jersey on April 18. The Environmental Procurement Conference brings together top leaders in the environmental industry to discuss upcoming procurement opportunities.



Fresh Face

John H. Broomfield, Vice-President

John Broomfield, Vice President, recently joined Willis' Southeast Regional Environmental Team. He works with clients to address their past, current and future environmental liabilities.

Before coming to Willis, John was Vice President for Marsh USA, Global Broking Environmental Department in Atlanta. He handled the placement of Environmental products for 12 offices located throughout the southeastern US.

Prior to his tenure at Marsh, John served for five years as an underwriter in Zurich North America's Environmental and Design Professional Department. He was responsible for placing Environmental Impairment Liability, Contractor and Real Estate policies throughout the southeastern US.

His career began in the Environmental Consulting Division at AIG where he performed hundreds of risk surveys on every type of risk underwritten by AIG.

John received his MA in Environmental Policy from George Washington University and his BS in Geology from Skidmore College in Saratoga Springs.

Key Contacts

Corporate Practice

John Reynolds
CEO and Practice Leader
New York, NY
Tel: 212 837 0413
john.reynolds@willis.com

Michael Balmer
Boston, MA
Tel: 617 351 7530
michael.balmer@willis.com

Gary Rodrigues
Boston, MA
Tel: 617 351 7405
gary.rodrigues@willis.com

Rick Secchia
New York, NY
Tel: 212 804 0512
rick.secchia@willis.com

Judi Martinez
Chicago, IL
Tel: 312 621 4762
martinez_ju@willis.com

Chuck Zaher
Regional Environmental Team Leader
Chicago, IL
Tel: 312 621 4745
zaher_ch@willis.com

Jeff Fritts
Dallas, TX
Tel: 972 715 6331
fritts_je@willis.com

Rick Wilson
Dallas, TX
Tel: 972 715 6200
richard.wilson@willis.com

James Gilley
Tel: 865 583 3754
Knoxville, TN
james.gilley@willis.com

Michael Szot
Los Angeles, CA
Tel: 818 552 4276
michael.szot@willis.com

Mark Vila
Milwaukee, WI
Tel: 414 203 5365
mark.vila@willis.com

Rachel Fischer
Minneapolis, MN
Tel: 763 302 7217
rachel.fischer@willis.com

Robin Kelliher
New Jersey (Florham Park)
Tel: 973 410 4669
robin.kelliher@willis.com

Dawn Berry
New York, NY
Tel: 212 837 0638
dawn.berry@willis.com

Allen Jones
Regional Environmental Team Leader
New York, NY
Tel: 212 837 0767
jones_ae@willis.com

Scott Kosienki
New York, NY
Tel: 212 837 0714
scott.kosienki@willis.com

Amber Lenweaver
New York, NY
Tel: 212 837 0706
amber.lenweaver@willis.com

Susan Vetter
New York, NY
Tel: 212 837 0708
susan.vetter@willis.com

Anthony Wagar
New York, NY
Tel: 212 804 0551
anthony.wagar@willis.com

Richard Ringenwald
Radnor, PA (Philadelphia)
Tel: 610 254 5985
richard.ringenwald@willis.com

Richard Sheldon
Regional Environmental Team Leader
Radnor, PA (Philadelphia)
Tel: 1 610 254 5625
richard.sheldon@willis.com

Jeff Clarke
San Francisco, CA
Tel: 415 955 0219
jeffrey.clarke@willis.com

Rick Craig
Regional Environmental Team Leader
San Francisco, CA
Tel: 415 955 0171
rick.craig@willis.com

Brian Lynch
San Francisco, CA
Tel: 415 955 0142
brian.lynch@willis.com

Lisa Anderson
Seattle, WA
Tel: 206 386 7453
lisa.anderson@willis.com

Buff Nelson
Seattle, WA
Tel: 206 386 7926
buff.nelson@willis.com

Regional Contacts

Brian McBride
Regional Environmental Team Leader
Atlanta, GA
Tel: 404 224 5126
brian.mcbride@willis.com

John Broomfield
Atlanta, GA
Tel: 404 224 5095
john.broomfield@willis.com

Peter Romaine
Atlanta, GA
Tel: 404 224 5087
peter.romaine@willis.com

Eric Smith
Atlanta, GA
Tel: 404 224 5074
eric.smith@willis.com

Katrina Bergstrom
Chicago, IL
Tel: 312 621 4932
katrina.bergstrom@willis.com

Disclaimer: This update is intended to provide US readers with general information regarding developments on environmental insurance and risk management issues. Please consult your attorney for legal advice on these issues.