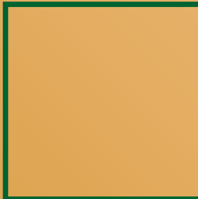
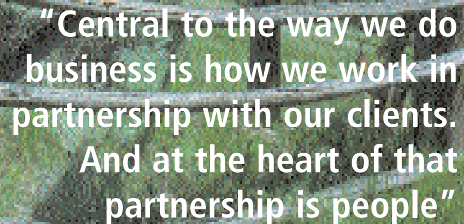
Environmental



Willis

Environmental



New ventures – New risks

Willis Limited is a leading global insurance broker, developing and delivering professional insurance, reinsurance, risk management, financial and actuarial services to corporations, public entities and institutions around the world. With over 300 offices in more than 100 countries, its global team of 14,500 associates serves over 50,000 clients in 160 countries with an annual turnover in excess of US$1.3bn.

Willis has particular expertise in serving the needs of clients in such major industries as construction, property, aerospace, marine and energy. In June 2001 the Group returned to public ownership and is listed on the New York Stock Exchange (symbol: WSH).

Our diverse array of clients share one common characteristic – exposure to risk. They turn to us because we help them to identify ways to minimise, finance or transfer their risks.

Whatever the nature of the challenge faced, we will assemble the team to meet that challenge, combining the skills our clients need and applying them on their behalf through a single point of contact.

Willis has a proven track record of solving corporate environmental challenges through the application of sophisticated risk management techniques, the appropriate use of insurance and the utilisation of alternative risk financing mechanisms. Insurance plays a more prominent role than ever before in environmental risk management. With relatively straightforward underwriting requirements, highly flexible policies and realistic yet competitive pricing, there is no reason in today's market to risk having an uninsured environmental loss.

Willis has a proven track record of solving corporate environmental challenges.

Principal types of coverage

The principal types of coverage/risk transfer products available to Willis clients through the environmental insurance market can be outlined as follows:

Environmental Impairment Liability for Operational Risks
Environmental Impairment Liability policies can provide cover for liabilities associated with contamination arising as a result of future operations regardless of whether it is a result of a sudden and accidental incident or a gradual cause. Cover is typically provided for on-site and off-site statutory clean up, third party property damage and bodily injury, and associated legal defence costs. Policy periods of up to 5 years are available.

Contractors' Pollution Liability
Contractors' Pollution Liability is specifically designed to provide coverage for pollution liabilities associated with contactor operations (including asbestos removal work), whether these arise from new pollution or through the mobilisation of existing contamination. Cover can be extended to business interruption risks such as the financial consequences of delayed start-ups in construction projects.

Environmental Impairment Liability for Historical Pollution
Environmental Impairment Liability policies can provide cover for potential liabilities associated with pre-existing contamination from historical operations, whether for the benefit of the "original polluter", a current site owner, a property developer and/ or a buyer who has inherited the risk through the terms of a sale and purchase agreement. Cover is typically provided for on-site and off-site statutory clean-up, third party property damage and bodily injury, and associated legal defence costs. Policy periods of up to 10 years can be arranged.

Remediation Cost Cap
These "stop-loss" programmes can be designed to protect against cost overruns on contamination clean-up schemes. A cost-capping programme mitigates the financial risk by providing the funds to complete such work in the event of a cost overrun due to more extensive or severe contamination being found. The insurance can be combined with sophisticated funding techniques to remove timing uncertainties and make the most effective use of capital funds.

Combined Programmes and Liability Buy-outs
These are site or portfolio specific techniques which blend a combination of the principal coverages with an efficient funded element to cover projected known remediation costs. This allows for the negotiation of a flexible insurance programme, including the scope for policy periods in excess of 10 years.

Liability buy-outs provide an increasingly attractive solution to companies seeking a comprehensive exit from environmental liabilities. These programmes can be structured to provide buyers and/or sellers with a permanent buy-out of environmental liabilities without affecting ownership and control of the relevant property assets.

environmental@willis.com

Environmental

Environmental insurance for transactions

Contamination and pollution issues are among the hardest risk issues to qualify accurately and manage as part of transactional deals. This leads to financial uncertainties which can hinder negotiations or affect the revenue earning capacity of the project or even prohibit a deal completely.

The pressures to assess properly and manage environmental risks have never been greater and are continuing to increase. These pressures come from many sources including:

– Increasing environmental legislation, which exposes companies to a greater risk of incurring liabilities and costs
– Investors, buyers and sellers requiring evidence of satisfactory environmental management and performance
– Increased expectations of stakeholders in relation to corporate responsibility
– The need to maximise value and minimise risk during transactions
– Growing awareness and perception of environmental issues
– Contractual requirements and exposures, including the need for "clean exits"

The pressures to assess properly and manage environmental risks have never been greater....

Willis Limited

Ten Trinity Square
London EC3P 3AX
Telephone: +44 (0)20 7975 2481
Email: environmental@willis.com

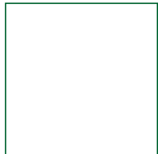
www.willis.com/m&a

Amsterdam
Athens
Auckland
Bahrain
Bangkok
Beijing
Bermuda
Bogota
Brussels
Budapest
Buenos Aires
Caracas
Chicago
Columbo
Copenhagen
Dubai
Dublin
Frankfurt
Helsinki
Hong Kong
Istanbul
Johannesburg
Kuala Lumpur
Lisbon
Luxembourg
London
Madrid
Manila
Mexico City
Milan
Montreal
Moscow
Mumbai
New York
Oslo
Paris
Prague
Riyadh
Santiago
Sao Paulo
Seoul
Singapore
Stockholm
Strasbourg
Sydney
Taipei
Tokyo
Warsaw
Zurich

SFS/2097/03/04

Willis Limited, Registered number: 181116 England and Wales.
Registered address: Ten Trinity Square, London EC3P 3AX.
Lloyd's Broker and Member of the General Insurance Standards Council.

Environmental Insurance



The success of any commercial venture, be it a merger, acquisition, joint venture or other equity sharing transaction depends on the effective management of risk.

Environmental risks, such as historical contamination, are amongst the hardest risks to quantify accurately, verify and manage. This has led to an increasing demand for financial solutions to environmental problems resulting in a striking growth in the specialist environmental insurance market.

Environmental risk transfer solutions can, inter alia, be used to:

- eliminate/mitigate potential deal breakers and facilitate transactions
- reassure financiers and reduce debt service costs
- protect acquirers from environmental liability exposures
- strengthen negotiating positions and maximise transaction values
- ensure clean exits for Venture Capital, Private Equity and other investors
- underpin or replace contractual mechanisms such as warranties and indemnities.

The principal environmental coverages are:

Historical Contamination Cover

Arranged for liabilities associated with pre-existing contamination or for contingent liability exposures associated with previous divestments by the target company.

Cover is typically provided for both third party property damage and bodily injury claims (resulting from off-site migration) and statutory on-site and off-site clean up costs. It can however, be extended to cover issues such as business interruption or economic loss associated with contamination (e.g. rental income, loss in property values).

Operational Pollution Risks

Industrial operations present an on-going risk of pollution or contamination (e.g. leakage from underground fuel storage tanks). Public Liability policies typically exclude gradual pollution risks and will not cover remediation costs. Specialist cover is available to indemnify the insured against on-going pollution risks resulting from unanticipated discharges, leakages or spillages etc.

Liability Capping

Due diligence exercises often identify 'known liabilities' such as the need for a contamination clean up exercise or a capital investment programme.

Cost estimates for such issues are notoriously inaccurate, potentially leading to cost overruns. Significant excesses could jeopardise the viability of the proposed transaction and these concerns often cause financial institutions to adopt an unusually cautious approach to lending where deals involve a major remediation programme.

environmental@willis.com

Willis

Insurance mechanisms can be designed to remove this risk by providing the funds to complete such works in the event of a cost overrun. The insurance can be combined with risk funding/financing options to remove timing uncertainties and make the most efficient use of capital funds.

Long policy periods can be arranged with significant limits for multi-event or portfolio covers. Policies are designed to respond, where possible to any changes in legislation that may occur during the policy period.

The different coverages are often combined in a single bespoke risk transfer solution to suit the particular requirements of the transaction.

Policies can be worded to be fully transferable and often jointly insure various parties (e.g. acquirer and financial backers). They can also be structured and worded to provide 'back to back' coverage of indemnity or warranty clauses.

Coverage can often be designed and placed in extremely tight timescales on the evidence of existing survey reports.

Case Study
Environmental insurance unlocked a £15 million property deal when concerns over potential environmental liabilities looked set to thwart the deal. An environmental assessment identified contamination beneath the property, a former electricity transformer station, although no remedial works appeared to be necessary. However, due to access restrictions, it had not been possible to investigate many areas of the site, and as a result it was possible that contamination could be more severe and widespread than initially identified.

The vendor, a major UK utilities company, was to be indemnified by the purchaser for all liabilities arising from ground contamination. The vendor was concerned that, as the original polluter, they could face such liabilities if the purchaser was not able to fund future clean-up works that may be required. This was of particular concern as the purchaser was a special purpose company (SPC) with no asset base, established to develop the site for a residential end use. The SPC's parent company refused to offer a parent company guarantee, whilst the vendor was adamant that the indemnity offered insufficient protection. The result? Deadlock.

Willis successfully placed 10 years' environmental insurance cover for both the vendor and purchaser, providing backing to the vendor's contingent liability without the need for the purchaser to provide a parent company guarantee. Both parties gained considerable value from the purchase of insurance, which cost less than one percent of the deal value. The vendor gained a clean exit from the site sale whilst maximising the sale price, and the purchaser gained certainty that potential future losses would be covered.

"Turning risk to opportunity"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

David Barr
barrd@willis.com
+44 (0)20 975 2310

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

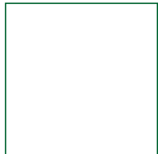
Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

MA/2413/09/04

Financing Environmental Risk in the Chemical Sector



The global environmental agenda is developing at a rapid pace. New liabilities are continually being created as legislative frameworks evolve in response to the changing demands of the international community.

Changes to accounting procedures are altering the way in which companies can provide for liabilities thereby increasing the visibility of potential environmental risks to shareholders and investors.

Demonstrating effective management of environmental risk is a corporate governance obligation and a key priority for companies wishing to reassure stakeholders and proactively manage their corporate reputation.

Whilst chemical companies face a diverse range of environmental liabilities, the most financially significant exposures tend to fall into the following broad categories:

- Operational pollution risks that are customarily associated with the use and storage of potentially polluting materials
- The legacy of contamination resulting from historic operations
- Liabilities associated with the off-site disposal of waste (especially relevant in the US)
- Contingent losses associated with the above issues – such as business interruption costs.

Most chemical companies have established reserves for known clean up obligations or budgeted capital expenditures for improvement programmes.

Unfortunately, however, the risks associated with pollution or land contamination are impossible to predict with any certainty and such provisions may therefore prove inadequate.

The discovery of new issues, the accelerated closure of plants, tightening legislation or increasingly strict enforcement could lead to additional liabilities. Such uncertainties can have a material effect on the company's liquidity or financial condition, which may in turn undermine investor confidence.

Environmental insurance and alternative risk transfer mechanisms are playing an increasingly prominent role in the management of such financial risks. The market can now offer significant capacity, with long policy periods and pricing is now realistic and competitive. There is substantial flexibility in the design of insurance contracts and the underwriting criteria are relatively straight forward.

Willis has extensive experience in the design and placement of such programmes and is one of the leading environmental insurance advisers.

Environmental Impairment Liability
The continual improvement of environmental management systems within an organisation will reduce the probability of an environmental loss during ongoing operations, but cannot eliminate it entirely.

The growing need to address uninsured exposures has led to the incorporation of specialist environmental insurance policies within corporate risk management strategies. Environmental Impairment Liability programmes typically provide catastrophe protection for such exposures on a renewable basis. They are designed to dovetail with the general liability programme and cover operational pollution risks, historic contamination liabilities and associated contingent exposures.

Facilitation of Commercial Transactions
Most environmental liabilities do not crystallise until a site or business is to be sold or redeveloped. The complexity of modern deals, ever tighter timescales and pressing completion pressures require fast, effective solutions to the allocation of environmental risks between counterparties.

Environmental insurance is now being routinely used as a catalyst to unlock deals by removing uncertainty, maximising disposal values and avoiding the need for environmental indemnities.

Balance Sheet Protection
Environmental risk financing mechanisms can be used to cap the cost of 'known' remediation obligations (individually or as an aggregate), hedge against the impact of timing uncertainties and transfer the risk of encountering further 'unknown' issues.

Accounting standards require publicly quoted companies to disclose their environmental liabilities on their financial statements. Structured solutions based upon 'blended' programmes (incorporating an element of self funding and risk transfer) can be used to remove, or at least offset, environmental liability provisions from the balance sheet and reduce the risk of earnings volatility. They typically include a profit sharing provision to reward a favourable loss experience.

Such programmes help companies to release reserves, manage cash flows, cap liabilities and therefore enhance shareholder value.

"The legacy of the past should not affect the future"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

David Barr
barrd@willis.com
+44 (0)20 975 2310

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

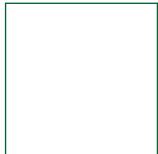
Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

MA/2413/09/04

Contractors' Pollution Liability



Construction activities present a range of pollution risks, especially if the relevant sites are potentially contaminated. By their very nature, many of these liabilities are not covered under public liability policies, leaving contractors, and employers with uninsured risk exposures.

Contractors are exposed to a wide range of pollution related liabilities when working on contaminated sites or actively carrying out remediation activities. In the increasingly competitive contractor market there is growing pressure to accept contractual responsibility for consequential risks.

These risks can arise in many different ways, from exacerbation of pre-existing site contamination, to new pollution issues caused by the contractor's own operations. They can also have a variety of knock-on effects including the financial implications of project delay.

Typically, contractors will have some limited pollution cover under general liability policies but gradual pollution exposures are usually excluded. Gradual pollution conditions may not become evident until some time after the completion of the works.

Contractors' Pollution Liability Insurance

Contractors' Pollution Liability insurance (CPL) is designed to protect contractors, project sponsors and developers by covering pollution risks which are excluded from general liability policies.

Many project specifications require adequate pollution liability insurance to be in place and contractors can arrange this on a portfolio basis or on a contract specific basis. Furthermore in some circumstances it may be more practical or economic for a project sponsor to arrange such cover on behalf of all the contractors working on a project.

The cover can be tailored to meet the specific requirements of an individual contract or project. There are a variety of potential 'wrap up' options which can be used to cover consultants, sub-contractors etc.

Significantly, it is possible to arrange occurrence based policies to give ongoing cover for gradual pollution risks after completion of the contract.

Cover includes:

- Losses caused by both sudden and gradual pollution events arising from pollution conditions caused whilst working at customer sites
- Bodily Injury and Property Damage including clean-up of pollution conditions
- On and off site clean-up costs
- Legal defence costs.

The Insured's clients may be covered as additional insureds under one policy.

Underwriting Considerations

Premium is based on the nature of the company's operations, a project description, engineering details plus other technical factors.

Case Study

A contractor involved in a major railway station development project was contractually obliged to accept liability for pollution risks associated with tunnelling operations.

The site was contaminated as a result of historic activities and the main risk related to the creation of new pollution migration pathways as a result of tunnel boring.

Willis arranged contract specific CPL cover on behalf of the main contractor and its sub-contractors. The policy limit was £20 million and it was arranged on a losses occurring basis. The insurance gave the contractor sufficient comfort to accept the contractual liabilities.

"Gradual pollution exposures are usually excluded from general liability policies"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

David Barr
barrd@willis.com
+44 (0)20 975 2310

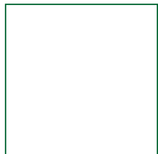
Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

Transfer of Environmental Liabilities for Financial Institutions



The allocation of environmental liabilities can become a significant point of contention between the various transaction counterparties and a key consideration for equity investors and lenders.

New environmental risk transfer solutions are increasingly being used by financial institutions to facilitate deals, secure loan arrangements and maximise enterprise values.

In many cases, it is the perception of environmental risk rather than specific risk factors which leads to concern. Nevertheless such perceptions may still erode enterprise value, threaten deal completion and can sometimes become a barrier to otherwise attractive projects.

Contamination liabilities are amongst the hardest exposures to accurately quantify, verify and manage. Indeed, the full extent of the exposure may not manifest itself until well after completion.

Specialist insurance products are now playing a central role in the management of pollution and contamination risks associated with corporate transactions. They are increasingly used as a corporate finance tool and tailored to suit the specific requirements of lenders and private equity firms.

Environmental Insurance is being used by financial institutions to:

- eliminate/ mitigate potential project 'deal breakers'
- protect equity investors from long tail environmental liability exposures after completion
- replace indemnities and/or warranties and ensure a 'clean exit' for equity providers
- provide security in the event of concerns about buyer or seller credit-worthiness
- quantify and cap actual or potential remediation liabilities or environmental obligations
- reduce lenders exposure to credit risk
- protect lenders’ from direct liability (e.g. in the event of foreclosure).

Coverage can be designed to transfer contamination legacy risks and/or insure against the losses associated with operational pollution risks. Products are also available which can cap 'known' liabilities such as remediation costs.

environmental@willis.com

Willis

It is also possible to exploit discounted funding techniques to design risk financing or 'finite' insurance programmes which can be used to transfer 'known' liabilities, such as restoration obligations, and spread the financial impact over a series of fiscal periods.

Long policy periods can be arranged with significant limits for multi-event or portfolio covers.

Policies can be worded so that they are fully transferable and often jointly insure various parties (e.g. acquirer and financial backers). They can be designed to protect the underlying venture itself or to directly protect the position of the lenders or equity providers. They can also be structured and worded so that they provide 'back to back' coverage of indemnity or warranty clauses.

Coverage can often be placed in extremely tight timescales on the evidence of existing survey reports.

Case Studies

1) Lender Liability

Willis structured environmental loan default protection for a UK bank looking to finance the acquisition of a number of power facilities. One of the bank's prime concerns was the potential for default in the event of a major environmental loss.

By combining a number of different insurers, Willis was able to put together a lender protection programme which covered two separate £200 million loans for an eight year loan period.

The loan terms stipulated that the bank would be entitled to call in the loan after a generation interruption of over 12 months. In the event of a significant environmental loss and subsequent borrower default, the policy would pay off the balance of the loan.

2) Maximising Disposal Value

Willis helped a Vendor Group realise maximum value and achieve a clean exit from the sale of a global manufacturing operation. Significant legacy liabilities were considered likely to represent a major concern to potential purchasers and therefore reduce the return from the disposal programme.

Working with our client and its professional advisers, Willis devised a transaction strategy which involved using environmental insurance 'in lieu' of a vendor indemnity or purchase price reduction for environmental liabilities.

The insurance protection was arranged by the Vendor on the basis of a vendor due diligence exercise. The policy benefits were transferable to a purchaser and therefore the policy was offered as an 'asset' in the sale agreement. Upon deal completion the Vendor retained an interest on the policy to cover its contingent liability.

“Policies can jointly insure various parties”

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2330

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

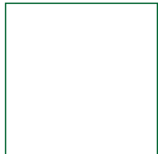
Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

David Barr
barrd@willis.com
+44 (0)20 7975 2310

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

Financing Environmental Risk in the Manufacturing Sector



The global environmental agenda is developing at a rapid pace. New liabilities are continually being created as legislative frameworks evolve in response to the changing demands of the international community.

Changes to accounting procedures are altering the way in which companies can provide for liabilities thereby increasing the visibility of potential environmental risks to shareholders and investors.

Demonstrating effective management of environmental risk is a governance obligation and a key priority for companies wishing to reassure stakeholders and protect and enhance their corporate reputation.

Whilst manufacturing companies face a diverse range of environmental liabilities, potentially the most financially significant exposures tend to fall into the following broad categories:

- Operational pollution risks that are customarily associated with the use and storage of potentially polluting material
- The legacy of existing contamination resulting from historic day to day operations
- Liabilities associated with the off-site disposal of waste (especially relevant in the US)
- Contingent losses associated with the above issues – such as business interruption costs.

Many large manufacturing companies have established reserves for known clean up obligations or budgeted capital expenditures for improvement programmes.

Unfortunately, however, the risks associated with pollution or land contamination are impossible to predict with any certainty and such provisions may therefore prove inadequate.

The discovery of new issues, the accelerated closure of plants, tightening legislation (e.g. IPPC) or increasingly strict enforcement could lead to additional liabilities. Such uncertainties can have a material effect on the company's liquidity or financial condition, which may in turn undermine investor confidence.

Environmental insurance and alternative risk transfer mechanisms are playing an increasingly prominent role in the management of such financial risks. The market can now offer significant capacity, policies can be written for long periods and pricing is now realistic and competitive. There is substantial flexibility in the design of insurance contracts and the underwriting criteria are relatively straightforward.

Willis has extensive experience in the design and placement of such programmes and is one of the leading environmental insurance advisers.

Environmental Impairment Liability
The continual improvement of environmental management systems within an organisation will reduce the probability of an environmental loss during ongoing operations, but cannot eliminate it entirely.

The growing need to address uninsured exposures has led to the incorporation of specialist environmental insurance policies within corporate risk management strategies. These environmental impairment liability programmes typically provide catastrophe protection for such exposures on a renewable basis. They are designed to dovetail with the general liability programme and cover operational pollution risks, historic contamination liabilities and associated contingent exposures.

Facilitation of Commercial Transactions
Most environmental liabilities do not crystallise until a site or business is to be sold or redeveloped. The complexity of modern deals, ever tighter timescales and pressing completion pressures require fast, effective solutions to the allocation of environmental risk between counterparties.

Environmental insurance is now being routinely used as a catalyst to unlock deals by removing uncertainty, maximising disposal values and avoiding the need for environmental indemnities.

Balance Sheet Protection
Environmental risk financing mechanisms can be used to cap the cost of 'known' remediation obligations (individually or as an aggregate), hedge against the impact of timing uncertainties and transfer the risk of encountering further 'unknown' issues.

Accounting standards require publicly quoted companies to disclose their environmental liabilities on their financial statements. Structured solutions based upon 'blended' programmes (incorporating an element of self funding and risk transfer) can be used to remove, or at least offset, environmental liability provisions from the balance sheet and reduce the risk of earnings volatility. They typically include a profit sharing provision to reward a favourable loss experience.

Such programmes help companies to release reserves, manage cash flows, cap liabilities and therefore enhance shareholder value.

"Unlock deals by removing uncertainty"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

David Barr
barrd@willis.com
+44 (0)20 975 2310

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

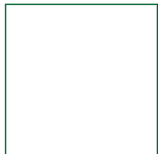
Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

MA/2413/09/04

The Role of Environmental Insurance in Project Finance and PFI Projects



Effective management of environmental risk is a hallmark of successful development projects. This is particularly critical in project finance and/or PFI deals which generally involve a large number of participants within a complicated contractual framework.

In view of the increasing complexity of these deals and the nature of funding arrangements, project lenders require exhaustive reassurance that all project risks are identified and adequately controlled or, ideally, transferred.

Environmental risks such as historic contamination are among the hardest risk issues to accurately quantify and manage, particularly in relation to projects with long concession periods.

The legal 'goalposts' are continually moving (especially in emerging markets) as regulatory frameworks evolve and the full extent of the exposure may not become clear until well after completion.

Flexible and competitive environmental risk transfer solutions can be used to:

- eliminate/ mitigate potential deal breakers and facilitate transactions
- add confidence to the provision/ acquisition of finance, thereby reducing debt service costs
- protect interested parties from environmental liability exposures/ negating the need for contingent reserves
- ensure clean exits for project lenders, owners, concessionaires, equity partners etc
- underpin contractual responsibilities such as warranties and indemnities
- cover consequential losses under a PPP/PFI contract e.g. loss of revenue as a result of a contamination event.

The imaginative application of environmental insurance can add certainty to financial models, improve bids and deliver real tangible value.

Environmental Liability Insurance

Insurance can be arranged for project liabilities associated with all phases of the project - covering pre-existing contamination and/or operational risks after completion of the construction phase.

Historical cover is typically provided for both third party property damage and bodily injury claims (e.g. resulting from off-site pollution migration) and unknown on-site and off-site clean up costs.

It is possible to augment environmental policies and cover contingent risks such as start up delays, business interruption or economic loss resulting from contamination.

Policies can also be structured to repay the outstanding loan balance or replace revenues/government funding in the event of the enforced shut down of an operational plant or facility for environmental reasons.
Policies can be worded so that they are fully transferable and jointly insure various parties (e.g. borrower and financier). Coverage can be designed and placed in extremely tight timescales.

Liability Capping
Due diligence exercises often identify 'known liabilities' such as the need for a remediation exercise or a capital investment programme.

Cost estimates for such issues are notoriously inaccurate, potentially leading to cost overruns. Significant exceedances could jeopardise the viability of the proposed project and these concerns often cause financial institutions to adopt an unusually cautious approach to lending where deals involve a major remediation programme.

Insurance mechanisms can be designed to remove this risk by providing the funds to complete such works in the event of a cost overrun.

Case Study
A UK PFI project entailed the provision of a fully integrated waste management system in the Midlands. The project included the construction of various waste reclamation facilities, the construction of a 10 MW waste to energy plant, and the operation and expansion of the waste management facilities for a 25 year concession period. The contractual structure of the deal required the successful bidder to accept responsibility for all the environmental liabilities associated with the operational landfills.

On behalf of the international consortium which won the contract, Willis negotiated a 10-year environmental policy, with a £10 million limit of indemnity, to cover historical contamination risks and ongoing pollution risks associated with both the construction and operational phases. The coverage provided reassurance for the project lenders hence unlocking the deal.

"Environmental policies can cover contingent risks such as start up delays"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2330

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

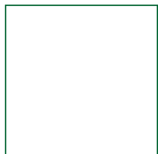
Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

David Barr
barrd@willis.com
+44 (0)20 7975 2310

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

Financing Environmental Risk in the Water & Waste Water Industry



The global environmental agenda is developing at a rapid pace. New liabilities are continually being created as legislative frameworks evolve in response to the changing demands of the international community. Water and waste water utility companies face a diverse range of environmental liabilities which arise from both historical activities and from on going operations. The most financially significant exposures are highlighted below:

- Contamination of drinking water supply source by influent which is contaminated by bacteria, viruses or chemical contaminants
- Discharges of contaminated effluent resulting from:
  - A treatment process breakdown
  - Untreatable contaminants
  - Excess volume from combined sewer overflows
- The effects of improperly treated effluents discharged to surface water causing:
  - Fish kills
  - Harm to human health through contamination of drinking water source
- Contaminated effluent or improper storage of waste sludges causing soil, surface water or groundwater contamination
- Leaking above ground storage tanks of process materials or wastes
- Liability arising from the spreading of environmental biosolids on third party land
- Underground storage tanks which present several exposures:
  - Slow leaks from tanks leading to gradual pollution
  - Ruptures causing catastrophic releases
  - Spills during loading/unloading process.

Demonstrating effective management of environmental risk is a corporate governance obligation and a key priority for companies wishing to reassure stakeholders and proactively manage their corporate reputation. Environmental liabilites can arise in a number of ways, but can generally be split into historical liabilities associated with previous activites, operational liabilities associated with on going activities and known liabilities associated with current obligations. Environmental insurance is rapidly emerging as a key tool for managing these risk exposures and complementing and augmenting existing risk management solutions.

Environmental Impairment Liability
Environmental insurance is playing an increasingly prominent role in the management of environmental risk. The market can now offer significant capacity, policies can be written with long policy periods and pricing is now realistic and competitive. There is substantial flexibility in the design of insurance contracts and the underwriting criteria are relatively straightforward.

On-Going Operational Pollution Risks
The continual improvement of environmental management systems within an organisation will reduce the probability of an environmental loss during ongoing operations, but cannot eliminate it entirely.

The growing need to address uninsured exposures has led to the development of specialist environmental insurance policies within corporate risk management strategies. These blanket programmes typically provide catastrophe protection for such exposures on a renewable basis.

They are designed to "dove-tail" with the general liability programme and cover operational pollution risks such as contamination by leaking underground storage tanks, spills during refuelling, process failures during operation and associated contingent exposures.

Historical Contamination Cover
Water and waste water treatment plants have always stored, used and managed chemicals and wastes. Such historical practices could have given rise to contamination which may in the future lead to on-site and off-site clean-up obligations or third party property damage and bodily injury claims. Insurance can be arranged to cover liabilities arising from such pre-existing contamination.

Programmes for known liabilities or remediation obligations
Standard environmental insurance policies will of course only cover fortuitous events and as such, known obligations or 'finite' risks are not normally insurable.

Composite structures can be used to address these obligations and combine both risk retention and risk transfer mechanisms. These mechanisms are particularly useful in managing the timing and cost risks associated with known obligations.

Such programmes can be designed to transfer such liabilities off the balance sheet, allow investment projects to proceed with confidence, provide a financial cap on the costs of known obligations and provide stabilised cash flows.

Willis is regarded by the specialist insurance markets as one of the leading environmental insurance advisers.

"There is substantial flexibility in the design of insurance"

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

David Barr
barrd@willis.com
+44 (0)20 975 2310

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

MA/2413/09/04

Combined environmental risk transfer programmes and liability buy-outs

Land contamination liabilities can seriously affect a company's liquidity and create a drag on corporate performance, which may in turn undermine investor and customer confidence. These liabilities, whether real or perceived, tend to crystallise and become a priority issue during the course of business transactions. As more and more companies and their professional advisers are finding, the spectre of environmental risks has the potential to hinder, if not totally halt, the progress of mergers, acquisitions and disposals, property transfers and development projects.

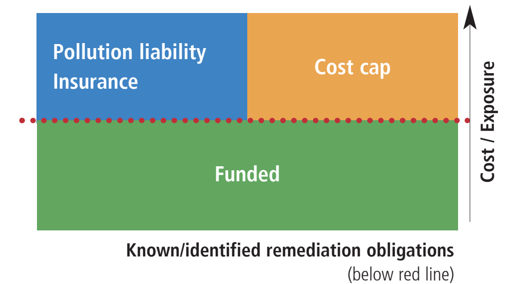
In transactions it is very common for the buyer and seller to have different views of the magnitude of environmental liabilities. Traditionally, companies have dealt with these liabilities via price adjustments, warranties and indemnity provisions. However, in the "post-Enron" climate, companies are demanding more certainty and security. Alternative solutions are increasingly being sought through the use of specialist environmental insurance products. Whilst such products can be very helpful, there is still the demand for solutions which provide an even greater level of cover over a longer period of time.

For risks which involve a significant known remediation obligation and uncertainty over the magnitude and potential for other on-site and off-site land contamination liabilities, the use of combined environmental risk transfer programmes and complete "liability buy-out" solutions is becoming an increasingly attractive option.

Combined Environmental Insurance Programmes

Combined environmental risk transfer programmes blend remediation cost-cap and pollution legal liability insurance with an efficient funded element (see diagram). The funded element is structured to provide the anticipated finance necessary to undertake the clean-up of the known pollution. However, the scoping of work and costs associated with clean-up projects, no matter how well a site has been investigated, can be notoriously inaccurate.

Unknown/unforeseen exposures
(above red line)



This leaves a very real risk of exposure to vast unforeseen cost-overrun expenses. There is also the potential for further liabilities arising in the future from any unknown pollution that may exist and residual contamination remaining post-remediation.

The insurance part of a combined environmental risk transfer programme is designed to wrap around the funded layer and provide cover against the fortuitous

risks that exist, regardless of whether they are financial or temporal in nature. The remediation cost cap element is a "stop loss" insurance which mitigates the financial risks associated with cost overruns and project delays incurred as a result of dealing with the known pollution.

The pollution legal liability element of the risk transfer programme provides cover for any on-site and off-site statutory clean-up, liabilities for third party property damage and bodily injury, and associated legal defence expenses, which arise as a result of any "unknown" contamination that may exist. It also provides cover for future liabilities arising from the residual risks remaining post-remediation (e.g. further clean-up as a result of further regulator interest in the site following the introduction of more stringent clean-up standards, or a third party bodily injury arising from pre-remediation contamination which has been slow to manifest itself). The flexibility created by combining environmental insurance with a funded element means that risk transfer programmes can be designed and placed with policy periods of up to 30 years.

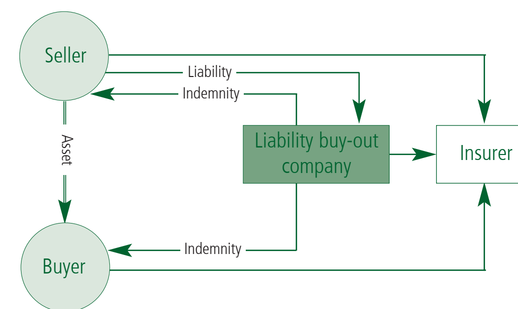
Liability Buy-Outs

These provide a comprehensive solution to companies seeking a long-term or permanent "in perpetuity" exit from environmental liabilities, without affecting the ownership and control of the relevant property assets.

The liability for pre-existing contamination issues, whether known or unknown, is contractually transferred to another company, commonly an environmental consultancy, by way of a comprehensive indemnity provision. For a one-off fixed cost, the seller achieves a release from its legacy liabilities and associated uncertainties and allows the buyer to take the asset without assuming any contamination liabilities. The liability buy-out company is contractually obliged for the period of the indemnity (which as stated above, could be offered in perpetuity) to manage the contamination issues and carry out the necessary clean-up works in an effective and efficient manner.

To provide security to all parties, the company would normally look to underpin the contractual exposures with a long-term combined environmental insurance programme incorporating both funded layer and insurance elements, under which the buyer and the seller would appear as insured parties.

The benefits of the liability buy-out are fully assignable and transferable to future purchasers, thus providing buyers and sellers with an extremely flexible and robust commercial tool.



The Willis Environmental Team

Willis have an environmental team dedicated to the advice, design and placement of bespoke environmental risk transfer programmes. Our vast experience in this specialist insurance sector is invaluable when it comes to the design and negotiation of complex insurance-based solutions to manage land contamination liabilities, whether on a site-specific or portfolio basis.

James Alexander
alexanderj@willis.com
+44 (0)20 7975 2703

Nick Bennison
bennisonn@willis.com
+44 (0)20 7975 2744

David Barr
barrd@willis.com
+44 (0)20 975 2310

Fiona Gray
grayf@willis.com
+44 (0)20 7975 2330

Nathan Sewell
International Practice Leader
sewelln@willis.com
+44 (0)20 7975 2522

Mergers & Acquisitions
Willis Limited
One Camomile Street
London EC3A 7LA

MA/2413/09/04