

Environmental Risk Management

Strategies, Trends and Solutions

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ESG

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Trends in Environmental Risk



Trends in Environmental Risk

Overview

- Proliferation of environmental mapping websites using GIS software is creating toxic tort class action.
- Optimizing the value of the real estate portfolio through strategic transactions is uncovering latent, long-term pollution liability.
- Calls to mitigate climate change will lead to greater regulatory compliance obligations and demands to address natural resources damage.
- Enterprises are becoming more vulnerable to pollution loss arising from extreme weather events, which are growing in frequency and severity.
- The emerging issue of PFAS/PFOA chemicals will challenge traditional strategies for managing historic and future pollution risk.
- ESG initiatives are increasing the risk but also creating opportunities.
- Specific chemicals that have been used for decades, and are currently in widespread use, are driving an increase in toxic tort activity.

Risk-Specific Pollution Risks

Healthcare:

Mold / Legionella

Life Sciences:

• Ethylene Oxide

Agricultural:

- Pesticides / Herbicides
- CAFO Contamination

Private Equity:

Pre-Closing Environmental Risks

Energy / Public Utilities:

- CCR Impoundments
- Carbon Emissions

Basically Everyone:

PFAS/PFOA

Trends in Environmental Risk

How Environmental Risk Transfer Supports ESG

Environmental Underwriting:

- Underwriting = Due Diligence
- Aligns Risk Management with EH&S
- Insurability demonstrates ESG

Access to Environmental Resources:

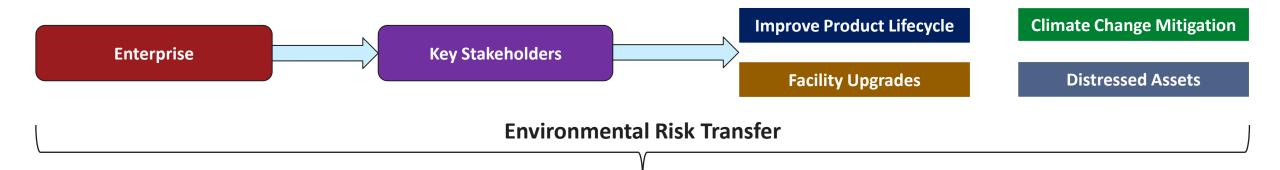
- Emergency response assistance
- Loss control
- Preferred counsel and consultants

Avoiding the Knock-On Risks:

- Beneficial reuse
- Solutions for carbon-intensive risks (CCS)
- Climate Resilience

Managing Distressed Assets:

- Brownfield redevelopment
- Sites facing mandated closure or costly upgrades
- Landfills and waste impoundments



The Situation with PFAS/PFOA

The Leading Emerging Environmental Issue

- Complex family of over 3,000 fluorinated chemicals used for water-proofing, stain-proofing, fire-proofing and fire suppression
- Considered Persistent, Bio-accumulative and Toxic Chemicals or PBTs
- Numerous private party toxic tort lawsuits filed in multiple jurisdictions
- Patchwork of state regulations with varying degrees of stringency and enforcement
- USEPA released a "Strategic Roadmap" in 2021 detailing plans for stricter national regulation, particularly under the "Superfund" law
- All regulations have three main drives:
 - Research
 - Restrict
 - Remediate
- Liability is multi-faceted

Types of Liability

Direct Manufacturing	Companies that manufacture the actual chemicals
Use in Manufacturing	Companies that use the chemicals in their manufacturing processes
	Companies that use the chemicals and dispose of waste chemicals on their own properties in landfills or waste impoundments
Supply Chain Exposure	Companies that use components and equipment that were treated with or otherwise contain the chemicals
Fire Suppression	Companies that use the chemicals in fire suppression foams (AFFF)
Product Liability	Companies that sell products containing the chemicals
Waste Disposal / Beneficial Reuse	Companies that accept waste materials for final disposal or recycling

The Situation with PFAS/PFOA

Insurance Market Response

- Exclusions appearing more frequently for PFAS on GL / Umbrella Excess, as follows:
 - Manufacture, distribution, sale, resale, re-branding, installation, repair, removal, encapsulation, abatement, replacement or handling of PFAS or any materials containing PFAS
 - Discharge, release, escape, or presence of PFAS
 - Ingestion, inhalation or contact with PFAS
 - Applies to concurrent or in-sequence losses that result in cleanup costs, third-party cleanup costs / property damage and all associated legal defense costs
- Environmental insurance market is also excluding but may provide some limited cover:
 - Sublimits for Cleanup Costs
 - Per Claimant Deductible for Third-Party Bodily Injury Claims
 - Government-Mandated Trigger for PFAS Cleanup
 - Voluntary Site Investigation for PFAS
 - Hostile Fire Exception for AFFF





Operational Risks

- Pollution loss resulting from day-to-day operations:
 - Sudden & Accidental
 - Gradual
 - Transportation
 - Disposal Site Liability
- Typical loss scenarios include:
 - Cleanup Costs
 - Civil Fines and Penalties
 - Natural Resources Damage Assessments
 - Third-Party Bodily Injury / Property Damage Claims
- Key Exposures vary by class of risk
- Coverage in traditional P/C programs limited

<u>Chemical &</u> <u>Manufacturing</u>

- Leaks/spills of feed-stocks and process chemicals
- Air emissions

Healthcare / Life Sciences

- Mold/legionella
- Air emissions (esp. ethylene oxide)

Construction

- Exacerbating existing pollution
- Silt/Sedimentation

Hospitality & Multi-Family Residential

- Mold/legionella
- Asbestos & lead

Energy, Utilities & Mining

- Bulk fuel fires and releases
- GHG emissions
- Waste impoundments

<u>Agriculture</u>

- Pesticides / herbicides
- Bio-solids

Historic Risks

- Pollution loss resulting from historic conditions:
 - Currently-owned locations
 - Divested properties
 - Exacerbation claims at leased sites
 - Historic disposal activities
- Typical loss scenarios include:
 - Government-mandated orders to investigate and remediate
 - Natural resources damage claims
 - Indemnity failure
 - Third-Party Bodily Injury / Property Damage Claims
 - Cost overruns on for active environmental cleanups
 - Increased liability allocation at Superfund sites
 - "Reopener" claims at remediated sites
 - Capital improvements

Common Characteristics

STRICT

JOINT & SEVERAL

RETROACTIVE

"Even if you didn't break it, you bought it!"



Pollution Legal Liability

Overview

- Covers site pollution exposures
- Often deployed for the following:
 - Site acquisition / divestiture
 - Leasing and sale / leasebacks
 - Corporate M&A
 - Redevelopment Projects
 - Cleanup Projects
 - Supplement Property / Casualty insurance programs for pollution risk in day-to-day operations
- Can insure a single site or portfolio of sites
- Can be secured up to a 10-year policy term for historic risks and 3 to 5-year policy term for Operational risks

Coverages

- Claims-Made and Reported Coverage
- Covers Operational Risks and Historic Risks (if supported by underwriting data)
- Onsite / Offsite Cleanup Costs
- Onsite / Offsite Third-Party Bodily Injury and Property Damage
- Natural Resource Damage Assessments
- Excess of Indemnity (counter-party credit risk) can be endorsed to policy to backstop environmental indemnities
- Transportation and Disposal Site Liability
- Civil Fines and Penalties where insurable by law
- Business Interruption / Extra Expense
- Associated legal defense costs

Contractors Pollution Liability

Overview

- Insures against pollution conditions created or exacerbated by contracting operations
- Can be secured at the contractor level or on a project basis, including owner/contractor controlled programs
- Reduces financial uncertainty and impact from unforeseen events during the construction project term and during the state statute of repose
- Maximum policy period for project programs is 15-17 years, depending on insurer

Coverages

- Occurrence-Based coverage
- Cleanup Costs for pollution conditions created/exacerbated by contracted operations
- Third-Party Bodily Injury and Property Damage
- Natural Resource Damage Assessments
- Transportation and Disposal Site Liability
- Civil Fines and Penalties where insurable by law
- Associated legal defense costs

Products Pollution Liability

Overview

- Insures against pollution conditions caused by products sold / distributed by an insured
- Typically excluded on most pollution insurance policies but some carriers will include as part of a site pollution insurance policy
- Coverage for Products Pollution only also available from select markets

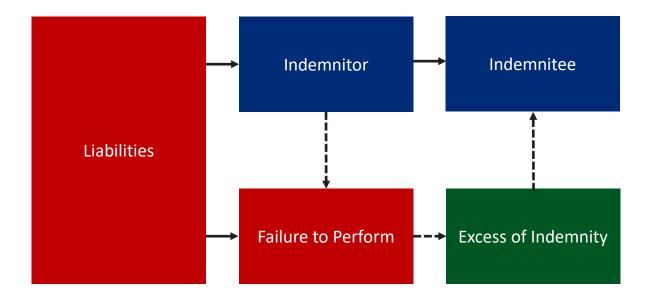
Coverages

- Claims-Made and Reported coverage
- Cleanup Costs for pollution conditions caused by product use or failure
- Third-Party Bodily Injury and Property Damage
- Natural Resource Damage Assessments
- Product Recall coverage
- Associated legal defense costs



Excess of Indemnity

- Excess of Indemnity coverage is a specialty endorsement attached to a PLL policy
- Insures performance failure of indemnitor related to environmental indemnity obligations for pollution conditions
- It can be utilized for:
 - Standard PLL risks, such as unknown pre-existing pollution conditions
 - Most importantly: can cover known pollution conditions requiring cleanup



Lender Liability Programs

- Designed to allay lender concerns over liability for operational and pollution risks
- Two basic types of insurance:

Lender Liability:

- Mortgage Impairment (Lesser of Cleanup Costs or Outstanding Debt)
- Standard PLL Coverage included
- Policy is for the Lender Only Loan Recipient cannot be scheduled

PLL with Lender-Friendly Provisions:

- Standard PLL with the following:
 - Automatic Assignment Primary Lender becomes First
 Named Insured in event of default
 - Additional Named Insured All lender parties scheduled so they can trigger the policy if named in a suit
 - Specific NOC All lender parties get notified if policy is cancelled
 - Waiver of Subrogation in favor of lender parties
 - Exclusions any exclusions added to the policy by endorsement do not apply to lender parties

Remediation Cost Cap

Insurance Limits

Buffer Layer (20% to 40%)

Expected Costs of Remediation

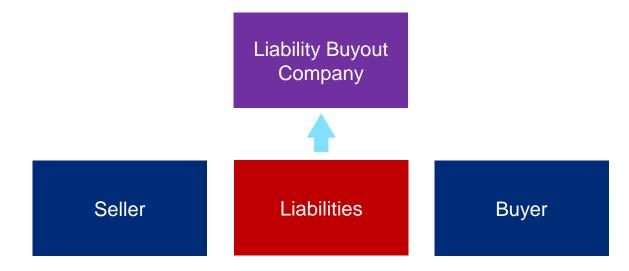
- Covers cost overruns on environmental cleanup projects incurred during the policy term, including:
 - Actual extent or degree of contamination is greater than estimated, including offsite risk
 - Previously unidentified contaminants have been discovered
 - Changes in cleanup standards
 - Governmental change in cleanup requirements

Coverage details

- Coverage applies in excess of projected remedial cost and negotiated buffer layer
- Buffer typically 20 to 40% of projected clean-up cost
- Policy term of 10 years

Environmental Liability Buyout

- The contractual transfer of cleanup obligation and other liabilities to a third-party specialty company
- Liability assumption is in perpetuity
- Requires **full funding** of remedial costs and associated risk transfer elements at the time of the transaction



Asbestos Claims

- It is a common misconception that claims related to asbestos are declining:
 - Asbestos claim settlement values at a 13-year high
 - Plaintiff firms aggressively pursuing cases
 - Increasing claims against 2nd and 3rd tier defendants
 - Increasing claims activity for talc
- Many industries are subject to third-party claims for bodily injury related to asbestos. Including those:
 - In the chain of commerce for asbestos-containing products
 - With premises exposure through facilities/equipment
- Exposure can arise from:
 - Existing business
 - Prior operations
 - Mergers & acquisitions



In addition to insurance archeology and claims advocacy, additional strategies include:

- Adverse development cap Transfer liabilities above the presently projected values, serving as a cap against adverse development of the losses
- Loss portfolio transfer Transfer asbestos claims to the insurer and remove from your balance sheet altogether

Losses and Claims Review



Loss and Claims Review

Claims Management Best Practices

- Pollution insurance can be manuscripted
 - Attorneys can have a hand in crafting policy language
 - A tight policy is the best defense
- Timely reporting and policy obligations
 - Late reporting is the leading cause of claim denial
 - Policy should be tailored to the client's administrative structure
- Cooperation / Engagement with the carrier throughout the process
 - Counsel and environmental consultants subject to carrier review

Q&A

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