Navigating environmental risks in real estate investments

February 2024

wtwco.com

Real estate can face a wide range of environmental risks. Modern developments may sit on top of historic pollution from legacy industrial use, while landlords may also become liable for pollution caused by tenants if they go into liquidation.

In our recent webinar on 29 November 2023, we heard about some of the sector's main pollution risks and how environmental insurance covers them, while also protecting business reputation and finances.

WTW speakers

Chris Strong
Environmental Practice Leader

Jo Newson
Broker and Environmental Practice Director

What are the main types of environmental pollution?

Soil pollution — generally occurs gradually over time as a result of buried waste, the poor storage of raw materials, and leaking storage tanks and pipelines.

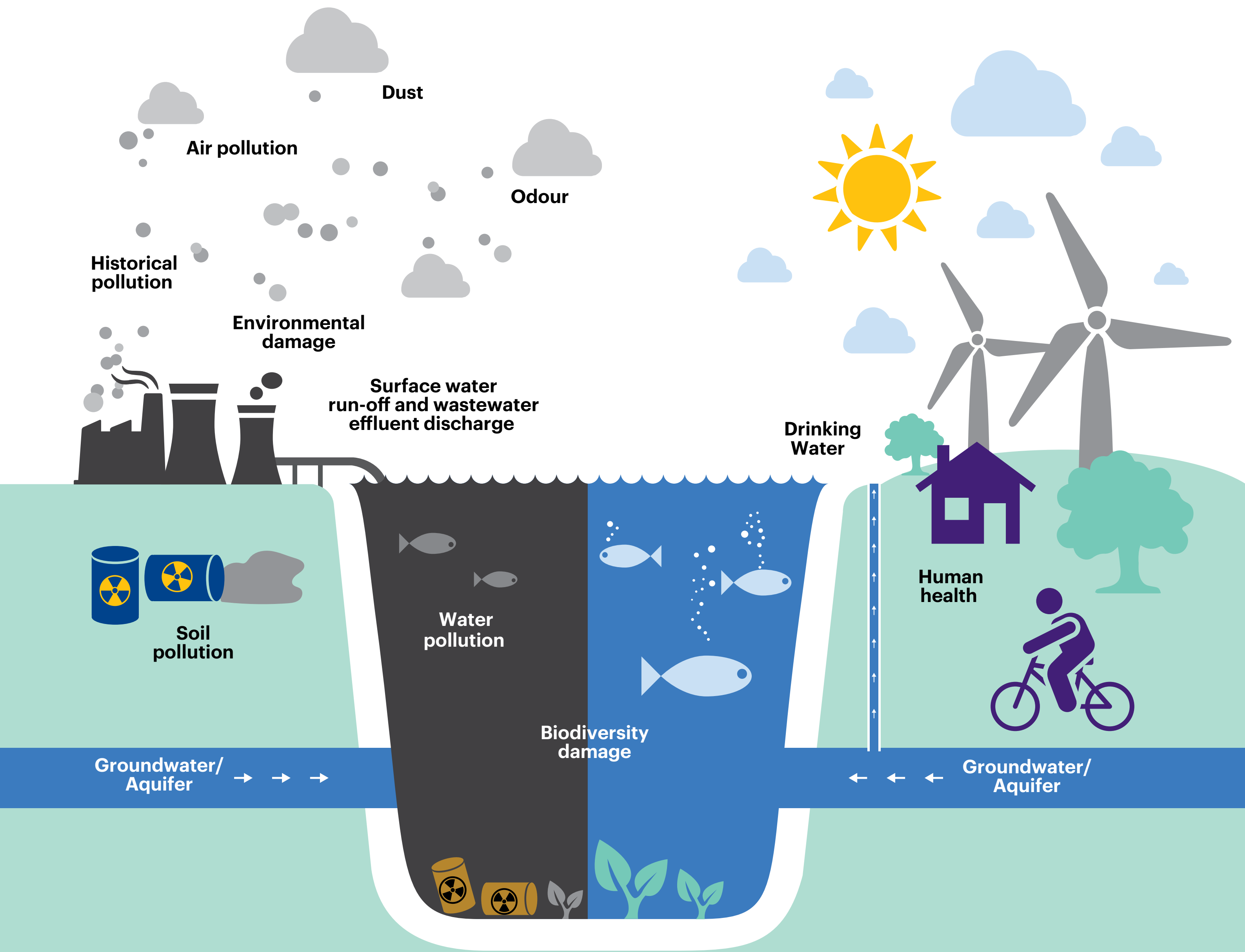
Groundwater pollution — often caused by long term soil pollution leaching into groundwater aquifers. It can also be caused by drainage systems discharging pollution via soakaways directly into the aquifer. Groundwater pollution is often difficult and expensive to remediate.

Surface water pollution — many commercial property tenants use water as part of their processes. If the treatment process in not effective then polluted water can easily enter drainage systems that discharge to rivers which can cause significant damage to water quality, wildlife and biodiversity.

Air pollution — lots of industrial activities release harmful gases into the atmosphere, these emissions are highly regulated. If the filtration system fails or an incident occurs, toxic fumes and gases can be released. Indoor air pollution caused by mold, asbestos or microbial matter can also lead to significant third party claims for bodily injury and property damage.

Historic pollution — after 250 years of industrialization, there are many contaminated legacy sites. Even the most modern office buildings can sit on top of high-risk legacy occupations such as chemical works. If disturbed, the pollution can and find its way into groundwater or rivers. This is a particular concern for businesses buying or selling property or developing new sites.

What is an environmental risk?



Biodiversity

You don't need to pollute to cause environmental damage. If a company's activities disturb rare plant or animal life in a protected area, they could be open to prosecution and claims, even if they did not cause any contamination.

What are the main exposures for real estate companies?

Historic pollution risks

Offices, commercial buildings and redevelopment sites can have contamination sitting in soils and groundwater from legacy industrial use. The polluter pays principle often doesn't work because the original occupier is no longer around. Even if they are, responsibility is often passed on through indemnity or warranty clauses in contracts, leaving new owners with significant potential liabilities.

Examples of liabilities include:

- Pollutants discovered when a site is being redeveloped
- A neighboring business discovering pollution linked to your site while investigating their own site
- Contractors working on a site mobilizing and exacerbating historic pollution
- A local authority taking river samples and tracing pollution back to legacy contamination
- Pollution discovered during general maintenance works

Operational pollution risks

Landlords can become liable for their tenant's pollution when a tenant becomes insolvent. This means landlords need to know what their premises are being used for and understand the potential environmental risks from those operations. Some risks might not be obvious at first sight.

- Dry cleaners often have large amounts of solvent chemicals on site.
- Offices may have oil tanks connected to generators as back-up heating.
- Warehouses may use a lot of cleaning chemicals, which can get into wastewater runoff.
- Swimming pools use different chlorine-based cleaning chemicals, which can create toxic chlorine gas if mixed in the wrong way.
- Indoor mold in plumbing, heating and ventilation systems can cause poor indoor air quality leading to legionella.
- Premises may be used for illegal activities, such as methamphetamine production, with risks of explosions and toxic chemical reactions.
- Asbestos and lead-based paint can cause health problems in properties more than 20 years old. Landlords should have management plans to identify and remove them.

Environmental management: the first line of defence

Real estate businesses need to have systems and controls in place to manage environmental risks from all the properties they own and manage. This is the first line of defence against potential pollution.

Measures that should be in place include:

- **Robust due diligence** processes for new property acquisitions.
- **A comprehensive environmental management plan** to identify how operations could impact upon the environment and put measures in place to mitigate those impacts. This should cover how chemicals are stored, how waste is managed and what's allowed under environmental permits.
- **A waste management plan**, including air and water emissions management.
- **Long-term groundwater monitoring** if there are known groundwater issues on a site.

They should also make sure their tenants have appropriate environmental management processes.

Environmental insurance: for when an incident happens

Even with the best environmental risk management controls, no business can remove their risks entirely. Environmental impairment liability (EIL) insurance is there to protect your business if an incident happens despite having appropriate safeguards and controls.

Environmental impairment liability (EIL) insurance can cover pollution no matter how long ago it was caused or how gradual its effect. It also covers first and third-party costs, filling the gaps that other policies don't cover.

First and third-party costs

- Liability to third parties for environmental damage and bodily injury.
- Third party property damage from both sudden and accidental pollution and gradual pollution.
- First party legal defence costs in the event of legal action.
- Statutory clean-up costs if an environmental agency carries out work on your behalf and sends you the bill.
- Legal defence costs if you are prosecuted.
- D&O liability for environmental breaches.

Example: first party costs

Water used by firefighters on a fire in car park became contaminated with acid from car batteries. It ran off into the car park owner's drainage system and then leaked into an aquifer, polluting the local groundwater. Most of the clean-up was on the company's own site, so would not be covered by general insurance.

Prevention and recovery

- **Crisis management response:** one of the main concerns for real estate companies is the reputational damage that a pollution incident can cause. With EIL, they can access a team of PR consultants to manage the message to media and stakeholders as soon as an incident occurs.
- **Pre-incident loss mitigation:** the policy will respond if there is an immediate risk of environmental damage caused by pollution. For example, the policy can pay the cost to pump contaminated fire water safely into storage tanks before it could run off and pollute the groundwater.
- **Site investigation:** if an incident occurs, you will need to carry out an investigation — for example, drilling bore holes and testing the depth and concentration of contaminants — to assess the nature and extent of the pollution and how to remediate it.
- **Soil and groundwater remediation:** EIL will pay for remediation work not just on your site but in the surrounding area as well.
- **Biodiversity restoration:** covers the cost of restoring biodiversity lost through pollution. Alternatively, EIL can pay to carry out environmental restoration works somewhere else to make up for the damage caused.
- **Long-term ground water monitoring:** for up to 10-15 years after the incident.
- **Business interruption:** loss of profits if your business has to close as a result of an incident.

Fines and penalties

Environmental insurance can't cover fines and penalties if a company is found to have breached laws or regulations. As environmental regulation tightens, these are getting heavier and can run into millions. It's important for firms to monitor and manage their exposures to avoid such breaches.

Does general insurance cover environmental risks?

General liability policies only cover damage caused by sudden and accidental pollution. However, lots of pollution incidents happen gradually over time, especially buildings on legacy sites. As shown in the table below, general policies don’t cover first-party clean-up costs, statutory clean up, preventative mitigation costs, biodiversity damage, or potential new risk exposures created by changes in the law.

Figure 1: **Gaps in cover***

	General liability	Property	Environmental
Sudden and accidental pollution	✔	✘	✔ (Optional)
Gradual pollution	✘	✘	✔
Statutory clean-up	✘	✘	✔
On-site first party clean-up	✘	✘	✔
EU environmental liability directive	✘	✘	✔
Biodiversity damage	✘	✘	✔
Loss mitigation	✘	✘	✔

*Please note: Policies do differ and this is representative of a standard general liability and property policy

The importance of environmental due diligence

It’s vital to carry out environmental due diligence when buying a building or industrial site to identify any legacy risks and plan how to manage them.

- **Have all locations been assessed?** Even if the current land use seems low risk, such as warehouses or offices, these sites may have been industrial in past and sit on top of buried pollution.
- **Have all known conditions been identified?** EIL can include cover for known conditions, as well as unknown historical conditions. It’s important that these are identified during the due diligence process so they can be included in the policy.
- **Is remediation planned or completed?** It’s important to know if there is ongoing or planned remediation at site as this could make it a much less attractive proposition for buyers.
- **Is the regulatory position understood?** Due diligence should cover contacts with the regulator. Are the relevant authorities aware of any contamination and, if so, what is their position on how it should be managed?
- **Is there existing insurance?** If the existing owner has insurance, it might be transferable, so it’s worth finding out what’s already in place.
- **Is a change in use planned?** If the site is being bought for redevelopment, this can change the risk profile and the clean-up requirements if there’s an incident.

What are the main types of environmental policy?

Premises pollution liability (PPL)

- Provides cover for sites that the client owns or operates.
- Can also be written as a wraparound automatically covering the entire business.
- PPL is on a claims made basis.
- Policies can cover periods of up to 10 years for historic risks and up to three years for new pollution risks.
- Can also cover transportation exposures and first party business interruption.

Contractors pollution liability (CPL)

- Typically covers work done on construction sites, so it's relevant to real estate developers.
- Covers new pollution caused by site operations and exacerbation of historic pollution.
- Can be structured as an owner-controlled insurance program (OCIP) to include all contractors on site.
- Policies can be written for the length of the project.
- For one-off projects, cover can be written on an occurrence basis. For annual operations across all of a contractor's sites, it's generally on claims made basis.

Market for environmental insurance

EIL was first sold more than 20 years ago, and demand has been growing ever since, driven by publicity around major accidents, increasing legislative and regulatory controls, public pressure and concern over reputational damage. The market is now well established, especially in the U.S. and Europe.

Why buy EIL?

As well as protecting against the costs of pollution claims and remediation action demanded by regulators, there's a growing list of reasons why more businesses are buying environmental policies.

- **Contract obligations:** banks and funders who are financing property deals and construction projects increasingly require environmental cover.
- **Balance sheet protection:** large real estate businesses may hold a reserve in their accounts against unknown environmental costs. This could be transferred off the balance sheet through a tailored EIL insurance policy, releasing funds to invest in the business.
- **Reputational damage:** more and more businesses are concerned about adverse publicity and reputation damage as environmental issues move further up the corporate agenda.
- **Legal costs:** environmental damage claims can be complex and lead to legal action which can be long and expensive.
- **Emergency response:** policies offer access to 24/7 technical expertise when an incident occurs.

Common misconceptions

Not relevant

Even low risk operational occupancies can have significant legacy risks. The costs from third party damages to clean up and legal expenses, can be high without insurance.

The regulations don't apply

Environmental regulations are getting tougher for all types of occupation and it's safe to assume that businesses will need to do more to demonstrate compliance.

Too expensive

Depending on the risks involved, cover can be more affordable than imagined. Buying EIL can be a cost-effective way to fill the gaps in general liability (GL) and property policies.

Too much information is needed

Environmental insurance used to have heavy information requirements, including extensive questionnaires and site surveys. However much less information is needed today. At WTW, we usually don't need a lot of detailed information to give an initial very rough indication of premium.

How does EIL help meet ESG challenges?

EIL can play a critical part in ESG strategies, helping companies address and manage both their immediate and long-term environmental impacts.

Addressing climate risks: EIL policies can cover some climate risks, such as the gradual impact of air emissions, which are increasingly being excluded from traditional general liability policies.

Biodiversity: EIL covers biodiversity damage, which is also routinely excluded from general liability policies, without the need for a pollution trigger. Regulations relating to biodiversity loss are developing quickly and will require businesses to be more transparent about their impacts on biodiversity.

Reporting requirements: EIL can help companies meet requirements to understand and report on both the environmental risks they face, and the risks they pose to the environment.

ESG risk management: EIL can help to demonstrate how well ESG exposures are being managed and give stakeholders confidence that the company has the tools to respond to environmental damage quickly and effectively.

PFAS exclusions

Polyfluoroalkyl Substances (PFAS) are synthetic chemicals used in non-stick, water repellent and heat- and stain-resistant products, which have been widely used in building materials.

They may be harmful due to the fact that they never break down. They can accumulate in the body if ingested and remain in the environment forever. PFAS should be part of all environmental due diligence processes, especially when sites are being redeveloped. If PFAS is discovered, remediation and redevelopment costs can increase dramatically.

Claims and class actions for PFAS pollution have been growing, especially related to PFAS contamination of groundwater. We are seeing many GL insurers put in place blanket PFAS exclusions, but it may still be possible to get cover for sudden and accidental damage in an EIL policy.

Insurance requirements

Often, the information needed to quote insurance cover can be gathered from other insurance policies and open sources such as your website. For PPL operational cover, a lot of the information required will already be included in what you provide to the General Liability and Property insurers. For CPL, the details may already be included in contracts with owners and lenders.

More information may be needed for historic pollution, to show what's happened over time. However, even here, most of the information we ask for is already required by local authorities for planning purposes or by environmental agencies. If the building is part of an acquisition, much of the detail can be found in the vendor due diligence information.

Figure 2: **Underwriting insurance requirements**

PPL

Transactional Cover (Historical)

- Site Location Schedule
- Environmental Reports
- Planned Future Land Use
- Regulatory Correspondence
- S&P Agreements/Contracts
- Due Diligence Procedure

PPL

Operational Cover (New Conditions)

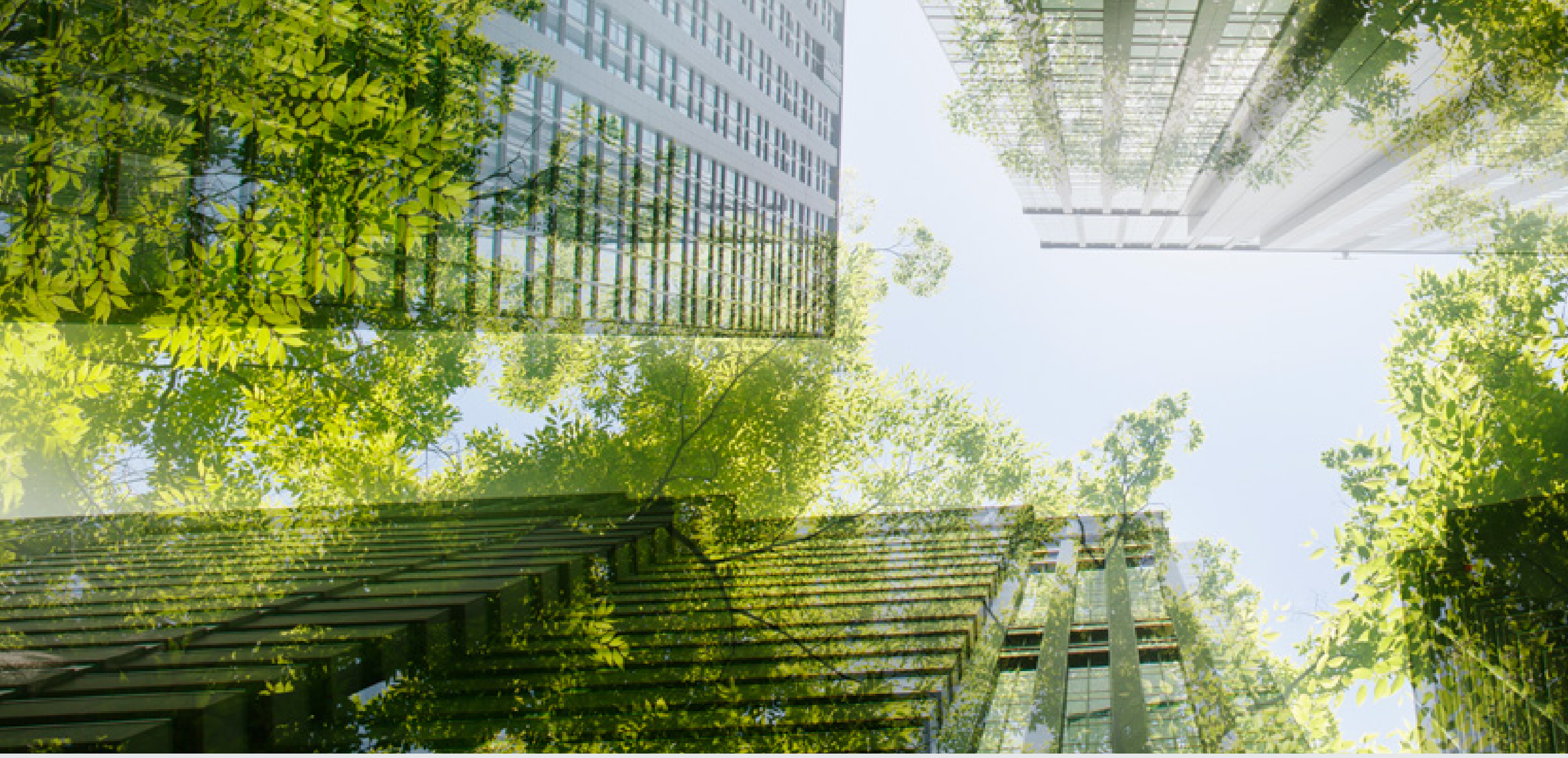
- Site Location Schedule
- Permits
- Spill Response Plan
- Fuel/Chemical Storage
- Waste Management
- Compliance History
- Environmental Audit Reports
- Loss History

CPL

Project and Annual Cover

- Contract Turnover Breakdown
- Length of Construction Period
- Method Statements
- Lenders Requirements
- Environmental Reports
- Construction Environmental Management Plans
- Remediation Strategies
- Loss History

Please note: This list is not exhaustive and some additional or less information may be required by insurers



Case studies

PPL: Industrial chemicals used by a tenant

Incident: A company had leased an industrial unit to a powder coating company. The tenant went into liquidation, which meant the landlord became liable for any pollution they caused. During refurbishment, a contractor found that chlorinated solvents used by the powder coating company had leaked into the ground through a cracked concrete floor causing groundwater pollution.

Impact: A groundwater and soil investigation showed that it required remediation, including groundwater remediation, removal of solvents from the soil and removal of tanks.

Cost: The landlord's PPL policy paid for the soil investigations and remediation work costing £1 million and also £0.5 million loss of income while they were unable to let the property.

PPL: Class action against landlord and tenant for historic emissions

Incident: A medical sterilization company had been leasing a property from a global industrial company in the U.S. for 20 years and had operated at the site for a further 10 years prior. During all this time, it had been releasing ethylene oxide gas emissions as part of its process. Following a report by the Environmental Protection Agency (EPA) about the dangers of ethylene oxide, a class action was brought against landlord and operator alleging that the emissions had caused clusters of cancer cases.

Impact: the landlord has never operated at this site but has been brought into the action. They face large legal defence costs, and potential damages for the whole period, including the 10 years before they bought the property.

Cost: Legal defence costs are expected to be more than $4m. A similar case last year resulted in damages of more than $750 million.

Summary of key points

- Most real estate business, big and small, have environmental exposures.
- Many of these exposures are not covered by property or general liability policies, leaving large gaps in cover.
- EIL can be a cost-effective way to cover these gaps and also help businesses respond to incidents quickly to reduce potential reputational damage and long-term clean-up costs.
- There are solutions for all types of real estate ownership and redevelopment projects.
- WTW can provide indications of premium from readily available information.

CPL: Contamination discovered during redevelopment

Incident: A contractor managing a large waterside redevelopment project carried out large scale excavations. This uncovered a contaminated fill material beneath the project site. The material was tested for contamination and transported to a landfill site that was licensed to accept certain levels of contaminated fill.

Impact: The landfill site later discovered the material had higher concentrations than originally detected, breaching its license. The local authority that operated the site traced the waste back to the redevelopment.

Cost: The CPL policy covered damages and restoration costs, which totaled $8 million.

Further information

For more information, please contact:

Asia

Ben MacCarthy
Head of Casualty and Head of Real Estate, Hospitality & Leisure, Asia
+852 2195 5885
benjamin.maccarthy@wtwco.com

Australia and New Zealand

Robert Lasovski
Corporate Risk (P&C) Leader, Australasia
+61 (0)478 307 114
rob.lasovski@wtwco.com

Trent Williams
Head of Broking, Australasia
+61 423 598 493
trent.williams@wtwco.com

Europe

Victor De Jager
Head of Property for Europe
+31 (0)6 2111 6250
victor.de.jager@wtwco.com

GB

Chris Strong
Environmental Practice Leader
+44 7730 584 943
christopher.strong@wtwco.com

Jo Newson
Broker — Director
+44 203 124 8317
jo.newson@wtwco.com

Paul Turnbull
Managing Director Real Estate Practice
+44 (0)20 3124 6253
paul.turnbull@wtwco.com

North America

Brian McBride
Head of Environmental Broking
+1 404-224-5126
brian.mcbride@wtwco.com

Jim Martuscelli
Head of Real Estate and Hospitality Industry Practice
jim.martuscelli@wtwco.com

South America

Roman Mesuraca
Regional Head of P&C & Broking — LatAm
+54 11 4324 1195
roman.mesuraca@wtwco.com

About WTW
At WTW (NASDAQ: WTW), we provide data-driven, insight-led solutions in the areas of people, risk and capital. Leveraging the global view and local expertise of our colleagues serving 140 countries and markets, we help you sharpen your strategy, enhance organizational resilience, motivate your workforce and maximize performance. Working shoulder to shoulder with you, we uncover opportunities for sustainable success — and provide perspective that moves you. Learn more at wtwco.com.

wtwco.com/social-media

wtw-HP-2024-0760 FPS 5604225

wtwco.com