



## Burning issues for environmental claims

Now in its second year, AIG's European Environmental Impairment Liability (EIL) claims intelligence report reflects some important environmental loss themes, with implications for companies of all sizes and from all industry sectors. A rise in fire-related environmental damage claims, and losses relating to improper construction and demolition (C&D) waste management practices are amongst the trends reflected in this year's claims statistics.

The trends reflected in EIL claims over the past 12 months once again demonstrate that insureds environmental exposures are far from static. They are set against an evolving risk landscape in which climate change is influencing fire risk, there is growing public awareness of environmental issues and increasing regulatory pressure across Europe to carry out inspections and make the polluter pay.

Now, more than ever, companies need to reassess their approach to environmental risk management and stress test their coverage to ensure it would respond as expected in the event of a loss. "Insureds think it will never happen to them, but quite clearly – as reflected by the claims statistics over the past 12 months – it can and does," says Wilson Hull, environmental major loss adjuster, AIG. "No matter how good your risk management practices are, ultimately you may have an environmental incident that you need to deal with."



## At a Glance

- Top 3 industries for notified EIL events are (1) Transport, Comms, Electric, Gas & Sanitary (2) Manufacturing and (3) Construction. However, incidents were recorded across a wider range of industries than ever
- A rise in environmental incidents stemming from wildfires and facility fires – 15% of all loss incidents were documented as fire emergency response in 2017
- More claims are arising as a result of substandard management practices in the handling of construction and demolition waste

## Methodology

For AIG's latest environmental claims insights, data was collated on 104 notified events in 2017 from the company's European commercial industrial insureds across EU member states including: Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. The notified events include major corporate and small to medium size enterprises (SMEs), spanning approximately 30 major industrial groups including agriculture, mining, manufacturing, transportation, electricity & gas, sanitary services, waste management, wholesale & retail trade and tourism.

## Industries

The EIL claims notifications received in 2017 once again illustrate the breadth of industry sectors that can be impacted by environmental incidents. “Historically, when EIL policies were first conceived and issued, the primary focus was probably on heavy manufacturing industries, which were perceived to be more likely to give rise to environmental incidents,” says Hull. “But our claims statistics show that an environmental incident can happen in almost any sector.”

Comparison with numbers from 2016 show that year-on-year notified events were received in sectors that had previously not recorded losses. This reflects the growing maturity of the product more generally and the recognition that environmental losses can occur across a diverse range of businesses and operations.

“Across Europe we have an ever-increasing range of industries within our book of business” says Peter Jarvis, head of international environmental at AIG. “But that aside, the environmental insurance industry has expanded so much over the last four to five years, and the awareness of what people are purchasing is growing. They are more educated buyers and the brokers understand a lot more and challenge the norm, so we are seeing broader use of the policy, which is what it’s there for.”

“As an industry we’ve made it more accessible, market capacity has grown and conditions for potential clients are more favourable, including reduced deductible levels compared to a few years ago” he adds. “So claims that may not have attached before are starting to attach.”

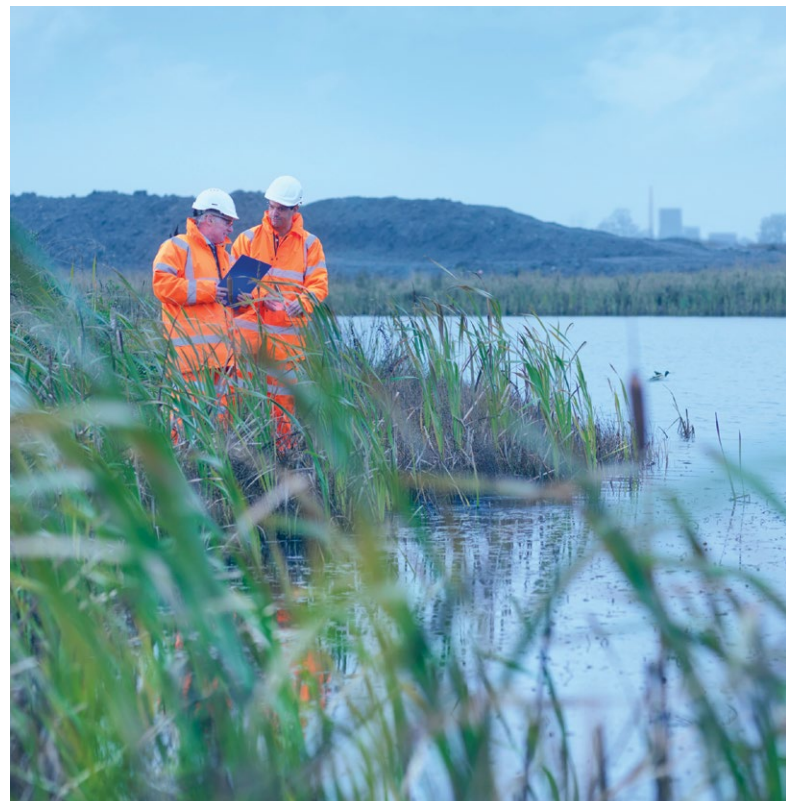
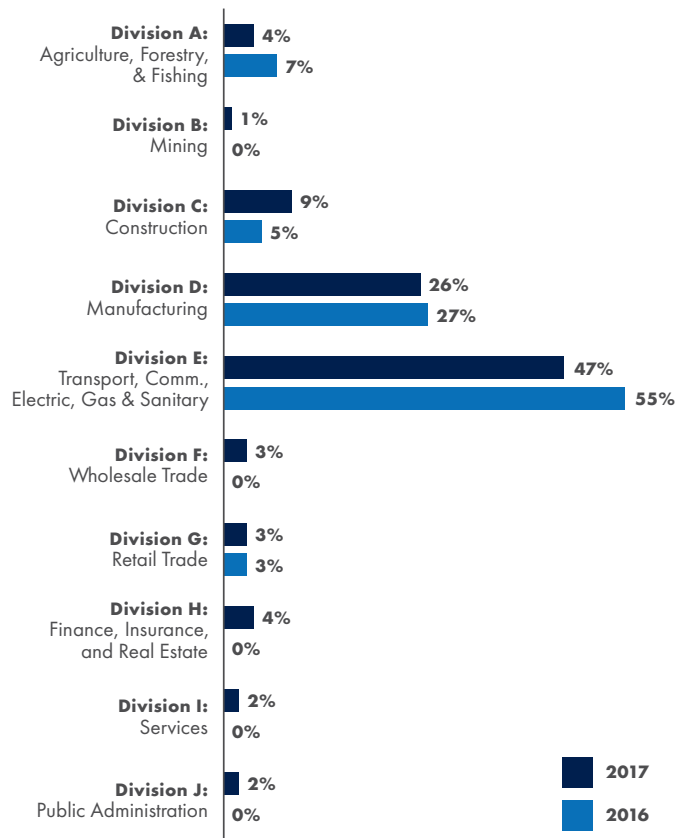
The proportion of loss incidents within the most polluting industry sector, classified as Division E: Transportation, Communications, Electric, Gas & Sanitary Services were down marginally in 2017, to 47% from 55% in 2016. Nevertheless this continues to be the sector that experiences the largest number of EIL claims notifications.

Meanwhile, claims in Division C: Construction showed an almost doubling of loss incidents from 5% in 2016 to 9% in 2017. The claims information suggests the biggest issue for this sector at present are inadequate waste management processes. Losses associated with waste management activities (across all industry segments) accounted for 11% of AIG’s 2017 notifications (see Fig 4). This includes a significant proportion of construction and demolition losses.

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Wilson Hull

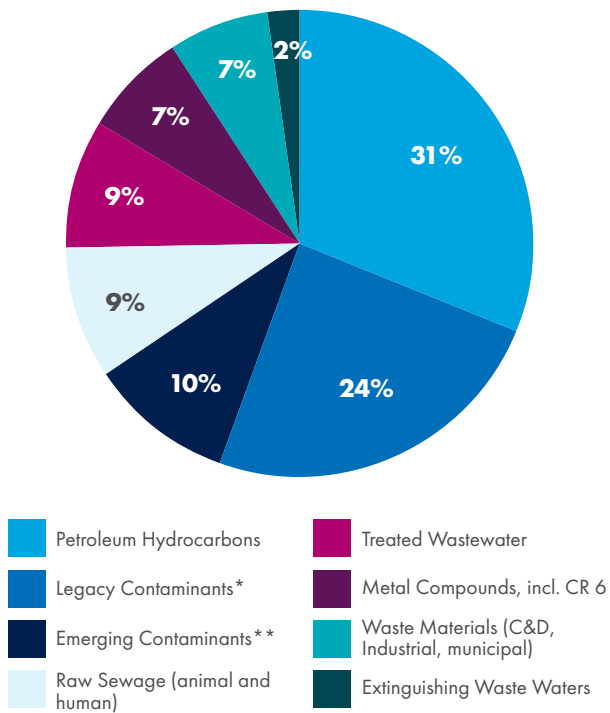
Fig 1 Notified Events by Industry Division (US SIC) – 2017 vs 2016



## Contaminants

Regarding pollutant type, petroleum hydrocarbons were identified as the primary contaminant of concern for 31% of all pollution-related incidents. This was down slightly from 35% in 2016, as other sources of contamination became a more significant driver of notified events.

Fig 2 Primary Contaminants of Concern – Notified Events 2017



\*Legacy Contaminants include: acid/alkaline substances, ashes, bitumen, fertiliser, microbial matter, organic matter, suspended solids, volatile/semi-volatile organic compounds (VOCs and SVOCs).

\*\*Emerging contaminants include: asbestos, bulk ground gas, heat transfer fluid, perfluorinated compounds, phenols, and polychlorinated biphenyls (PCBs).

Wastewater can be a source of many pollutants. Nine percent of AIG's EIL claims incidents in 2017 arose from the release of raw human or animal sewage, and a further 9% of incidents were associated with treated wastewater releases. 'Emerging' contaminants<sup>1</sup> from sources other than wastewater accounted for 10% of the 2017 notified events, including ground gas, perfluorinated compounds, phenols, and polychlorinated biphenyls.

<sup>1</sup> i.e. contaminants that have not been seen previously in AIG's notifications

Environmental regulators have shown a willingness to get tough with waste water treatment firms that pollute water courses on more than one occasion. The record £20m fine received by Thames Water in March 2017 for releasing 1.4 billion litres of untreated sewage into the river Thames is evidence of this, with regulators taking a particularly strong stance against repeat offenders.

"In some cases the court has looked beyond the corporate personality of a subsidiary, who is the defendant in a matter, and said, 'Actually there's a connected company within the group with a much bigger revenue that is sitting behind the business that needs to be fined here'," explains Stephen Shergold, partner in the Environmental and Natural Resources team at law firm Dentons. "In those cases, the higher categorisation of company further increases the fine levels."

"In my view, this trend shows us that the regulator and the courts are starting to drive the actual cost of environmental impact into the boardroom," he adds. "The fines are sending a message that businesses cannot afford to overlook investment in pollution prevention."

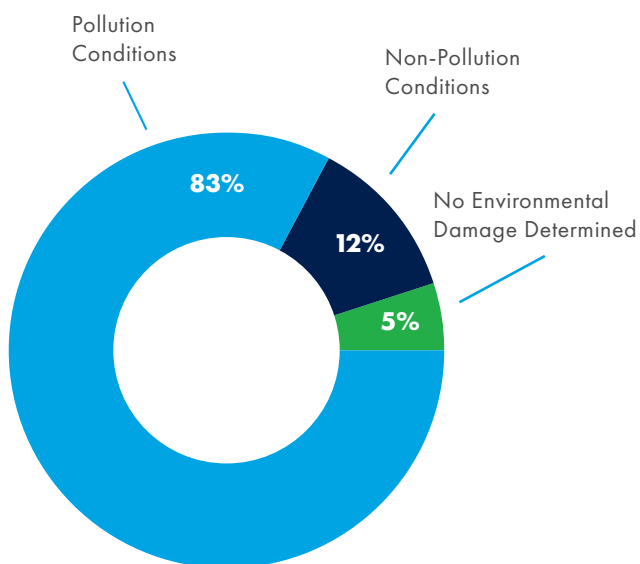
As far as overall enforcement is concerned, regulators are more likely to enforce remediation using domestic legislation in countries such as the UK, where such rules existed before the implementation of the European Environmental Liability Directive (ELD) a decade ago. The directive itself is more likely to be used in Eastern European countries that historically did not have mature environmental legislation. "The burden of proof is quite onerous on the regulators so they are far more comfortable using other legislation where it already existed," says Hull.

## Event type

Pollution events involve the release of solid, liquid, gaseous or thermal irritant or contaminant into the environment, resulting in damage to soil, groundwater, surface water, and air. Non-pollution events are characterised by direct damage to natural resources, habitats or species. For example, direct physical damage, reduction in surface water flow and lowering of groundwater levels. In 2017, there were also a number of events where the assessment showed that there was no environmental damage, but where our policies still responded – e.g. with legal or business continuity support.

Overall, pollution-driven events have marginally reduced, whereas events related to non-pollution and no environmental damage are on the increase.

Fig 3 **Proportion of Pollution Vs Non-Pollution Conditions – Notified Events 2017**



**“Waste classification is a big exposure for clients.”**

**Dawn Slevin**



## C&D waste management

C&D (construction & demolition) waste is the largest waste stream in the EU by volume. Proper management of this waste can have major benefits in terms of sustainability, as well as offering a boost to the construction and recycling industry. As reflected in last year’s EIL claims notifications however, its mismanagement can have severe negative consequences for the environment and any property developers, main contractors and sub-contractors held liable.

Under Europe’s waste and environmental laws, primary responsibility rests with the waste producer and the entities that exert economic control over the activities. While great strides are being made in the area through, for example, the EU C&D Waste Management Protocol (2016), as well as C&D waste guidelines at member state level, waste enforcement is still somewhat reactionary.

“C&D waste requires testing, proper classification and management before it leaves a development site,” says Dawn Slevin, environmental strategist, international, AIG. “If all of that is not in order before demolition and groundworks start, there is significant risk that waste may be sent to an inappropriate facility.”

“Waste classification is a big exposure for clients,” she continues. “Even if a subcontractor has responsibility for it, and their contract states this, the waste producer is ultimately responsible: the site owner often relies on their construction design team.”

An increase in C&D waste management claims could be down to several factors. One is the recovery of the European construction markets, with the sector emerging from recession after several years of restructuring.<sup>2</sup> And with more construction activity taking place and increased pressure on contractors, the potential for claims resulting from inadequate C&D waste management practices is heightened.

<sup>2</sup> [www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl\\_European\\_construction\\_monitor.pdf](http://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl_European_construction_monitor.pdf)

“While, at first glance, these may not appear to be the most significant area of claims in terms of volume, we know from our experience that they can be among the largest,” says Jarvis.

The direct outcomes of inadequate C&D waste management practices for AIG clients include project delays,<sup>3</sup> double removal costs arising from waste material dispatched to inappropriate facilities, third-party claims associated with environmental damage and business interruption, criminal prosecution for illegal waste activities, reputational damage and legal fees which can run for many years.

### Spike in fire-related claims

The EIL claims statistics in 2017 show that environmental impact as a result of fire is an emerging exposure for many clients. Fire events impacting property, facilities and habitats emerged as one of the leading losses in 2017 with 15% of all loss incidents documented as fire emergency response, compared with 7% in 2016.

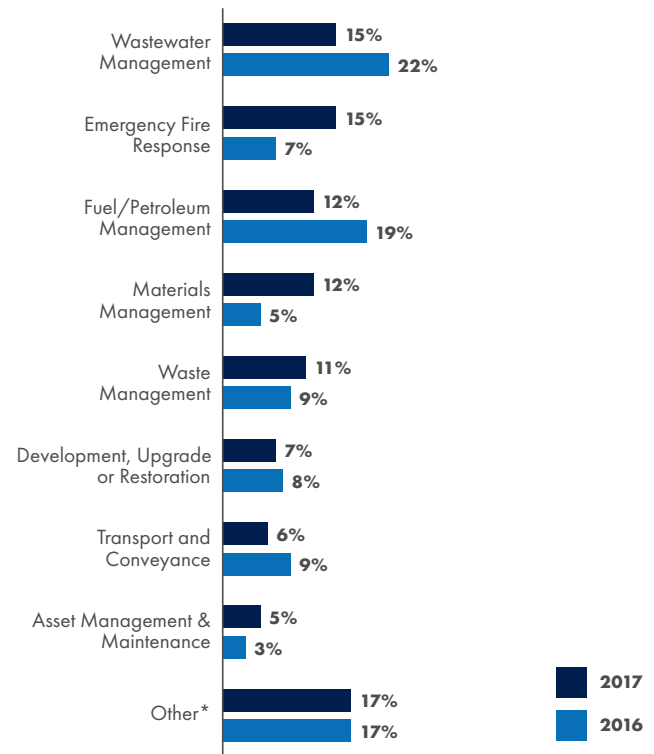
There are various reasons for the increase in fire risk and the environmental exposures this introduces, explains Slevin. “It is a combination of climate change, whereby conditions are ideal for a fire to ignite and spread, coupled with forest and habitat management practices that have not adapted to a changing climate; these aspects have resulted in wildfire as an emerging risk across our EIL book of business for 2017. It’s only been in the last couple of years that companies have really been taking note of climate change and the impact this has on their business.”

In addition to the impact on human life and property, fires can also cause significant environmental loss through degradation of air quality via the release of toxic gases and pollutants as well as direct damage to habitats and species. Pollutants from forest fires can affect air quality for thousands of kilometres and extinguishing waters may contaminate soils, surface waters and adversely impact habitats and species many kilometres downstream from the burning area.

There was a significant jump in those EIL notifications in 2017 that impacted natural habitats (up to 9% of loss incidents overall compared with 2% the previous year). The increase can be directly attributed to the growth in non-urban emergency fire response activities in 2017. Groundwater and soil impacts were also up slightly year on year.

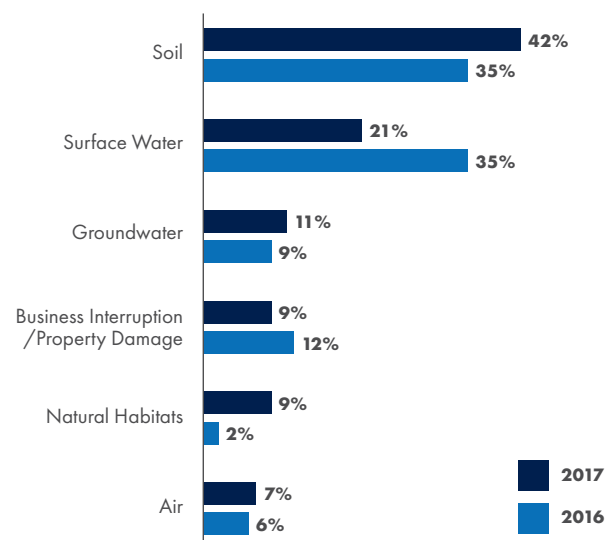
In areas where hotter temperatures and dry conditions are more conducive to conflagration events, insureds can be held liable for fires which begin on their premises and then spread to the wider environment. An example of a claim received by AIG’s EIL team resulted from a wildfire that was ignited when routine maintenance was taking place on an overhead power line, which fell, sparking a blaze.

Fig 4 Insureds Top 8 Environmental Risk Management Activities Associated With Notified Events - 2017 vs 2016



\* Includes: Other/ Normal Process Operations; Acquisition, Lease or Divestiture; Remediation Response; Routine Monitoring; Finished Product Management; Energy Management; Research & Development; Water Supply & Management; Commissioning/Decommissioning; Emergency Flood Response

Fig 5 Primary Resources Impacted (Natural and Built Environment) - 2017 vs 2016



<sup>3</sup> [www.bbc.com/news/uk-scotland-north-east-orkney-shetland-39654767](http://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-39654767)

**“Clients sometimes say to me they have all their environmental exposures managed and they don’t have any concerns.”**

Peter Jarvis

If dry brush and other vegetation is surrounding overhead power lines and other electrical equipment it can be an accident waiting to happen, thinks Jarvis. “We insure a lot of power companies and their facilities and this example of a power line coming down during maintenance works and triggering a forest fire is a real concern.”

“Clients sometimes say to me they have all their environmental exposures managed and they don’t have any concerns,” he continues. “The best risk management practices unfortunately do not prevent events such as a fire taking place. Clients buy general liability and property insurance not because they think it will happen but because they want to responsibly protect their balance sheet in case the unexpected occurs. The same should be true for their environmental exposures.”

Pollution arising from firefighting run-off is an often overlooked consequence of facility fires. While just 2% of claims incidents in 2017 occurred due to the release into the environment of firefighting run-off, this is nevertheless an exposure that could increase in line with increased fire risk if the exposure is not properly managed.

“The fire services will turn up to a facility and help to mitigate the loss by controlling a fire and the impact it has on your property, but they could also leave you with a significant deluge of fire extinguishing wastewater, which contains all sorts of chemicals,” explains Hull. “It’s a risk to the environment that does need to be considered, even though the fire services are probably more environmentally aware now.”

“When a fire occurs, the fire brigade is not responsible for the pollution arising from the extinguishing waters,” adds Denton’s Shergold. “The owner of the site is responsible, and so lack of containment can trigger liability. We have seen the extent of that liability increase where the regulator feels containment measures or site housekeeping should have been better.”



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Stephen Shergold



## How the cover responds

The EIL claims data captured in 2017 demonstrates the cover is being utilised by a broadening spectrum of insureds, as the product grows in maturity and awareness of environmental liability increases. The claims insights are testament to the fact that the insurance is responding to a wide range of environmental incidents resulting from activities as diverse as waste management, transport and conveyance and emergency fire response.

Most of the 2017 loss incidents arose from new conditions on-site (41%), which typically would not be covered under a general liability policy, explains Hull. "Furthermore, EIL policies, unlike GL policies, do not differentiate between "sudden and accidental" events or gradual pollution conditions.

Brokers also have an important role – as do underwriters – in highlighting these exposures, and the mitigation processes and risk transfer solutions necessary. It continues to be the case that significant gaps in cover exist for companies relying on non-specialist general liability (GL) policies. "EIL insurance is an important risk transfer mechanism for insureds to consider as part of their overall insurance portfolios," says Hull.

## Key environmental questions companies should be asking

- Do we know what is covered or what gaps exist in our insurance programme around Environmental Damage and Pollution loss?
- Are we considering the potential impacts of climate change as part of our planning and risk management processes?
- Does our organisation have a robust crisis management plan for multiple events, including fire, which addresses press communications, regulatory interactions and emergency response & remediation?
- Is the generation and management of construction and demolition waste given adequate consideration during all stages of the construction project?



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# Case Studies

## Human health exposures from fire

The insured operates a transportation hub that experienced a significant fire during maintenance works. As well as impacts of fire water, significant concerns existed of the potential impacts to third parties from hazardous by-products of combustion. Clean-up of first party property was required to ensure safe reopening to employees and public. This was done alongside a need to minimise the remainder of the company's operations and minimise business interruption potential.

## Non-Pollution exposures from fire

The insured is a power generation company responsible for power plants but also network cables including overhead powerlines. An overhead cable support failed resulting in the downing of a cable. The impact of the break triggered a fire which quickly spread creating a forest fire which resulted in significant damage. The impact is environmental damage from non-pollution. Other issues to consider include access to area to tackle the spread of fire, and the time required to return the damaged ecosystem to condition prior to the fire.

## Fire control & uncontrolled release

The insured operates in the manufacturing of cleaning products and suffered an extensive fire at one of its facilities. The loss within a local territory was covered under a multinational policy. Firewater mixed with released products from the site was retained on-site due to the infrastructure that had been put in place. Minimal release initially occurred into the adjacent environment. However, before material could be removed from site the protection measures suffered a failure resulting in a large scale release of contaminated water into the surrounding watercourses resulting in impacts to the local fish population and a clean-up operation being required.

## Crisis Containment after an event

A fire at a manufacturing plant led to the discharge of chemicals and firewater into an adjacent stream which caused a significant interest from local community as well as press. A crisis management firm was engaged to help the insured manage its public relations including press releases and monitoring press and social media outlets for any negative or inaccurate stories. This allowed the company to focus efforts on managing the situation at the plant and work on clean-up efforts.

## Construction activities & impacts on adjacent habitats

The insured was undertaking large scale excavation works adjacent to a river. During the excavation works the ground became unstable resulting in a loss of structural integrity and partial collapse of the excavation. This resulted in the adjacent river inundating the excavation until such time that the collapse could be temporarily fixed. Impacts to the insured property is of less concern in this case but the actions of the contractor resulted in significant impacts to the adjacent river through temporary diversion of water, and also loading of the water with suspended solids and therefore the potential for impacts to biodiversity.

# CLAIMS FIRST

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