

Climate change and environmental liability: untangling the complex web of emerging risks

Jayne Cunningham • April 24, 2023

Increasingly severe, frequent and costly extreme weather events, which research¹ links directly to the impacts of climate change, are now becoming a new normal across the world. These intensifying natural catastrophe risks are spilling over into the environmental liability sphere leaving businesses potentially exposed to risks they may not have previously considered.

Changing climate creates new environmental risk

In February 2021, Storm Uri brought 'The Great Freeze' to Texas. Pipes froze and burst, causing an estimated \$11bn in insured losses.² At the time, Storm Uri was described as the first of its kind in 50 years. However, just two years later, in January 2023, Texas experienced another winter storm that had a similar devastating effect. As the energy production state of the US, water was not the only substance carried in Texan pipes that burst. The full polluting impacts of industrial and petrochemicals into public spaces remains to be seen, but the increasing likelihood of subsequent environmental liability claims is becoming evident.

Technological advancements expose risks to human health

At the same time, advancements in technology are exposing a plethora of environmental and health risks to which businesses were previously unaware. And, as chemical analysis techniques grow in sophistication,

so too does the volume of unknown and long-term risks associated with using a range of chemicals, the effects of which may not be fully understood for years to come.

These developments mean that businesses will need to consider how they will deal with their potential liability, as everyday chemicals that had been regarded safe for decades – such as dry-cleaning agent tetrachlorethylene and the protective coating PFAS, used to stain guard carpets and curtains and coat cooking utensils – have been washing into wastewater for many years. According to the latest research from The Environmental Protection Agency (EPA³), PFAS is now known to be highly mobile, entering drinking water, and may contain human carcinogens.

If a company is found liable for resulting environmental harm to human or wildlife, the legal costs and damages can be significant – as we may see at the conclusion of the ongoing water contamination related lawsuit against the North Carolina Marine Corps Base Camp Lejeune⁴ brought by a number of veterans.

Knock on effects

There is also a potential knock-on effect for insurers and insureds, as in some cases, environmental tenure policies, which are underwritten to cover several years into the future, could be forced to pay out for consequences that would have been almost impossible to predict at the policy's inception. If a claim escalates into a class action, the potential aggregation risk and impact of social inflation could equally increase pay-outs owed.

As regulators and consumers become more aware of these new environmental risks, a complex web is emerging that shows the interconnectedness between intensifying physical risks, regulatory scrutiny and more sophisticated technology that will create increasing pressures to transition towards more sustainable businesses practices.

Greater understanding of these new environmental risks will be a step in the right direction, however alarming the findings. Ultimately, knowing where to look will lead to an evolution in the regulation that keeps us safe. It is also the starter gun for businesses to reconsider whether their environmental liability insurance policies are up to par with the evolving risks, and for carriers to consider their present and future exposures.



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- 1 How is climate linked to extreme weather? - Met Office
- 2 feb2021-tx-winter-weather-summary-mar2022.pdf (texas.gov)
- 3 Research on Per- and Polyfluoroalkyl Substances (PFAS) | US EPA
- 4 Camp Lejeune water contamination claims total about 5,000 so far, U.S. Navy says | Reuters

