

Case study: Detergent spill clean-up costs £1.7m

XL Group
Insurance



Environmental

A fire at a chemical manufacturing building spread to the whole facility, resulting in its complete destruction. The fire and water used to extinguish the fire, resulted in the discharge of heavily contaminated water to the river that eventually ended up in the estuary and the sea.

The consequences:

The company alerted the authorities who subsequently activated the emergency protocol to prevent the spread of the polluted water and minimise the damage to the estuary. The emergency measures necessitated the use of 60 people, 10 vehicles, and the temporary installation of both anti-pollution barriers, and absorption barriers installed all along the river.

As a result the authority issued the insured with a claim for £1.7m for clean-up costs and mitigation measures. Fortunately, because the detergent was of a biodegradable nature, the damages to the river and estuary were limited.

This case demonstrates how fire can trigger pollution conditions (fire water runoff), which result in significant environmental liabilities. Even though these may be sudden and accidental in nature, a public liability policy would not respond to the regulatory clean-up costs arising from this type of incident.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	No

Public liability policies vs. Environmental policies (based on a typical policy)

Are these types of loss covered by a typical Public Liability Policy?	Are these types of loss covered by a typical Environmental Impairment Liability Policy?
No	Yes
Only if Sudden & Accidental	Yes
No	Yes

Case study: Diesel spill results in emergency clean-up

XL Group
Insurance



Environmental

The absence of an adequate maintenance programme for an aboveground diesel storage tank led to a breach in the secondary containment, resulting in a gradual leak that reached the sea.

The consequences:

On immediate discovery of the leak, the company informed the authorities to coordinate the clean-up and carry out mitigation measures. The first measure taken to prevent exacerbation of the leak was to stop the discharge of the company's treated effluent into the watercourse. This effectively stopped the company from operating for an extended period.

The total loss amounted to €160,000 of which €40,000 is in respect of clean-up costs and €120,000 for business interruption costs.

This example demonstrates how emergency costs are critical in mitigating environmental releases. Environmental policies provide coverage for emergency costs and allow the insured to notify the authorities of the release without compromising cover.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	Yes

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Only if Sudden & Accidental	Yes
No	Yes

Case study: City-centre building £2m environmental loss



XL Group
Insurance



Environmental

While carrying out replacement works in the basement of a city centre, multi-tenanted commercial building, contractors inadvertently damaged badly-corroded pipes connecting oil storage tanks to boilers.

The leak was undetected for at least a week, with approximately 20,000 litres of fuel being lost during this period.

The consequences:

Work to remedy the situation did not start until a few weeks after discovery of the leak. As a result, the problem was exacerbated with fuel penetrating into the slab beneath the basement and a basement cinema. Significant remedial work was required, comprising flooding and flushing out of the diesel using dispersants and water, and subsequent removal of fuel-bearing fluid by tanker. The sub-floor and basement slab were also excavated and the contamination removed. Additionally, operation of the cinema was interrupted for an extended period.

The costs for on-site clean-up and third party business interruption were estimated at £2 million.

This case demonstrates how even a seemingly low risk land use, like an office building, has the potential to give rise to significant environmental liabilities. It also demonstrates how, despite good intentions and risk management, operator error or mechanical error still leaves the potential for environmental damage to occur.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	Yes
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	No
Historical Release	No
Gradual Release	Yes

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Case study: Environmental damage yet no pollution



XL Group
Insurance



Environmental

A shooting estate was fined £50,000 and ordered to pay £237,548 in legal costs after damaging part of a Site of Special Scientific Interest (SSSI) in Durham. In addition, the company was issued with a Restoration Order, bringing the total costs to approximately £500,000.

The case was brought to court after the company built a track and car park along with the associated drainage on a moorland site without seeking permission.

The consequences:

These works resulted in damage to over 4,433 square metres of internationally important peatland habitat.

A representative of the Environmental Agency explained that land owners and occupiers of SSSIs have a legal responsibility to seek permission from Natural England about proposals that may damage SSSIs and in this case [the company] failed to do so.

The imposed Restoration Order required the shooting estate to remove the track and car park for the purposes of restoring that part of the SSSI to its original condition before the offence. The defendants agreed to an undertaking for the court to carry out, at their own cost, additional works to reduce the impact associated with building another track within the SSSI, and to block an area of man-made drains 40km in length to help rectify the condition of the moorland.

"Over the last 18 months Natural England has been working with [the company] to agree a management plan that will ensure that over 5,500 hectares of Lune Forest SSSI are managed to sustain and enhance its interest for wildlife", said the representative.

This case illustrates how 'Environmental Damage' may arise without the need for a pollution condition to have occurred.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	No



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Case study: Environmental liability from fire leads to bankruptcy



XL Group
Insurance



Environmental

A fire at a relatively small warehouse facility – 2 hectares in size and employing 50 people – resulted in highly toxic waste water escaping from the site.

At the time of the fire, the company was storing the maximum capacity of hazardous materials permitted under its licence, some 4,000 tons. This resultant mixture of chemicals and firewater resulted in the production of 35,000 square meters of contaminated water, and 1,800 tons of contaminated soil.

The consequences:

The estimated costs to remedy the resultant soil and water pollution were in the region of €40m, with total costs estimated in excess of €70m, due to additional third party claims over and above the statutory costs of €40m, which were needed to make the environment safe once again.

Third party claims included costs from two neighbouring facilities which had to close permanently, and numerous other facilities temporarily affected by the fire.

As a result of not being able to pay the costs arising from the incident, the company quickly became insolvent as it did not have the appropriate or the relevant insurance cover to deal with such a scenario.

Regulators have undertaken a survey of the chemical industry and found that over 70% did not comply with health & safety standards, of which 8% were posing an imminent threat.

The above case study demonstrates how uninsured environmental liabilities can arise on a scale sufficient to make a company insolvent.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	Yes
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	No

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Case study: Landfill operator unable to meet clean-up costs



XL Group
Insurance



Environmental

A landfill operation came under the scrutiny of the regulator after it became clear that the operator was contravening strict conditions of its environmental licence, which stipulated what and how waste could be deposited.

An order was made by the regulator against the operator to remove the waste, that the regulator felt had been illegally deposited, and in breach of its licence.

The consequences:

The landfill operator received an order to remove waste which it was considered to have been illegally deposited. Not long after, the company went into liquidation. The company ceased trading and was unable to clear up significant volumes of waste which either was not permitted to be there, or required appropriate storage.

The waste was having a direct impact on the local environment and the local regulator was unable to get the polluter to pay due to the liquidation of the company.

Not only was the tax payer left with the bill, but due to the way material had been stored, a significant pollution incident subsequently followed, which cost several million Euros to stop the spread and to clean up. This was in addition to significant costs to remediate the way the site has been left.

The regulator subsequently undertook a review of financial provisions associated with environmental licences, and found that the vast majority of licence holders do not in fact have measures to meet the financial provision requirements of the licences.

This case demonstrates that despite the 'polluter pays' principle and strict liability of licensed facilities for environmental clean-up, without financial provisions being imposed, it is often difficult to recover costs where the polluter becomes insolvent. This and similar cases increases the likelihood of the European Union introducing compulsory financial provisions under the Environmental Liability Directive.



Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	No

Public liability policies vs. Environmental policies (based on a typical policy)

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Case study: Steel mill operator leaves pollution liability



XL Group
Insurance



Environmental

A steel mill operator filed for insolvency. The site was heavily contaminated with above ground waste material, slag, and sludge, resulting in significant heavy metal and hydrocarbon contamination of the site.

The site had an environmental permit, requiring the operator to clean it up on cessation of activities, and ensure the site did not cause harm to the environment during its operations. An order was made against the insolvent company to remove the waste and clean up the site in accordance with its environmental licence.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	No
Historical Release	Yes
Gradual Release	Yes

The consequences:

A long and complex case followed, the result of which found that the 'polluter pays' principle was immaterial as the polluter had no means or assets with which to pay for it. The significant clean-up costs were borne by the tax payer.

This case demonstrates that despite the 'polluter pays' principle and strict liability of licensed facilities for environmental clean-up, without financial provisions being imposed, it is often difficult to recover costs where the polluter goes bankrupt. This and similar cases increases the likelihood of the European Union introducing compulsory financial provisions under the Environmental liability directive.

Public liability policies vs. Environmental policies (based on a typical policy)

Are these types of loss covered by a typical Public Liability Policy?	Are these types of loss covered by a typical Environmental Impairment Liability Policy?
No	Yes
Only if Sudden & Accidental	Yes
No	Yes

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Case study: Developer liable for pollution it didn't create

XL Group
Insurance



Environmental

A developer acquired a former chemical works. The site had previously been used in connection with the manufacture of industrial products for a number of years. The developer subsequently developed the site for housing.

A number of years passed and a local water company became concerned about elevated concentrations of bromate (a suspected human carcinogen) and bromide (which can be toxic at high concentrations) in groundwater. The levels were in excess of acceptable drinking water standards, and a 20 km plume was traced back to the site.

The site was subsequently designated as "contaminated land" by regulators and the regulator identified both the developer and a former owner as the "appropriate persons" under Part IIA of the Environmental Protection Act 1990.

Both companies were found liable, and both unsuccessfully appealed. The former owner on the basis that they have not fully disclosed all information (and therefore had not passed on all liability to the developer). The developer for exacerbating the pre-existing pollution conditions during its site ownership.

The consequences:

Nine public supply boreholes were closed as a result of the pollution, costing millions of pounds for the water company. The water companies also indicated the cost of future remediation work could run into millions, and last up to 10 years. The possibility exists for the water company to seek to recover damages.

This case demonstrates how owners and developers can attract liability for pre-existing pollution conditions that they may not have originally created. It also demonstrates how significant environmental liabilities can arise, post-sale and development.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	Yes
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	No
Historical Release	Yes
Gradual Release	Yes

Public liability policies vs. Environmental policies (based on a typical policy)

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Only if Sudden & Accidental	Yes
No	Yes

Case study: School – An unlikely source of pollution?

XL Group
Insurance



Environmental

A Somerset school was ordered to pay almost £17,000 in fines, compensation and costs after thousands of gallons of heating oil leaked from a faulty pipe and caused a major pollution alert.

The alarm was raised after a contractor discovered approximately 33,000 litres of oil had escaped from a corroded pipe connecting two oil storage tanks at the school.

Oil was discovered coming up through tarmac and was visible on the surface of a local pond. However the major concern was that the spill had occurred over a very sensitive groundwater aquifer and was in close proximity to drinking water abstraction boreholes located approximately one mile from the school.

As a precaution, the water company closed its Winscombe boreholes. Following further investigation, it was discovered that the oil pollution had not migrated as far as the

groundwater abstractions. Ironically, the school had been proactive and replaced its oil storage tanks, but failed to replace the pipeline linking the tanks to the boilers.

The consequences:

The school was fined £9,000 and ordered to pay £2,901 costs by magistrates sitting at Weston-super-Mare after pleading guilty to causing polluting matter, namely heating oil, to enter controlled waters, namely groundwater, contrary to Section 85(1) of the Water Resources Act 1991. It was also ordered to pay £5,000 compensation to Bristol Water plus a £50 victim surcharge.

Had the spillage impacted the drinking water abstraction, the costs to remediate would have been substantially greater.

This case demonstrates how even a seemingly low risk operator like a school has the potential to give rise to significant environmental liabilities. It also demonstrates how, despite good intentions and risk management (e.g. in upgrading the oil tanks), operator error or mechanical error still leaves the potential for environmental damage to occur.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	Yes
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	No
Historical Release	No
Gradual Release	Yes

Public liability policies vs. Environmental policies (based on a typical policy)

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Case study: Gradual fuel leak results in £1.2m clean-up

XL Group
Insurance



Environmental

A water utility company faced a clean-up bill of £1.2m following a major diesel spillage.

The company realised that a significant amount of fuel had been lost from one of its back up generators at a treatment plant. Following an exhaustive investigation, a hole was discovered in piping from the tank that ran underground.

The contamination threatened groundwater within a designated Source Protection Zone and posed a risk to a nearby potable drinking water abstraction which was the sole source of water for around 50,000 people in the local area.

In total, about 7,000 litres of fuel were ascertained to have been lost before the leak was detected.

Remediation of the soil and groundwater was undertaken over an 18 month period. Ongoing monitoring was required, further adding to the remediation expenses.

This case study demonstrates how XL Group's Environmental Impairment Liability Insurance can be used by utility companies to protect against environmental liabilities resulting from an uncontrolled release of fuel oil.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	No
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	No
Historical Release	No
Gradual Release	Yes

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Case study: Fuel spillage impacts protected habitat



XL Group
Insurance



Environmental

A storage depot operator insured by XL Group suffered a spillage of diesel from an above ground storage tank when a contractor's vehicle inadvertently backed into it.

The impact damaged the bund wall surrounding the tank and damaged pipe work connecting the tank to the fuel dispenser.

A significant release (estimated 20,000 litres) of diesel occurred which reached surface water drains which discharged into a ditch on neighbouring RSPB land.

Losses arising from this scenario?

	Yes / No
Statutory Clean-up Costs	Yes
Third Party Damages	Yes
Own-Site Clean-up Costs	Yes
Biodiversity / Habitat Damage	Yes
Historical Release	No
Gradual Release	No

The consequences:

XL Group's EIL policy responded to the incident by providing on and off-site remediation expenses to clean up the diesel and impacted ground.

It is questionable as to whether the operator's public liability policy would have responded to statutory clean-up following such an incident and serves to demonstrate the importance of environmental insurance for operators of potentially hazardous processes.

This case study demonstrates how XL Group's Environmental Impairment responded to a diesel spillage, providing both first party and third party land clean-up.

Public liability policies vs. Environmental policies (based on a typical policy)

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