

# The cost of inaction: Managing the risk of chemical incidents throughout the supply chain

Loss of life or serious injury. Environmental damage. Irreparable harm to commercial reputation. Product safety managers know that the price of a chemical incident goes far beyond financial cost. But in today's dynamic chemical industry, implementing a comprehensive programme of risk mitigation, crisis management and regulatory compliance is a complex task.

The five pillars of chemical safety – governance, finance, mitigating risk, incident response and distribution – form an essential framework on which to build an effective crisis-management and mitigation system, reducing the risk and the cost of operating across the global chemical supply chain.

## 1 Governance & managerial support

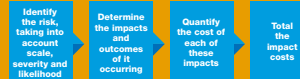
CEOs, directors and managers are responsible for their businesses' safety performance.

The responsibility for supply chain safety must start at the very top by cultivating a culture which recognises that performance excellence requires going beyond compliance.

## 2 Reporting and finance

Before planning to tackle company-level risk, it is necessary to quantify the cost of an incident. Overspend is wasteful, while underinvestment leaves companies exposed to financial and reputational damage.

Quantifying the cost of an incident:



## 3 Mitigating risk at the source

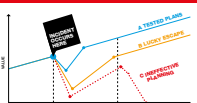
For companies with long-standing health and safety procedures, it is tempting to assume that because a serious chemical incident has never occurred then it never will.

It is recommended that companies provide a range of risk, crisis management and mitigation measures as part of their 'duty of care'. However, to actually reduce risk, a company must go beyond compliance and build a risk-mitigation system based around specific needs.

## 4 Incident response

How people react in the first moments of a chemical incident defines its severity. Providing those on the ground with access to expert information can be the difference between a minor event and a high-cost incident that causes serious harm.

How an incident can interrupt business continuity:



## 5 Distribution

Chemical incidents that occur along the supply chain have serious implications, no matter how far away from the core business they occur.

Companies must ensure that the distribution and transport networks that connect manufacturing sites, storage facilities and end users are secure, and that best practice is adhered to wherever hazardous materials are handled.

By applying this process, product safety managers are able to identify the limitations in their safety strategies and take actions to fill gaps in capacity.

As chemical markets grow and supply chains become more complex, the risks of a major chemical incident becomes statistically greater. The ability to quantify the cost of inaction provides a powerful tool to advise senior management on the best ways to protect people, the environment, assets and reputation.

## From the NCEC call log:

### MAJOR TRANSPORT INCIDENT

NCEC received a call about an incident where acid was leaking on a motorway. Our emergency responders advised the caller that:

- Anyone contaminated by the acid would require immediate hospitalisation – avoiding two serious incidents (2 x £205,406)
  - The fumes would be very toxic, so the appropriate personal protective equipment (PPE) is gas-tight suits – preventing serious injury to four emergency responders (4 x £205,406)
  - The risk of explosion can be minimised by ensuring there are no ignition sources
  - Drains should be blocked to prevent the water used by the fire and rescue service dealing with the incident from entering watercourses (£50,000)
- After helping the emergency services, NCEC immediately contacted the client's emergency number, enabling the company to initiate its crisis and public relations plans.

Total avoided cost of incident: **£1,282,448**

### INSECTICIDE SPILL

Following a large spill of insecticide, the attending fire and rescue service crew planned to wash it into a sewage system. However, NCEC identified that this would cause environmental damage and be a high-risk/high-cost process, which could have:

- Resulted in 200 tankers being needed to take away the contaminated water for disposal (£19,000)
  - Caused aquatic damage resulting in a fine for unsafe disposal (£50,000)
  - Resulted in litigation fees to determine who would be responsible for paying any fine – the company or the emergency services.
- NCEC advised on a more appropriate process for clean-up that avoided the risk of contaminating the sewage system.

Total avoided cost of incident: **£69,000+**

NCEC is the chosen 24-hour emergency response provider for more than 550 chemical companies, and supports many more with training and regulatory services.

NCEC is committed to supporting its clients to lead the way in best practice and ensure that global supply chains reflect the industry's commitment to protecting people, property and the environment.

Delivering best practice in chemical safety is an ongoing and collaborative process.

For more in-depth information about the content of this poster, please speak to our on-hand expert who can also supply you with our accompanying whitepaper 'The cost of inaction - Managing the risk of chemical incidents throughout the supply chain.'



# NCEC

Part of Ricardo