

Company fined £2.5m following uncontrolled acid releases

- Schools were closed following hydrochloric acid release
- Joint investigation and prosecution by HSE and the Environment Agency
- Guidance is available on maintaining equipment in large chemical plants

A chemical manufacturing company has been fined £2.5m following two incidents of uncontrolled releases of highly corrosive acids at its site in West Thurrock, Essex.

Industrial Chemicals Ltd pleaded guilty following the incidents in 2020, one of which caused the release of a hydrogen chloride gas cloud that resulted in schools in the area to close.

The first incident on 6 January 2020 resulted in an uncontrolled release of hydrochloric acid from three chemical storage tanks.

Three hundred thousand litres of the substance was released via poorly maintained pipework. As it came into contact with the atmosphere, this created a hydrogen chloride gas cloud which spread to nearby towns. Nearby CCTV footage shows the atmosphere being engulfed in the cloud within 60 seconds.



CCTV footage shows the atmosphere being engulfed in the hydrogen chloride gas cloud within 60 seconds

Local businesses were affected and schools in West Thurrock and Chafford Hundred were advised to close. Due to the risk to local residents of exposure to the migrating fumes, advice was provided by emergency responders to close windows and doors.

Hydrochloric acid is highly corrosive and hydrogen chloride is a toxic gas. The incident lasted approximately 24 hours.

On 29 August 2020 another uncontrolled release, this time of sulphuric acid, occurred due to a crack in a pipe. This resulted in the release of 87 cubic metres of sulphuric acid being released into the atmosphere. The valve that

was designed to control leaks in the event of cracks did not operate as intended, leading to the uncontrolled release, increasing the risks to operators and delivery drivers.

Sulphuric acid is highly corrosive and can cause lung damage if high levels are breathed in.

A joint investigation by the Health and Safety Executive (HSE) and Environment Agency (EA) into the release of the hydrochloric acid in January 2020 found that pipework had not been installed, maintained and inspected sufficiently which led to several smaller pipe failures before the more serious loss of containment. The investigation found that pipework had not been properly maintained, and a protective chemical-resistant coating had not been applied to the full height of containment walls.

An investigation by HSE into the release of sulphuric acid in August 2020 identified a lack of inspection and maintenance of the pipework and valves. The leak continued for a further two days due to the inability to operate a manual valve to stop the process. The loss of containment was eventually stopped on 31 August 2020. Fortunately, no one was harmed.

Both HSE and industry guidance highlight that [work equipment](#) must be maintained in efficient working order and in good repair. Work equipment includes the defective valve and pipework at the site. Suitable and sufficient inspection and maintenance regimes for pipework and valves significantly reduces the likelihood of the [loss of containment of dangerous substances](#) to protect both employees, other workers and members of the public from potential harm.

In relation to the January 2020 incident:

- Industrial Chemicals Limited of Old Power Station site, Stoneness Road, West Thurrock, Grays, Essex, pleaded guilty to breaching Section 2(1) and 3(1) of the Health and Safety at Work etc Act 1974 for the loss of containment of hydrochloric acid.
- Industrial Chemicals Limited also pleaded guilty to two charges of breaching environmental permit conditions in contravention of regulation 38(2) of the Environmental Permitting (England and Wales) Regulations 2016 in that the company did not take appropriate measures to minimise the risk of unauthorised emissions of hydrochloric acid/acid fumes to air and land with the potential to impact receptors offsite including the local community.

In relation to the August 2020 incident:

- Industrial Chemicals Limited pleaded guilty to Section 2(1) of the Health and Safety at Work etc Act 1974.

In a hearing at Westminster Combined Court last week (Friday 28 March), the company was fined £2.4 million in relation to charges under the Health and Safety at Work Act 1974 and a further £100,000 in relation to charges under the Environmental Permitting (England and Wales) Regulations 2016.

HSE principal inspector Maria Strangward said: “The uncontrolled release of significant quantities of hazardous substances in these cases was entirely avoidable.

“An appropriate planned maintenance programme should have been in place to ensure that pipes do not fail, and valves operate. The proactive maintenance of pipework and safety critical valves is extremely important at sites such as these.

“Industrial Chemicals Limited’s West Thurrock site is classified as an upper tier site under the Control of Major Accident Regulations 2015, so that businesses and communities are protected, and potential major accidents avoided.”

Adrian Sherman, Environment Agency regulatory officer, said: “The Environment Agency takes its regulatory responsibilities seriously to protect communities and the environment.

“We expect businesses to comply with their environmental permits and will take appropriate enforcement action when they fail to do so. In this case, an appropriate inspection and maintenance programme could have prevented an environmental and public health risk.”

The HSE prosecution was brought by enforcement lawyer Samantha Wells, who said: “At the sentencing hearing the judge noted the previous history of poor health and safety standards by this defendant, which included previous incidents relating to poor maintenance of pipework at this site showing a careless attitude to health and safety which was treated as an aggravating factor which uplifted the sentence imposed.”

The EA prosecution was brought by EA lawyer Laura King.

Further information:

1. [The Health and Safety Executive](#) (HSE) is Britain’s national regulator for workplace health and safety. We are dedicated to protecting people and places, and helping everyone lead safer and healthier lives.
2. More information about the [legislation](#) referred to in this case is available.
3. Further details on the latest [HSE news releases](#) is available.
4. Relevant guidance can be found at: [Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance – L22](#) and [A guide to the Control of Major Accident Hazards Regulations \(COMAH\) 2015 – L111](#)
5. HSE does not pass sentences, set guidelines or collect any fines imposed. Relevant sentencing guidelines must be followed unless the court is satisfied that it would be contrary to the interests of justice to do so. The sentencing guidelines for health and safety offences can be found [here](#).

About the Environment Agency:

1. The Environment Agency is a non-departmental public body, sponsored by the Department for Environment, Food and Rural Affairs.
 2. We work with businesses to help them comply with environmental regulations. Where businesses fail to meet their obligations, the Environment Agency takes appropriate enforcement action, ranging from guidance and advice to prosecution. Our enforcement work helps ensure a level playing field for legitimate businesses and prevents environmental harm.
 3. Industries with potential to pollute must operate under permits with strict conditions to protect the environment and local communities.
 4. For more information visit www.gov.uk/environment-agency.
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[April is Stress Awareness Month: tackle stress in the workplace with five steps in five weeks](#)

This April, Britain's bosses are being invited to follow five simple steps to prevent and reduce stress in their workplace.

The Health and Safety Executive's (HSE) Working Minds campaign has called on employers to support workers mental health during Stress Awareness Month.

Over the course of the month, employers are encouraged to focus on one of the campaign's 5 Rs for each of the five weeks. They are: to **Reach out** and have conversations, **Recognise** the signs and causes of stress, **Respond** to any risks you've identified, **Reflect** on actions you've agreed and taken, and make it **Routine**.

Preventing work-related stress isn't just the right thing to do by workers, it's the law. All employers are required to prevent work related stress to support good mental health in the workplace.

The Working Minds campaign brings together a range of tools and support to help businesses and workers including free online learning, Talking Toolkits, risk assessment templates and examples.

Kayleigh Roberts from HSE Engagement and Policy Division says: "By being proactive, you can improve productivity, reduce sickness absence and help retain valued workers. Employers are required to assess the risk of work-related stress impacting their workers, and act on the risks identified.

"As well as guiding you step by step, we provide all the practical templates, tools and resources you need to get started or, you can use it as an

opportunity to review what you already do. A huge part of this is making it part of your everyday working life, not just a one-off tick box that gets forgotten about.”

There are six main areas that can lead to work-related stress if they are not managed properly. These are: demands, control, support, relationships, role and change. Factors like skills and experience, age, or disability may all affect someone’s ability to cope.

If you are an employer looking for support, a good place to start is to [register for free bitesize learning](#).

You can also...

- Use a [Talking Toolkit](#) to help structure your conversations
- [Download a risk assessment template](#) to develop your processes for preventing or managing stressors
- Find out about NEBOSH HSE [Certificate in Managing Stress at Work](#)
- [Sign up to the monthly newsletter](#) to help you champion the Working Minds campaign beyond April.
- [Watch the webinar](#) with Healthy Working Wales, which is also available with [Welsh subtitles](#).

Notes to Editors:

1. The [Health and Safety Executive](#) (HSE) is Britain’s national regulator for workplace health and safety. We prevent work-related death, injury and ill health through regulatory actions that range from influencing behaviours across whole industry sectors through to targeted interventions on individual businesses. These activities are supported by globally recognised scientific expertise.
2. To read more about HSE’s Working Minds campaign click [here](#).
3. There are 36 Working Minds campaign partners including; Mind, ACAS, CIPD, NEBOSH and IOSH.
4. For press and media enquiries please contact enquiries@hse.gov.uk

[Health Board fined for failing to manage patients risk of falling](#)

Betsi Cadwaladr University Health Board has been fined £250,000 following failures relating to patient falls in its hospitals.

Three elderly patients sustained falls in 2022 and 2023 and they all sadly died. The cause of death of two of them was identified as being as a direct

result of falling.

Richard Hughes, 84 and Gwilym Williams, 74, fell at Ysybty Gwynedd in Bangor in January and June 2022 respectively, while Nancy Read, who was 93, fell at Wrexham Maelor Hospital in January 2023.

Betsi Cadwaladr University Health Board (BCUHB) was initially investigated by the Health and Safety Executive (HSE) following two other patient falls in 2020, one of which resulted in fatal injuries.

As a result, HSE took enforcement action against BCUHB that required it to implement an effective patient fall management system, including:

- ensuring patients had appropriate falls risk assessments (with clear risk controls detailed);
- that the risk assessments were reviewed and updated accordingly in the event of a patient's health deteriorating;
- that staff received training on patient falls.

The enforcement action also required BCUHB to review the patient falls policy and to ensure the entire system worked effectively. A follow-on inspection made in November 2021 identified that BCUHB were still not managing patient falls and this resulted in a further action being taken.

However, over the next two years, the three patients died and BCUHB had not implemented a system to identify and manage patient falls quickly, or provide staff with updated training.

Betsi Cadwaladr University Health Board pleaded guilty to breaching Section 3 (1) of the Health and Safety at work Act 1974 and have been fined £250,000 and ordered to pay costs of £11,766.

Speaking after the case HSE inspector Sarah Baldwin-Jones said "This is the second time this health board has been prosecuted in less than 18 months.

"These incidents could so easily have been avoided had the BCUHB followed their own adult falls policy. Effective management of patient falls includes thorough risk assessment, effective communication on risk management, monitoring and re-evaluation should the patient condition deteriorate.

"Staff and agency workers need to follow the same training pathway, ensuring those responsible for falls management have the skills to make appropriate decisions.

"Unfortunately, these actions were not always followed and as a result some patients suffered falls, which resulted in two preventable deaths."

The HSE prosecution was brought by HSE enforcement lawyer Gemma Zakrzewski and paralegal officer Sarah Thomas.

Further information:

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[Contractor sentenced after uncontrolled spread of asbestos following roof replacement work at domestic garages](#)

A self-employed roofing contractor has been ordered to undertake unpaid work after the uncontrolled spread of asbestos in a back garden, putting two young workers and local residents at risk.

Doorbell-cam footage shows parts of an old garage roof being disposed of with a lack of control measures.

The footage has been released by the Health and Safety Executive (HSE) at the start of Global Asbestos Awareness Week today, Tuesday 1 April, to highlight the dangers.

Stephen Wilks, trading as S Wilks Roofing, pleaded guilty to breaching asbestos safety regulations after work carried out under his control led to the contamination of a residential area with asbestos-containing materials.

The court heard how Mr Wilks had been commissioned by a property management company to replace asbestos cement roof sheets on three garages off Green Walk in Bowden, Altrincham in February 2022.

HSE began an investigation after a local resident raised concerns about debris that had fallen into their garden during the work. Analysis confirmed the debris contained chrysotile asbestos.

HSE inspectors discovered ripped bags of asbestos waste stored in a publicly accessible area in front of the garages, with asbestos-containing materials spilling onto the ground and contaminating nearby undergrowth. Further investigation revealed that residents' personal belongings stored in the

garages had also been contaminated.

The footage below shows two workers under the supervision of Mr Wilks improperly clearing asbestos debris from a neighbouring garden and disposing of it in domestic waste bins, highlighting the unsafe practices that led to this prosecution.

HSE's campaign "Asbestos and You" reminds tradespeople about the dangers of asbestos and the importance of working safely with it.

The regulator also provides comprehensive guidance for workers and employers about working safely with asbestos on its website. This includes information on how to identify asbestos, what to do if you find it, and the appropriate safety measures needed when working with or around asbestos-containing materials. Workers in trades such as construction, maintenance, demolition and installation are particularly at risk and should ensure they have appropriate training before starting work that might disturb asbestos. This guidance is available on the [HSE website](#).

The property management company subsequently arranged for a licensed asbestos removal contractor to safely collect the waste and thoroughly clean the affected areas.

Mr Wilks pleaded guilty to breaching Regulation 11(1) and Regulation 16 of The Control of Asbestos Regulations 2012, which require proper planning and precautions to prevent exposure to and spread of asbestos during non-licensed work. He was sentenced to a 12 month Community Order with 200 hours of unpaid work and was ordered to pay £3582.13 costs at a hearing at Ashton-Under-Lyne Magistrates Court on 28 March 2025.

HSE Inspector Phil Redman said: "This was a serious incident that put Mr Wilks, those working under his control, and members of the public, at risk from the potential harmful effects of being exposed to asbestos-containing materials. Duty holders are reminded to ensure they fully control the risks associated with the removal of asbestos-containing materials that do not require removal by a licensed asbestos removal contractor."

The prosecution was supported by HSE enforcement lawyer Kate Harney and paralegal officer Rebecca Withell.

Further information:

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2. More information about the [legislation](#) referred to in this case is available.
3. Further details on the latest [HSE news releases](#) is available.
4. HSE's campaign "Asbestos and You" reminds tradespeople about the dangers of asbestos and the importance of working safely with it. Asbestos can be found in buildings built before 2000 and is still the biggest

workplace killer in Britain, causing around 5,000 deaths every year. When disturbed, asbestos releases tiny fibres that can cause fatal lung diseases and cancers. More information can be found at: [Asbestos & You – Work Right to keep Britain safe](#)

5. Guidance on working safely with asbestos-containing materials can be found at: [Asbestos – HSE](#)

[Annual Science Review 2025](#)

The Health and Safety Executive (HSE) has published its 2025 Annual Science Review, showcasing the work it has delivered in support of the five strategic objectives outlined in the HSE’s 10-year strategy Protecting People and Places.

The 2025 review features more than 20 case studies from HSE’s science division with demonstrating how its extensive expertise, knowledge and capability delivers a positive impact on the working world.

The review highlights the range of research that HSE scientists are working on, from the safe introduction of hydrogen technologies and supporting the UK target to achieve net zero emissions, to assessing the evidence for safe levels of exposure to various toxicological hazards.

Professor Andrew Curran, Director of Science, Chief Scientific Adviser and Head of GSE Profession: “I’m proud of the important, innovative work that the scientists, engineers and analysts carry out, providing the evidence base to help deliver our strategy. The science review provides interesting examples of their important work as well as introducing you to some of the excellent people from around our organisation we are privileged to work with.”

Innovative projects featured range from the use of drones to inspect safety critical structures, including recommendations on how and when to use remote visual inspection (RVI) instead of in-person close visual inspection (CVI), to work on how lithium-ion battery power plant can be safely used within the confined space of a tunnel to remove diesel exhaust emissions – providing a positive health benefits to workers.

The [2025 Annual Science Review](#) is available for download from HSE’s science and research website.

You can find out more about the [case studies on our YouTube Channel](#).