

# Drones used to spray pesticides in Great Britain

Drones are being used to spray pesticides for the first time in Great Britain in a trial of new technology.

The Health and Safety Executive (HSE) approved the trial that allows plants and weeds growing around railway infrastructure to be treated by pesticides applied by drones.

The technology was discussed at an international conference organised by HSE. The regulator leads a global partnership looking at how drones could be used to apply pesticides in the future.

The railway trial allows chemical herbicides to be sprayed on railway bridges, tunnel portals and viaducts. The technology could potentially be used in other industries.



A demonstration of the drone technology took place on May 25

Professor Andrew Curran, HSE's chief scientific adviser, said: "Although we need to carefully consider both the environmental implications and potential consequences for human health, the emerging evidence suggests using drones to spray pesticides could have a positive impact on safety and the environment. If applied in the right way drones could spray more safely and more economically. This could have big implications for other industries especially agriculture."

HSE plays a prominent role in an initiative designed to help regulators around the world assess the risks associated with applying pesticides by drone.

Applying Pesticides Using Drones took place in York between 23 and 24 May and was sponsored by the OECD Co-operative Research Programme: Sustainable Agricultural and Food Systems.



Professor Andrew Curran, HSE's chief scientific adviser and Dr Richard Daniels, CRD Director spoke on the opening day of a two-day conference

Attendees heard from internationally recognised regulators, researchers and industry experts from North America, Asia, Europe, and Australia.

"We believe we have a key role in driving international developments which can help improve safety and protect people, places and the environment around the globe," said Professor Curran.

In the trial, drones developed by commercial firm Railscape Ltd have been used to control plants and weeds growing around railway infrastructure. This is normally done by workers manually, who often must work at height, overnight and on a tight time schedule when trains aren't operating. It is hoped using drones will reduce the risk of injury to workers and make the application more efficient and effective.

Ed Lewis, operations and project manager at Railscape, said the drone had been designed to spray pesticides in areas that are difficult or hazardous to reach using conventional working at height methods.

"While it was designed to operate in the railway environment, there are wider opportunities for other applications in equally challenging environments," he added.

"The Railscape solution is a UK first and we are currently the only company offering this service."

## About HSE

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. [hse.gov.uk](https://www.hse.gov.uk)

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## Company fined as worker crushed by 700kg crate

A glass distribution and installation company has been fined £200,000 after an employee broke two ribs and fractured his vertebra after being crushed by a crate.

The man, 29, was working for PSV Glass and Glazing Limited at the firm's warehouse at Stakehill Industrial Estate in Middleton.

He had been moving a crate of replacement glass, weighing approximately 700kg, with the help of another colleague on 16 June 2021.

The pair placed the crate on the top of a set of skates and intended to push the load across the warehouse. While doing this however, the crate became unbalanced and fell, trapping the worker underneath.



The crate that was being moved by the two workers

He suffered two broken ribs, a punctured lung and a fractured vertebra. Six screws and a plate were inserted to fix the vertebra.

A Health and Safety Executive (HSE) investigation found PSV Glass and Glazing Limited's system of work used to move crates in the warehouse was hazardous. When a crate was balanced on the skates it became unstable, increasing the risk of the load tipping. In addition to an inadequate system of work to move the crates, the company also had no suitable risk assessment despite a previous similar incident. Had the warehouse been less congested, a more suitable method of moving the crates could have been used, such as a proprietary pallet handling truck.

HSE guidance can be found at: [HSE – Moving goods safely](#)

PSV Glass & Glazing Limited, of Hillbottom Road, High Wycombe, Buckinghamshire, pleaded guilty to breaching Section 2 (1) of the Health and Safety at Work etc. Act 1974. The company was fined £200,000 and ordered to pay £4,897.05 in costs at Manchester Magistrates' Court on 26 May 2023.

HSE inspector Sharon Butler said: "This incident could so easily have been avoided. Employers should ensure they carry out an assessment of the risks when moving and handling loads and that the correct equipment is identified and used."

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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.

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## **Hampshire hygiene consultancy firm fined after admitting failures**

A Hampshire-based hygiene consultancy firm has been fined £2,000 after its failures put workers at risk of exposure to hazardous substances.

Envirochem Analytical Laboratories Limited provided an occupational hygiene consultancy service to customers across the South of England. The reports provided by Envirochem are used by their customers to make decisions regarding necessary controls to protect their workforce from risks to their health from substances including hazardous chemicals and dusts. However, they provided one customer with a deficient occupational hygiene exposure monitoring report.

An investigation by the Health and Safety Executive (HSE) found the report to be inadequate and did not provide the information necessary regarding the extent of exposure to hazardous substances, including isocyanates from paint spraying, a potent respiratory sensitiser. The report used inappropriate occupational hygiene monitoring and analysis methods and consequently under-reported the actual exposures at the customers premises.

Portsmouth Magistrates Court heard the services the company provided included

the provision of reports, following testing carried out by their consultants at customer premises.

Envirochem Analytical Laboratories Limited, of The Gardens, Broadcut, Fareham, Hampshire, pleaded guilty to breaching Section 3(1) of The Health and Safety at Work etc. Act 1974. The company was fined £2,000 and ordered to pay £6,583 in costs at Portsmouth Magistrates' Court on 23 May 2023.

HSE inspector Nicola Pinckney said: "This was a case of the company failing to provide the specialist services which its customer expected.

"Consultancies providing specialist services have a responsibility to ensure they are competent to undertake this type of work, undertake the work to the correct standards and provide accurate reports. They need to provide the necessary information, instruction, training and supervision to their employees undertaking this work to enable them to provide this specialist service.

"I would urge those wanting to appoint occupational hygiene specialists to check with the relevant professional body (i.e. the British Occupational Hygiene Society) as to whether those offering consultancy services are competent to do so."

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## **[Samantha Peace appointed HSE Director of Energy Division](#)**

The regulator that oversees significant parts of the energy industry has announced a new Director.

The Health and Safety Executive (HSE) has appointed Samantha Peace to lead its Energy Division.

Current Director Chris Flint has chosen to retire. Chris will leave HSE in April next year. Before then, he will lead several projects for HSE and work with Samantha to ensure a smooth transfer.



Chris Flint (left) and Samantha Peace (right)

Samantha, who has worked at HSE for 28 years, has a background in regulation. She joined HSE in 1995 as a factory inspector before moving to senior leadership positions in HSE's Field Operations Division.

Alongside her role with HSE, Samantha is a member of the executive committee of the International Association of Labour Inspection (IALI) where she works with regulators across the world.

Samantha said: "It is a great privilege to be named as HSE's Director of Energy Division. It is well-regarded for its work in areas including regulating offshore energy and has been expertly led by Chris for the last few years. I look forward to beginning my new position and will continue to build on the great work Chris has done during his time as Director."

Chris, who was appointed as Director in 2017, said: "I have thoroughly enjoyed my time as Director of Energy Division at HSE and am pleased that someone as experienced and accomplished as Samantha is taking over. There have been some wonderful projects in the offshore and energy field that I am very grateful to have worked on and now look forward to tackling new challenges in the Director of Regulation office."

Jane Lassey, Acting Director of Regulation at HSE, said: "Alongside everyone at HSE, I congratulate Samantha on her new position. Samantha has excelled in every position she has held with HSE and I am certain she will continue to do the same as Director of our Energy Division.

"I also wish Chris all the best in his new role before retiring next year. Chris oversaw numerous challenges and key projects whilst leading our Energy Division and proved himself as an excellent Director as well as demonstrating his commitment to HSE."

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  2. HSE news releases are available at <http://press.hse.gov.uk>
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## Serco fined £2.25m after death of custody officer

Security firm, Serco, has been fined £2.25 million for health and safety failings following the death of custody officer Lorraine Barwell.



Lorraine Barwell

Ms Barwell, a 54-year-old grandmother was kicked twice, once in the body and once in the head, at Blackfriars Crown Court in 2015 during the restraint of a prisoner in custody. She died from brain injuries caused by the second blow.

Ms Barwell had worked for Hampshire-based security firm Serco for 10 years when the attack took place.

The incident led to an investigation by the Health and Safety Executive (HSE) that found that Serco Limited had failed to properly analyse risk intelligence on prisoners and communicate risks and safety precautions to staff. There was also a failure to have sufficient procedures in place and follow them, to provide readily accessible protective equipment and to ensure further training was provided where identified as required.

In addition, there was a continued failure to adequately staff court activities, manage working hours, assess risks of violence and aggression, communicate safety critical information, have suitable procedures in place and to work in accordance with those procedures covering a period of over three years. Time pressures, staffing levels and business priorities had led to routine violations of procedures by staff in order to get the job done which had gone unchallenged. This is despite such failings being brought to their attentions by HM Prisons Inspectorate, Ministry of Justice, HSE Inspectors and Serco's own staff.

In a separate incident in 2016, another member of staff was rammed against a wall and strangled in the Woolwich Court annex which could have had very serious consequences. The alarm button was pressed, but there were no staff manning the annex to respond and so it took time to call and gain assistance from the main building. There should have been 32 of Serco Limited's officers at court that day, but there were only 22.

On 25 April 2022 at Southwark Crown Court, Serco Ltd, of Serco House, Bartley Wood Business Park, Hook, Hampshire pleaded guilty to charges under section 2(1) of the Health and Safety at Work etc. Act 1974 contrary to Section 33(1) (a) of the Health and Safety at Work etc. Act 1974. On 26 May 2023 at the Central Criminal Court (Old Bailey) they were fined £2.25m and ordered to pay £433,596.07 in costs.

In a victim impact statement, Lorraine's daughter Louise Grennan, said: "Our mum was a wonderful loving supportive mother to myself, my brother and her two granddaughters whom she adored and loved, and they adored her.

"She too was a friend to many and loved by many. To lose her has left a huge void in everyone's hearts.

"Mum was my best friend and she helped me care for my daughter. We spoke about plans to move abroad to live in the sun once mum had retired from work. That has all gone now."

Speaking after the hearing, HSE inspector Helen Donnelly said: "Serco drastically failed in their duties to protect both Lorraine Barwell and other staff over a sustained period. It is not common to have a case covering such an extended period, but it appeared that Serco Limited were not learning from their mistakes. □

"Lorraine Barwell and her colleagues were just doing their job and should have been protected from harm. Had Serco carried out their legal duties, these incidents could have been prevented.

"While this investigation has been long and complex, we hope Lorraine's friends and family will find some comfort in today's sentence and see that justice has now been served.

"No matter what work environment you are in, health and safety regulation is designed to protect people at work. We will not hesitate to act against those who fail to protect their workers."



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