<u>Company fined after an explosion</u> <u>seriously injured two employees</u>

A company which produces electricity from food waste by anaerobic digestion, has been fined more than £300,000 after an explosion caused two employees to suffer life changing injuries.

The metal tank the two men were working on was projected high into the air before crashing to the ground nine seconds later.

Footage of the blast has been released.

On 20 September 2017, two employees of Bio Dynamic (UK) Limited were using a grinder to cut and replace pipework at the top of an 11-metre high metal tank containing waste slurry. They were not using harnesses. Sparks from the grinder ignited flammable gasses causing the tank to explode.

Footage of the explosion captured by CCTV has now been released.

Tomasz Patek was flung out of the mobile elevating work platform (MEWP) into the air and landed on the ground in the slurry around the tank. He suffered serious injuries to his back, head and torso and was in hospital for two months. His injuries were so severe that he was not able to work for more than two years.

Tomasz suffers from pre and post-traumatic amnesia and has no specific recollection of the events. In a statement, he reveals the psychological scars from the incident; "After the accident, I was unable to recover emotionally.

"I did not realise what had happened and was in deep shock. I could not cope with the pain. I could not accept an accident had happened to me."

Robert Tyrko was thrown into the air and landed back in the basket of the MEWP. Following the incident, Robert's leg was amputated and he remains wheelchair bound as treatment is still ongoing to receive a prosthesis. Also, he sustained a fractured skull and a piece of metal in his elbow that continues to affect his daily life.

In his statement, Robert explains how the explosion has affected his day-to-day life; "This whole situation is having a huge impact on my relationship. I can't help my wife in anything like I used to be able to. Magda is both wife and husband because all my responsibilities fell on her; along with the kids.

"Also my personality is explosive. I lose my patience very quickly. I attended appointments with a psychologist because I had nightmares that I was still having this accident."

A joint investigation by the Health and Safety Executive (HSE) and the

Environment Agency found that the company had failed to ensure the health and safety of its employees and others nearby. The company had kept and treated waste in a manner likely to cause pollution to the environment. The explosion was caused by multiple failures in the company's management system and exacerbated by multiple breaches of the company's environmental permit.

At a hearing at Nottingham Crown Court on 22 November 2024, Bio Dynamic (UK) Limited, of Colwick Industrial Estate, Nottingham:

- pleaded guilty to breaching Section 2(1) and Section 3(1) of the Health and Safety at Work etc. Act 1974.
- pleaded guilty to breaching regulation 38(2) of the Environmental Permitting (England & Wales) Regulations 2016 (EPR), and s.33(1)(c) of the Environmental Protection Act 1990 (EPA).
- They were fined a total of £304,500 and ordered to pay £228,998 in costs.

After the hearing, HSE inspector Richenda Dixon said: "It's remarkable that Robert and Tomasz weren't killed.

"This incident resulted from fundamental and multiple failings by the company to properly manage its health and safety risks.

"These included failing to ensure that the design, installation and use of the tanks were safe; failing to carry out risk assessments; failing to put in place a safe system of work; and failing to train and supervise employees."

Senior Environmental Crime Officer Iain Regan said: "This was a lengthy and technically complex investigation by the Environment Agency and the HSE during which we found that the company's attitude towards environmental compliance was largely cosmetic. Although the site had an environmental permit, the company was not complying with the conditions of the permit or with their own management system and procedures.

"The site had unauthorised gaseous emissions points and undertook modifications to their process which were not risk assessed or notified to the Environment Agency. The company did not recognise or understand the impact that these changes had on the safety of the plant and failed to take action, when warned, which could have prevented the incident. These factors, and a failure to implement permit to work procedures, including appropriate risk assessment, created all the necessary conditions on 20 September 2017 for the explosion which occurred.

"Sites which receive, treat or dispose of waste must be permitted to ensure that they minimise the risk to the environment or human health. Incidents such as the explosion at Bio Dynamic show why it is essential that such sites strictly comply with all the conditions of their environmental permit and take their environmental responsibilities seriously. The consequences of the company's failure to comply with its environmental permit could have been fatal. As it is, two employees have been left with life changing physical and mental injuries which continue to devastate their lives seven years on from this incident."

Notes to Editors

- 1. <u>The Health and Safety Executive</u> (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 <u>legislation</u> referred to in this case is available.
- 3. Further details on the latest **HSE** news releases is available.
- 4. 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.
- 5. Guidance on anaerobic digestion can be found here: <u>Disposal and energy</u> recovery (hse.gov.uk), <u>Dangerous Substances And Explosive Atmospheres</u>, <u>L138: Dangerous Substances and Explosive Atmospheres Regulations 2002</u>. <u>Approved Code of Practice and Guidance</u>, <u>L138 (hse.gov.uk)</u>
- 6. The Environment Agency is the principal body in England with responsibility for the regulation of waste management facilities, the investigation of environmental crime and the prosecution of environmental offences.
- 7. Environment Agency press releases are available on UK.
- 8. Guidance from the Environment Agency on anaerobic digestion can be found at

www.gov.uk/guidance/biological-waste-treatment-appropriate-measures-forpermitted-facilities

Two companies fined after man falls through roof of Salford skate park

Two companies have been fined more than £100,000 after a man fell 30 feet through a fragile skylight as he was working on a roof.

Nicolas Vilela suffered multiple injuries in the incident at Graystone Action Sports Centre, on Brunel Avenue in Salford on 23 November 2022.

Now 43, Mr Vilela had been fixing a solar panel into position on the roof when he took a step back and fell through one of the skylights to the skate park below, narrowly missing several people. His horrific injuries included a partial lung collapse, broken ribs, pelvis, femur and left wrist as well as fractures to lower vertebrae. He spent a month in hospital.



Overview of Graystone Action Sports Skatepark from viewing area

Falls from height remain a leading cause of workplace death and <u>HSE has</u> <u>published guidance</u> about how these incidents can be avoided.

Speaking as the companies were fined, Mr Vilela said the incident had affected him both physically and emotionally.

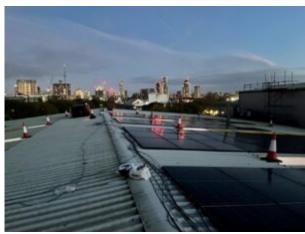
He said: "It has had an overwhelming and complicated impact on my life, having, until then, been a very active, dynamic person"

"A fall from a height of 10 metres is not something you survive.

"I broke my femur, pelvis, wrist, vertebrae and ribs. A lot worse could have happened but I am grateful for the fact that I am alive and can walk, but I will live with this trauma for the rest of my life.

"I have developed a fear of heights and a fear of any physical activity that could cause me harm. I am also really worried about how my body will respond in old age as a result of these injuries.

"I am unable to walk for more than a kilometre without feeling pain and getting very tired due to the loss of strength and mobility in my leg. My pelvic fracture impedes me from doing any heavy lifting and I live in fear of damaging it even more."



Cones used to mark out location

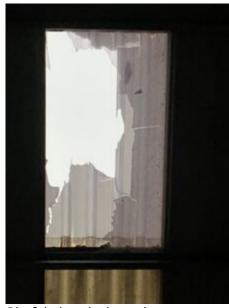
of fragile skylights

An investigation by the Health and Safety Executive (HSE) found that H20 Renewables Limited (H2O) were the principal contractor engaged for work to install solar panels to the roof of the indoor skate park and had engaged Green Projects Ltd (GPL) as sub-contractor to fit the roof mounted system. H2O planned the work during which time they were aware of multiple fragile rooflights in close proximity to where the solar panels would be fitted.

The risk assessment produced by H2O stated cones and warning tape would be used as a control measure to warn operatives of the risk of falling through the fragile roof lights, and fixed scaffolding would be used to prevent risk of falls from the perimeter of the roof. By the time the work started on 22 November 2022, the fixed scaffold had only partially been erected, and only the cones had been placed next to the skylights.

Despite the insufficient control measures being present to mitigate the risks from work at height, GPL's operatives were allowed to start work to fit the solar panels.

The investigation also found that H2O Renewables Limited and Green Projects Ltd, had failed to take suitable and sufficient precautions to ensure the safety of workers on the roof. Both companies had also failed to put in place a safe system of work for the installation of solar panels that were to be fitted in close proximity to many of the fragile roof lights present.



Skylight injured person fell through

H20 Renewables Limited of Hazel Grove, Stockport, pleaded guilty to breaching regulation 13(1) of the Construction (Design and Management) Regulations 2015. They were fined £106,720 and ordered to pay £40,995 costs at a hearing at Manchester Magistrates Court on 20 November 2024.

At the same hearing, Green Projects Ltd of Albert Street, Oldham, pleaded guilty to breaching regulations 6(3) of the Work at Height Regulations 2005. They were fined £13,340 and ordered to pay £1,600 costs.

After the hearing, HSE inspector Phil Redman said: "This was a very serious incident that Mr Vilela was extremely lucky to survive.

"A fall from this distance frequently results in life-changing injuries or death.

"It is a timely reminder that all work at height activities must be suitably planned, managed and monitored using a safe system of work."

This prosecution was brought by HSE enforcement lawyer Kate Harney and paralegal officer Rebecca Withell.

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- 3. Further details on the latest HSE news releases is available.
- 4. 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 in England and Wales can be found here and for those in Scotland here.
- 5. Guidance on working safely at height is available.

HSE publishes annual work-related ill health and injury statistics for 2023/24

The Health and Safety Executive (HSE) has today (Wednesday 20 November) published its annual statistics on work-related ill health and workplace injuries.

The statistics reveal that the number of workers reported to be suffering from work-related ill health during 2023/24 is 1.7 million — which is similar to 2022/23 (1.8 million workers).

The rate of self-reported work-related ill health remains broadly similar to the previous year, although the current rate is still higher than the 2018/19 pre-pandemic level.

Approximately half of those reporting ill-health relate to stress, depression

or anxiety, with an estimated 776,000 cases in 2023/24. The current rate of self-reported work-related stress, depression or anxiety is higher than the pre-pandemic level but has decreased from 910,000 in 2022/23.

An estimated 33.7 million working days were lost in 2023/24 due to self-reported work-related ill health or injury.

HSE's chief executive Sarah Albon said: "This year marks 50 years since the legislation which established HSE was passed. Much has been achieved in that time, including a dramatic reduction of around 85 per cent in the numbers of employee fatal injuries in the workplace.

"Today, Great Britain is one of the safest places in the world to work but these statistics serve as a reminder that there is still room for further improvement, and we remain committed to ensuring people remain safe and healthy wherever work is taking place."

HSE's statistics also reveal the impact work-related ill health and workplace injuries are having on Britain's economic performance.

In 2022/23, the estimated annual costs of workplace injury and new cases of work-related ill health reached £21.6 billion, which is £1.6 billion less compared with 2021/22.

The figures also show that 138 workers were killed in work-related accidents in 2023/24, while 604,000 workers sustained a self-reported non-fatal injury in the workplace during the same period.

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- 1. <u>The Health and Safety Executive</u> (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. Details on HSE's work-related mental health campaign, Working Minds, can be found here Working Minds Work Right to keep Britain safe
- 3. Details on HSE's new 10-year strategy can be found here <u>HSE strategy</u> 2022 to 2032 About us HSE.
- 4. HSE's annual statistics on work-related ill health and workplace injuries for 2023/24 can be found here — <u>Health and safety statistics</u> — HSE

Wood panelling firm fined £400,000

after injured worker loses leg

A wood panel manufacturer has been fined £400,000 after a worker suffered life-changing injuries at its factory in Chirk, near Wrexham.

The incident happened at Kronospan Limited on 31 March 2021, when a pack of waste MDF sheets weighing around 350kg fell from a trailer and landed on the left leg of Mark Hughes from Johnstown.

The injuries sustained by Mr Hughes, now 53, were so serious they resulted in him having his left leg amputated below his knee. The loss of his leg has been life-changing and he has since had to move to an accessible house. He is no longer able to carry on with his hobbies and struggles to climb stairs.



Mark Hughes was seriously injured when a pack of waste MDF sheets fell from this lorry

"My injury has changed everything in my life, it is like somebody dropped a bomb on our life and never picked up the pieces," he said.

"Everything now just takes a lot of planning to do and spontaneous trips do not happen anymore.

"I won't go anywhere that has a lot of steps."



The packs of MDF sheets weighed approximately 350kgs

After more than two years off work, Mr Hughes has been able to return to the company, but only in a part-time capacity.

"Some days I feel okay but some days after work I feel absolutely knackered.

"I've worked for Kronospan for 27 years and I feel since my accident it would be difficult to find a job somewhere else and start over," he added.

"A lot of my social connection was from work because I used to work a lot of hours.

"I have a quality of life but it is a lot different than what it used to be."



Kronospan Limited was fined £400,000 as a result of the incident

An investigation by the Health and Safety Executive (HSE) found that Mr Hughes had loaded a flatbed trailer of waste MDF sheets to transport them across the site to be destroyed. When he began to take off the straps holding the sheets in place, a pack fell off the trailer and landed on top of him. The road across the site was poorly maintained and had lots of potholes.

The investigation also found that there was no suitable risk assessment or system of work in place specifically relating to the risks associated with the stacking, movement and loading of waste MDF sheets.

Kronospan Limited of Chirk, Wrexham pleaded guilty to breaching Section 2(1) of the Health & Safety at Work etc. Act 1974. They were fined £400,000 and ordered to pay costs of £4,701 at Wrexham Magistrates Court on 19 November 2024.

Speaking after the hearing, HSE inspector Marie Wheeler said: "A man has suffered truly life-changing injuries as a result of this company's failures.

"The incident was completely preventable had a proper risk assessment been carried out.

"Nor did the company have a suitable safe system of work in place.

"HSE will always take action when basic failures like these result in very serious injury."

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<u>Plastics manufacturer fined as worker</u> <u>suffers multiple leg fractures</u>

A plastics manufacturer in Kent has been fined £400,000 after an employee was seriously injured by a forklift truck.

The man was struck by the vehicle while walking to collect materials at FloPlast Limited's site at Eurolink Business Park on 4 July 2023.

The driver of the forklift truck failed to see the worker, who sustained multiple leg fractures and a dislocated ankle, requiring him to have a metal plate fitted in his left leg.

A Health and Safety Executive (HSE) investigation found a number of measures lacking at the site in Sittingbourne:

- FloPlast Limited had no documented safe system of work and that nobody was following the measures the firm thought were in place
- CCTV footage showed multiple drivers and pedestrians circulating in close proximity
- A site inspection by HSE found employees were not observing one way systems or following systems of work
- HSE also established that there was no system in place to monitor compliance or to remind employees and drivers of the systems of work
- Finally, it was found that nobody had assessed the vehicles being used by workers to ensure they provided good visibility.

 ${\sf HSE}$ guidance can be found at: ${\sf Introduction\ to\ workplace\ transport\ safety\ -} \atop {\sf HSE}$

FloPlast Limited, of Eurolink Business Park, Sittingbourne, Kent, pleaded guilty to breaching Section 2(1) of the Health and Safety at Work etc. Act 1974. The company was fined £400,000 and ordered to pay £5,567 in costs at Maidstone Magistrates' Court on 14 November 2024.



The forklift truck that struck the worker

HSE inspector Peter Bruce said: "Poor vehicle and pedestrian segregation in the workplace is a common cause of fatal incidents and injuries. The employee in this instance suffered multiple fractures and has had to have a metal plate put into their leg which they will have for the rest of their life. "Employers need to ensure that they have suitable measures in place to segregate out pedestrians and vehicles. This includes: the provision of safe systems of work, appropriate training procedures and systems for ensuring compliance with those measures.

"Where it is identified that employees are not following these measures, employers should consider the reasons behind this implementing further measures as appropriate to the risk."

This HSE prosecution was brought by HSE enforcement lawyer Neenu Bains and supported by HSE paralegal officer Daniel Adams.

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