

# Health & Safety for Energy from Waste (EfW) & Biomass Plant Outages and Shutdowns:

## Processes & Procedures for Optimum Results

Ethan Parker - HSEQ Manager

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# Introduction



## Objective

- To *inspire* and *guide* teams in implementing robust health and safety measures during EfW and Biomass plant outages and shutdowns for outstanding results.

## Why It Matters

- Getting it right the first time – reducing operational downtime
- Driving operational efficiencies through safety-first practices
- Building a culture of accountability and resilience

# Introducing Augean & Future Industrial Services



Augean specialises in managing hard to handle wastes and specialist industrial services

We have UK waste treatment and disposal infrastructure – 22 sites in the UK

We focus on delivering best environmental outcomes

We are a market leader in the treatment of APCr, Fly Ash and other residues from UK EfW & Biomass Plants as well as specialist industrial services



# Introducing Augean & Future Industrial Services



Acquired by Augean in 2023, Future Industrial Services (FIS) is a market leader providing Specialist Industrial Cleaning with 7 sites across the UK

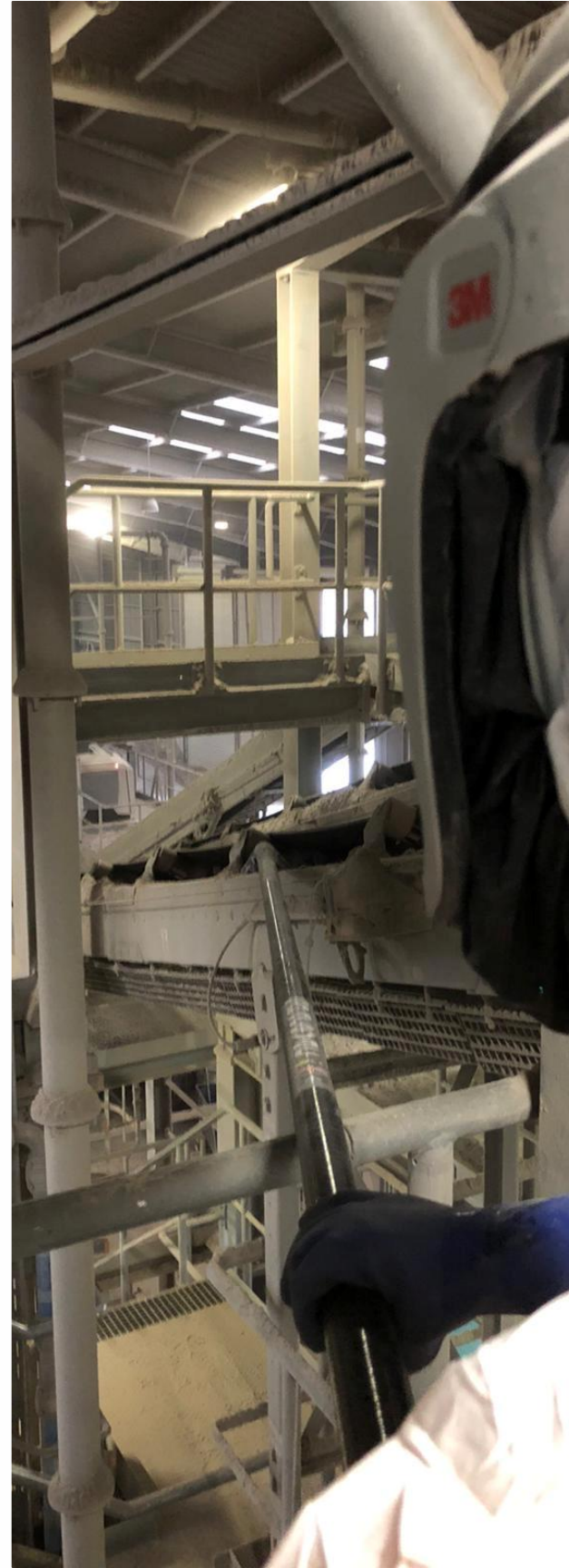
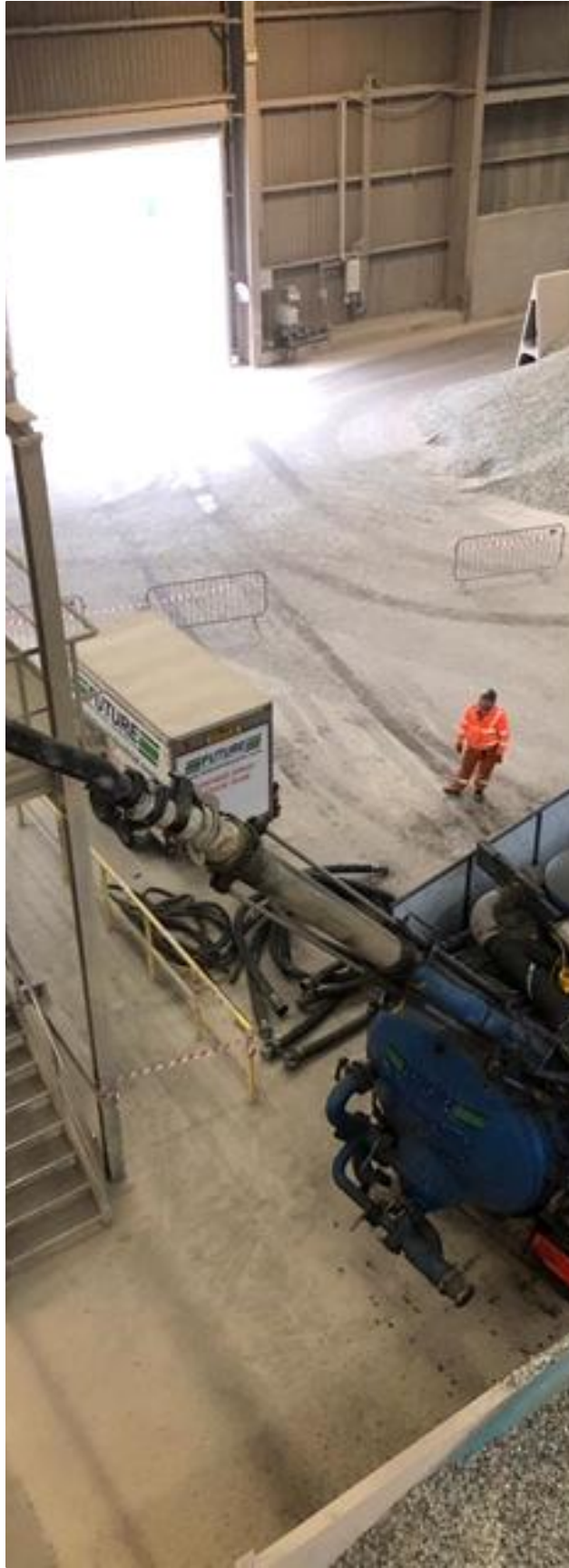
We provide Specialist Industrial Services for EfW and Biomass plants

**We have serviced over 23 plants in the last 12 months**

Typical scope of specialist cleaning works includes boiler grate, discharger, boiler passes economiser, siftings, FGT, baghouse, and silos





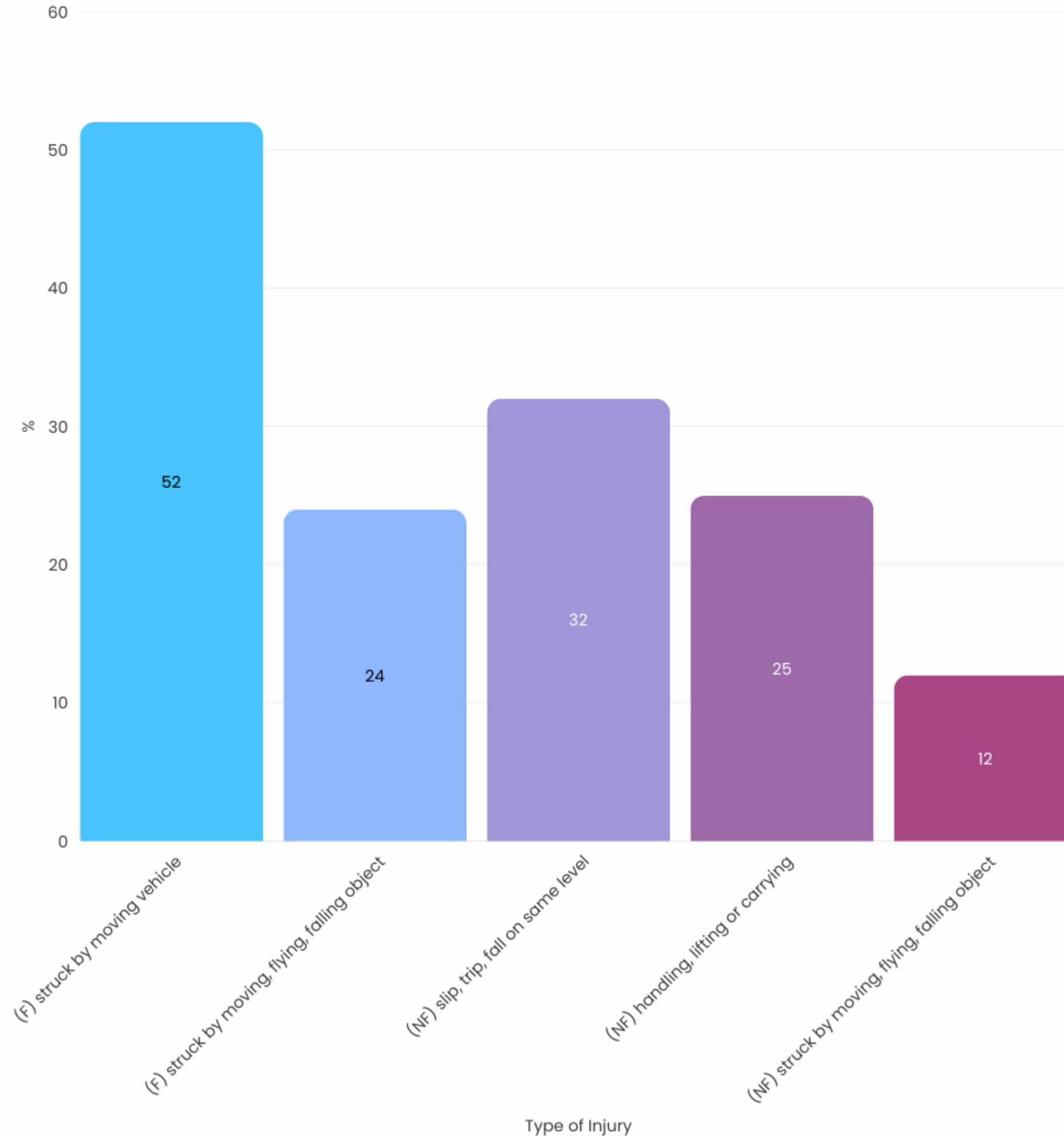


## Key Challenges

- Hazardous Environments
- Complex Co-ordination
- Time Pressure - Critical Path
- Regulatory Compliance



Fatal & Non-Fatal Injuries from Waste Industry incl EfW



# Waste Sector Industry Statistics

## Fatal (F)

- 52% deaths classified as struck by a moving vehicle
- 24% were classified as struck by a moving, flying or falling object

• \*HSE past 5 years

## Non-Fatal (NF)

- 32% injuries sustained from a slip, trip, fall on the same level
- 25% injured while handling, lifting or carrying
- 12% struck by moving, flying or falling object

• \*HSE past 7 years



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## Our LTIFr for EfW & Biomass Plant Sector

rolling 12 months



# Our Core Health & Safety Processes

- Pre-Outage Risk Assessment and Planning
  - RAMS
  - Planner
- Permits to Work (PTW)
- Emergency Preparedness




			SET UP	
			06/10/25	07/10/25
Hours			Mon	Tue
Days	Supervisor	12	1	1
	Driver	12	1	1
	Labour	12	4	4
Nights	Supervisor	12		
	Driver	12		
	Labour	12		



			LINE 1 OUTAGE		
			08/10/25	09/10/25	10/10/25
Hours			Wed	Thu	Fri
Days	Supervisor	12	1	1	1
	Driver	12	1	1	1
	Labour	12	4	4	4
Nights	Supervisor	12	1	1	1
	Driver	12	1	1	1
	Labour	12	2	2	2





LINE 2 OUTAGE

			11/10/25	12/10/25	13/10/25	14/10/25	15/10/25	16/10/25	17/10/25	18/10/25
Hours			Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Days	Supervisor	12	2	2	2	2	1	1	1	1
	Driver	12	2	2	2	2	1	1	1	1
	Labour	12	8	8	8	8	4	4	4	4
Nights	Supervisor	12	2	2	2	2	1	1	1	1
	Driver	12	2	2	2	2	1	1	1	1
	Labour	12	4	4	4	4	2	2	2	2





How We Stand Out in the Market

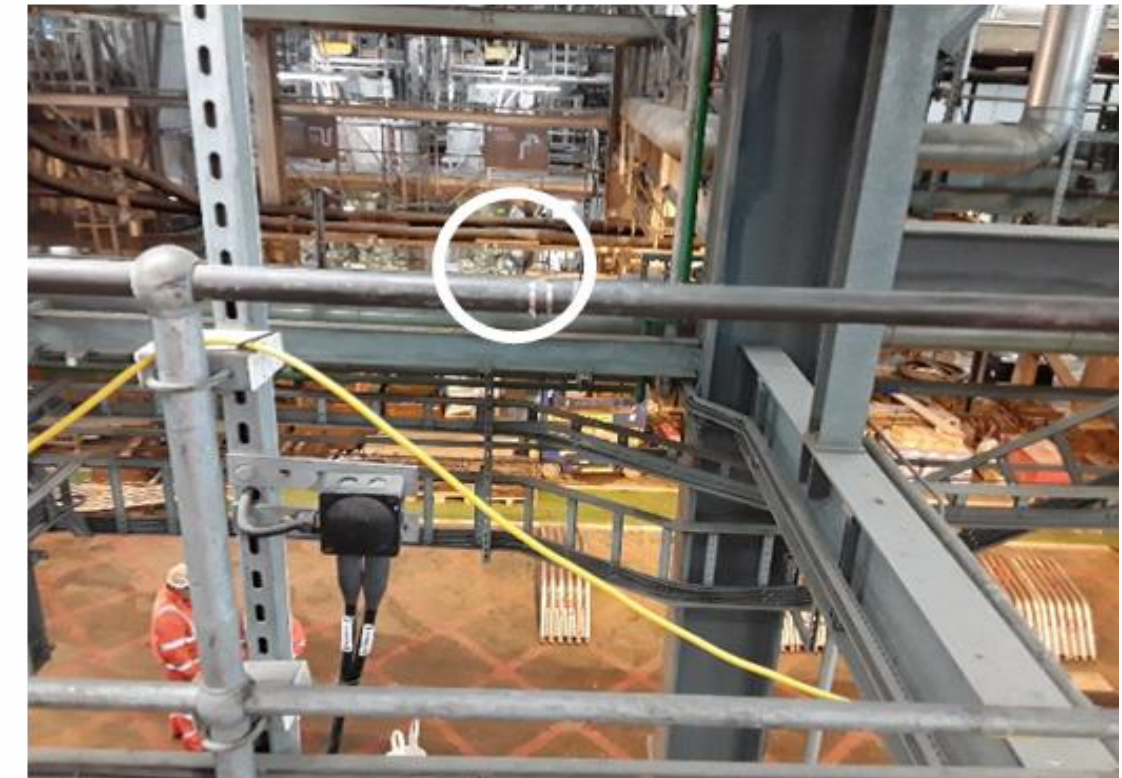
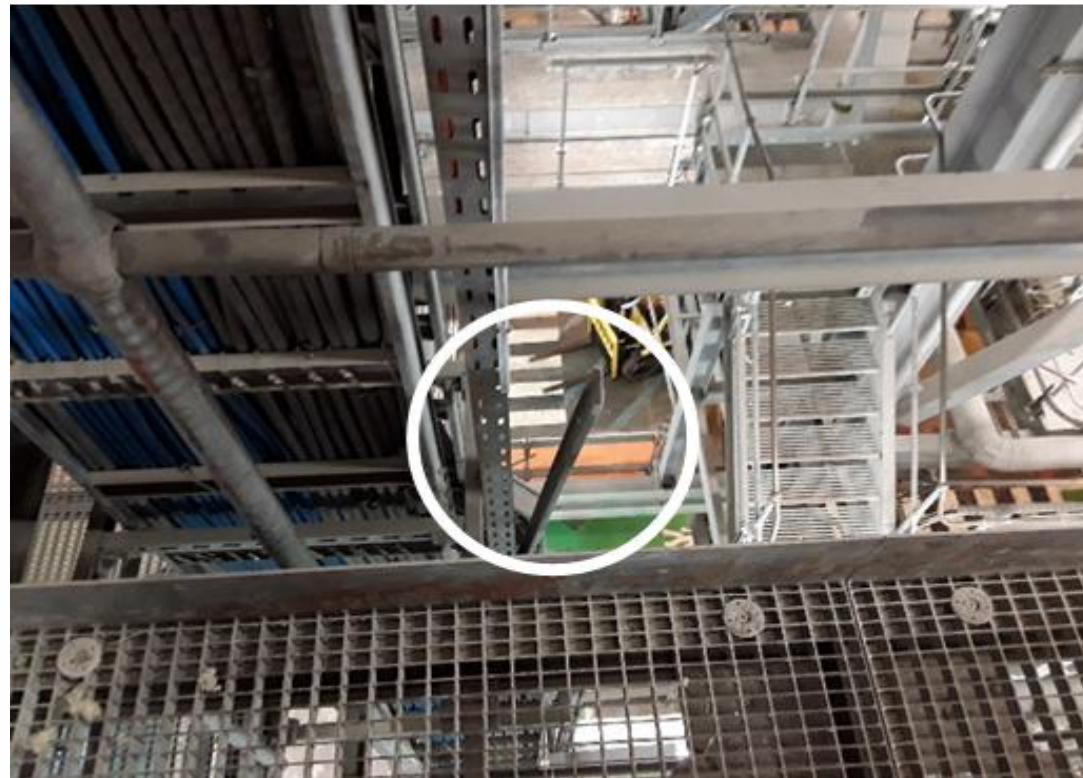
# Our Model for Optimum Results

Pre-Shutdown Preparations	During Shutdown	Post-Shutdown Review
<ul style="list-style-type: none"><li>✓ Training</li><li>✓ Equipment Checks</li><li>✓ RAMS / Shutdown Planner</li></ul>	<ul style="list-style-type: none"><li>✓ Monitoring</li><li>✓ Communication</li><li>✓ Compliance</li></ul>	<ul style="list-style-type: none"><li>✓ Lessons Learnt</li><li>✓ Set New Benchmarks</li><li>✓ Visibility Site Inspection Reports</li></ul>



# Safety: Hazard Spotting

EFW OPERATIONAL OPTIMISATION

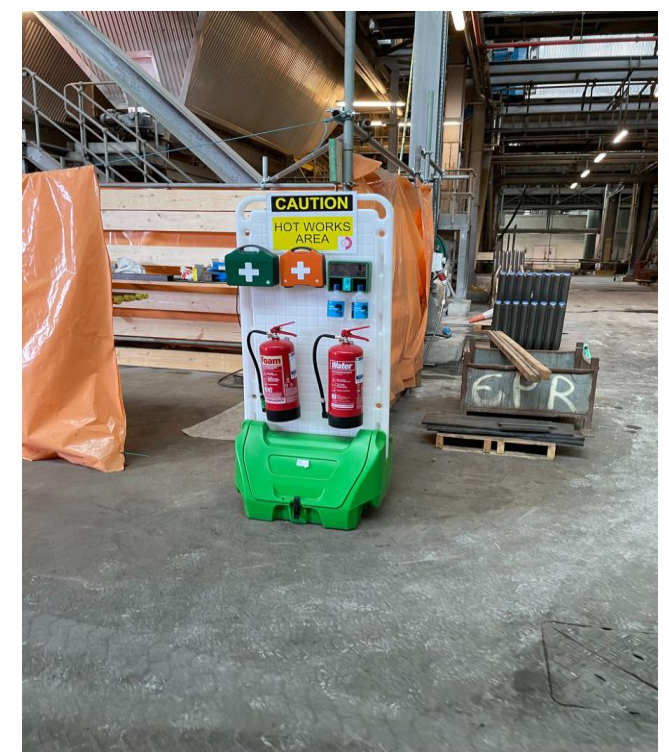
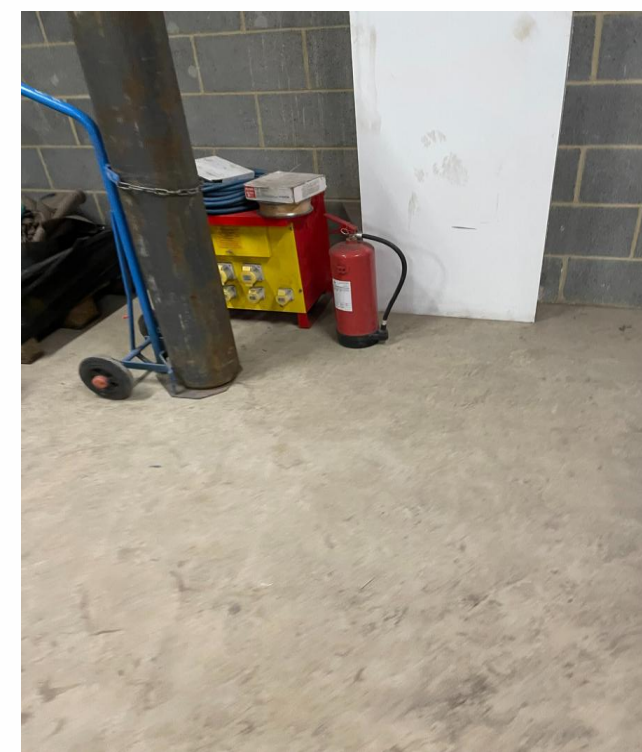
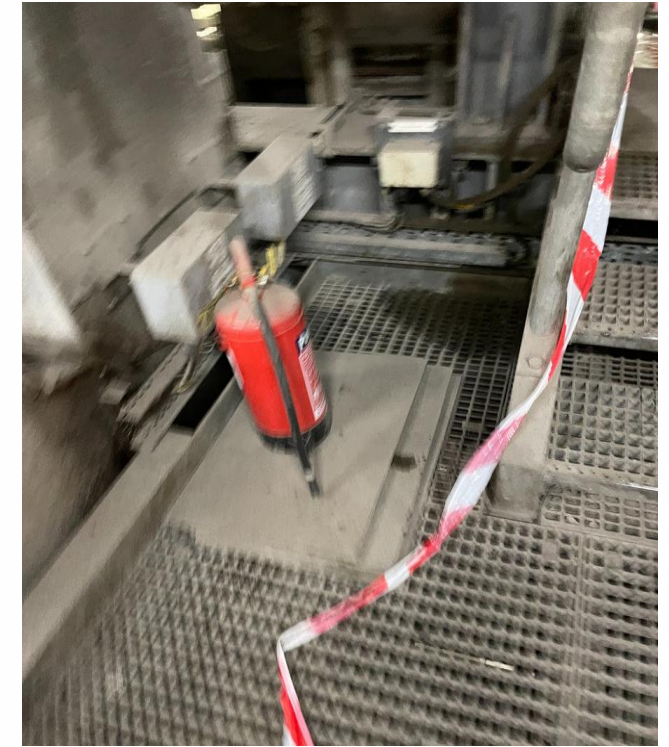






# Safety: Hazard Spotting

EFW OPERATIONAL OPTIMISATION







# Our Compliance & Best Practice

- Regulatory Standard
- Best Practice
- Open Communication Encouraging Near-Miss Reporting



04/08/2025, 12:42

EcoOnline EHS



 HSEQ events, Non-Conformities and Complaints

Record Details

Creator  
Ethan Parker

Record ID  
13056

Date  
04/07/2025

Date Updated On (UTC)  
04/07/2025

Report Event

Site  
Rugby Mobile Crew

Primary Event Type  
Near Miss or Dangerous Occurrence

Description of Primary Event Selected  
An unplanned event that very nearly causes, but does not actually result in human injury, environmental or equipment damage, or an interruption to normal operation.

Date and Time of Event  
30/06/2025

Date and Time Reported  
04/07/2025

Is this Legally Privileged?  
NO

Reference Number

Time into Shift

Geo Location - Click on Map Icon  


Specific Location

Details of actual job being done at the time

What could have happened?

Issue Addressed

Description of the Event  
A small screwdriver fell from the floor above landing and nearly hit one of the people on the inspection

Immediate actions taken  
Informed the operatives working above they need to have the screwdriver tied off if there is a potential to drop. Informed the site HSE Manager

Were there any additional persons involved or witnesses to the event?

Were there any vehicles involved?

Type of Person  
Employee

Reporter  
Ethan Parker

Reporter Name  
Ethan Parker

Contact

# Case Study

## Controlling APCr Hazards on Site

### Challenge:

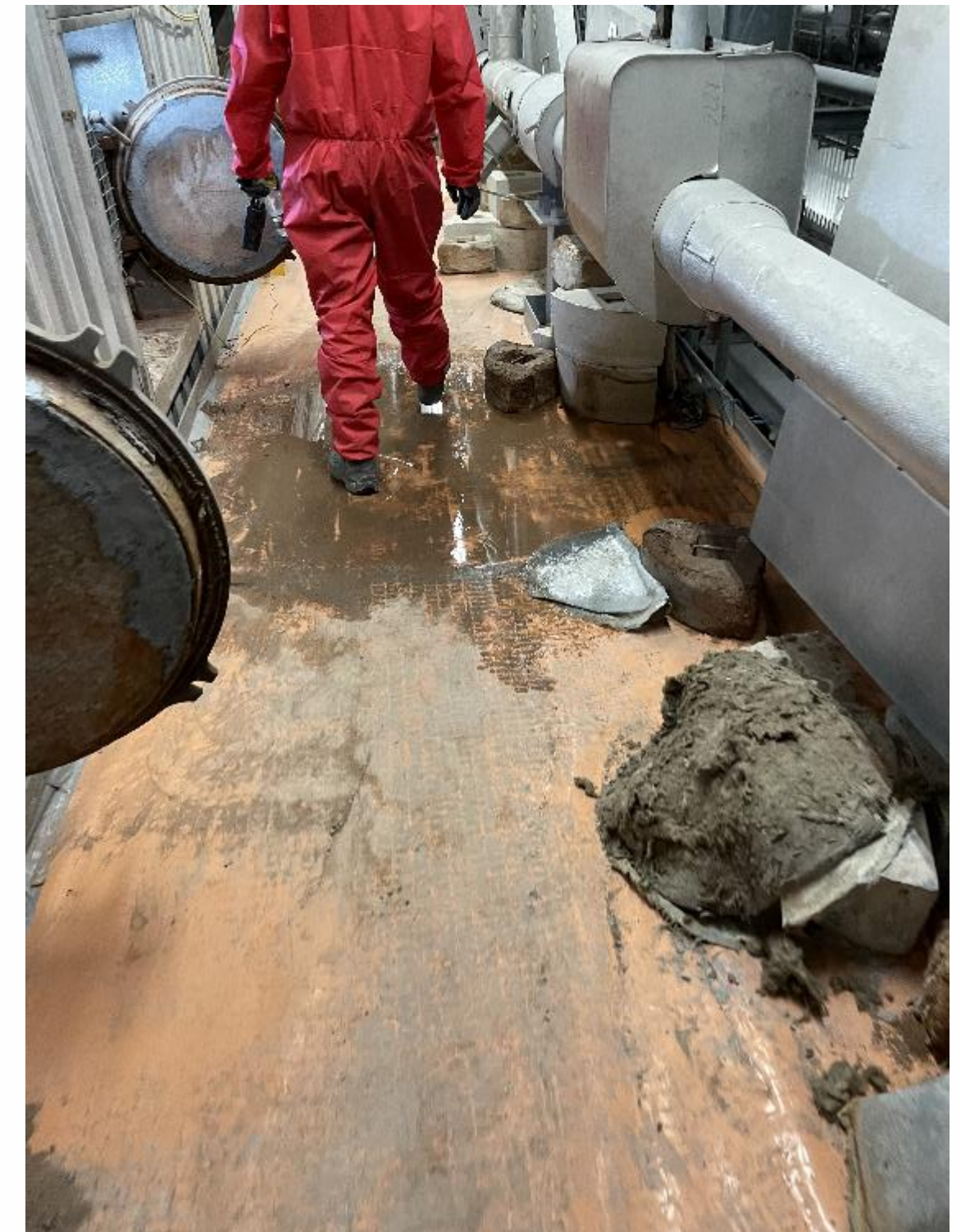
- When exposed to gratings on site, Air Pollution Control Residues (APCr) can cause metal surfaces to deteriorate and become dangerously slippery, increasing the risk of accidents and equipment damage.

### Solution:

- FIS introduced the use of protective sheeting and carpets as a control measure. These materials effectively cover gratings and other exposed surfaces, preventing direct contact with APCr.

### Outcome:

- Reduced Hazards: The sheeting and carpets control the risks associated with both falling dust and APCr exposure.



# Emerging Trends

- Chrome VI contamination in the boiler
- Extended operating conditions leading to higher activity during outages
- Increasing EfW presence in the UK requires more industrial services and potential risks of utilising agency staff during periods of multiple outages
- Robotics and AI



# Key Account Team

[enquiries@futureindustrial.com](mailto:enquiries@futureindustrial.com)



0330 128 1111



**Ethan Parker**

HSEQ



**Tony Molloy**

BUSINESS DEVELOPMENT



**Jamie Roberts**

OPERATIONS



**Helen Ingram-Seal**

CLIENT LIAISON

# Thank You

Ethan Parker - HSEQ Advisor

[www.futureindustrial.com](http://www.futureindustrial.com)

[www.augean.co.uk](http://www.augean.co.uk)

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