

**Many of the duty
holder sites we visit
are non-compliant!**

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The logo for Armstrong Environmental features the company name in a bold, sans-serif font. The text is white and is positioned on the left side of a stylized, three-dimensional oval shape. The oval has a red outer rim and a blue inner section, with a white highlight on the left side, giving it a glossy, metallic appearance.

LEV Risk Audit Prior to tendering for a large LEV programme of work

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LEV Risk Audit



LEV COMMISSIONING

There are roughly **750,000** LEV systems across the UK

(Adrian Parris – BOHS 2026)

ARMSTRONG (2025) FOUND:

- **80%** did not have a commissioning report available



**RESULTS OF
POOR
COMMISSIONING**

**WORKER
ILL-HEALTH**

**HSE
ENFORCEMENT**

**FINANCIAL
LOSS**

ROOT CAUSE?

Inadequate Control Measures

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Where is this identified in reality?

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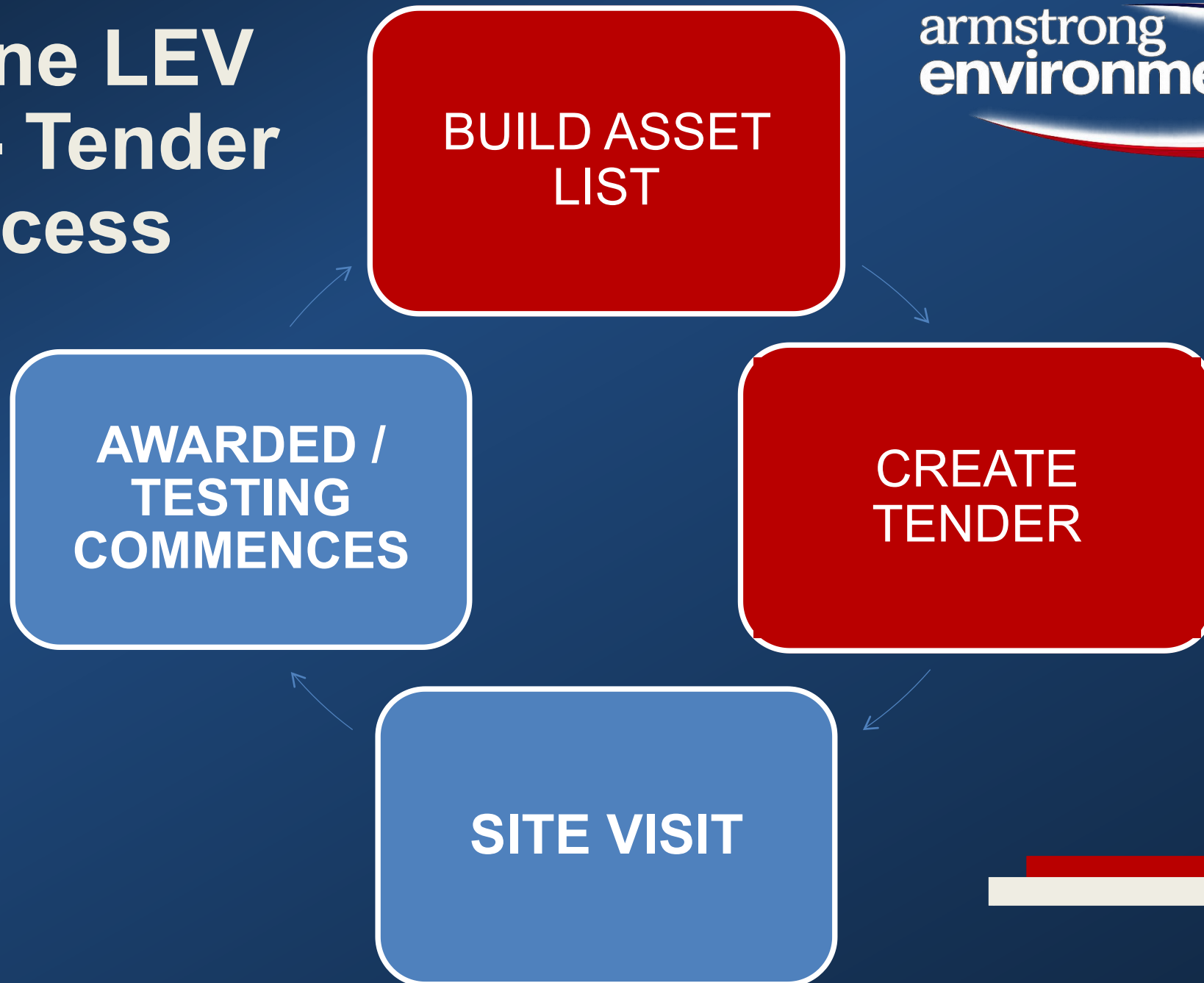
Routine LEV TExT - Tender Process

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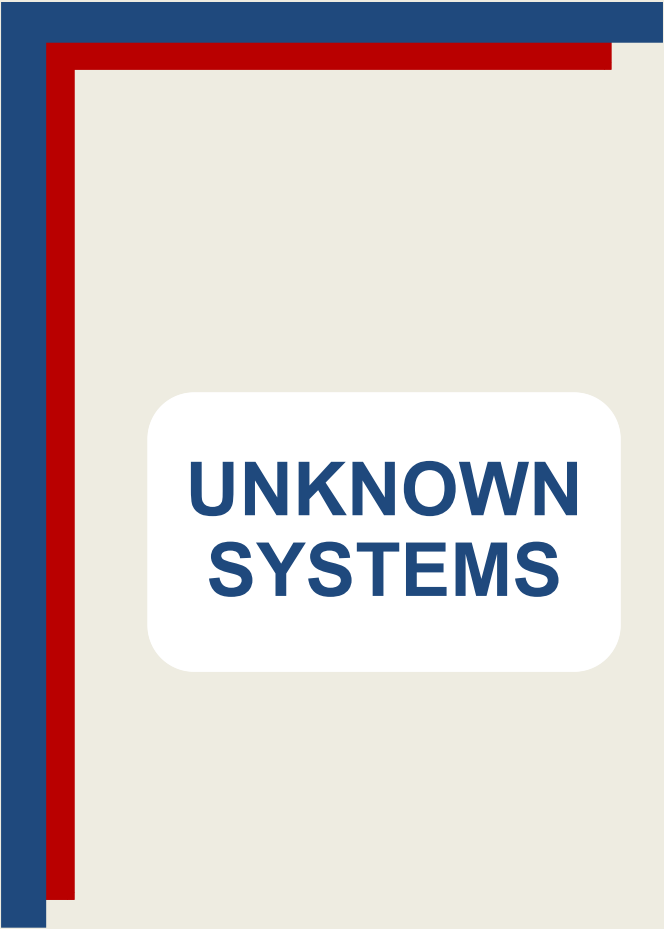
Routine LEV TExT - Tender Process

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If adequate control is not
demonstrated during
commissioning...

...what would the annual TExTs
confirm?



**UNKNOWN
SYSTEMS**

+

**MISSING
DOCUMENTS**

=

**COMPLIANCE
RISK**



WHAT IS THE SOLUTION?

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LEV RISK AUDIT

- Thorough review of all LEV systems on-site
- Reviews Documentation
- Confirms Processes & Substances used
- Operator Exposure Assessments



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Updated Tender

- Re-evaluates initial Tender
- Identifies compliance knowledge gaps
- Confirms site's requirements
(*Commissioning / Routine TExTs*)



Case Study



CASE STUDY

HSE Visit:

- No TExTs available for the large partial enclosures.
- Welding capture hood TExT reports did not meet the required standards

Client:

- Tendered for Routine LEV TExTs

The logo for Armstrong Environmental features the company name in a bold, sans-serif font. The word "armstrong" is in a lighter grey, and "environmental" is in a darker grey. The text is set against a dark blue background. A large, stylized, three-dimensional oval shape, colored with a gradient from red to white to blue, is positioned behind the text, creating a sense of depth and movement.

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Route to Compliance



```
graph TD; A[Initial Tender] --> B[112 LEV systems]; A --> C[All Routine TExTs]
```

Initial Tender

**112 LEV
systems**

**All Routine
TExTs**

**What was found
following audit**

**198 LEV
systems**

**76% Re-
commissioning**

GAP ANALYSIS



Missing
documentation



No centralized
data storage



No proof of
effective
control



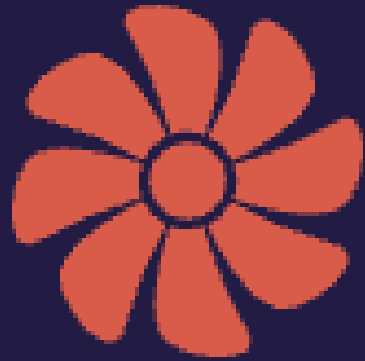
Asset List / Updated Tender

Asset List:

- 198 LEV systems

Requirements:

- X150 Re-commissioning
- X48 Routine TExTs
- Operator exposure monitoring
- Containment testing
- Improved data management storage



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Data Management



Centralised data storage



Automated testing lists



Easily accessible documentation



Statistical analysis

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Non-compliant



Compliant



Are you compliant?

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The logo for Armstrong Environmental is a stylized, three-dimensional oval shape. The left half of the oval is white with a blue gradient, and the right half is red with a blue gradient. The text "armstrong" is in a smaller, white, sans-serif font, and "environmental" is in a larger, white, sans-serif font, both centered within the oval. The entire logo is set against a dark blue background. There are red and white L-shaped decorative elements in the top-left and bottom-right corners of the main content area.

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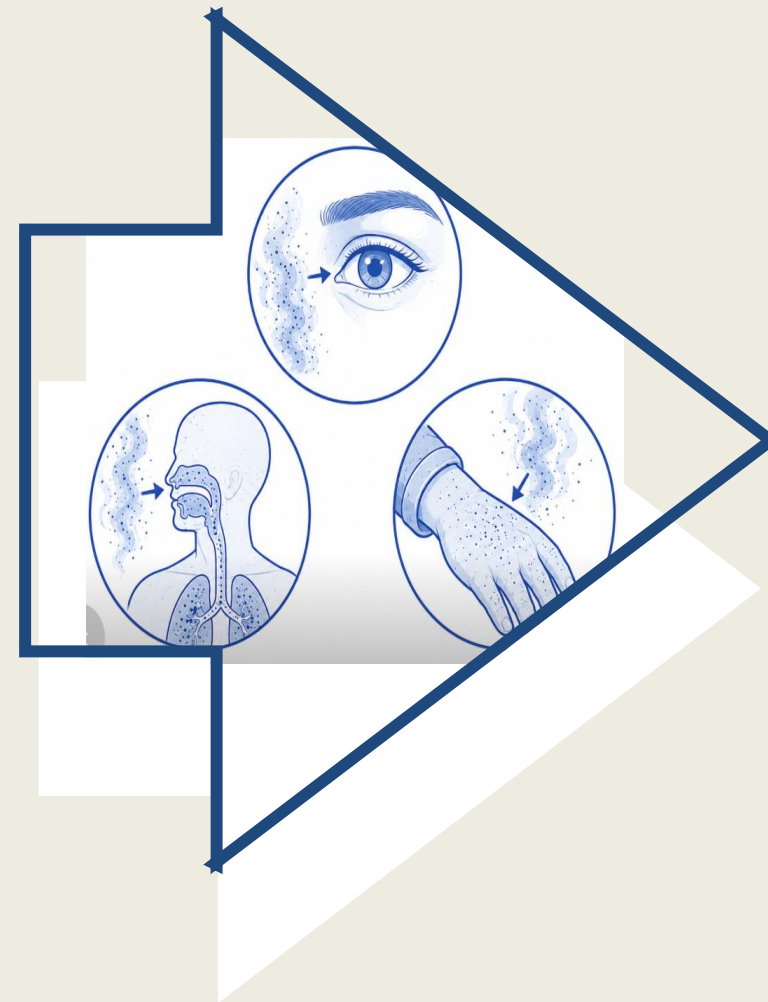
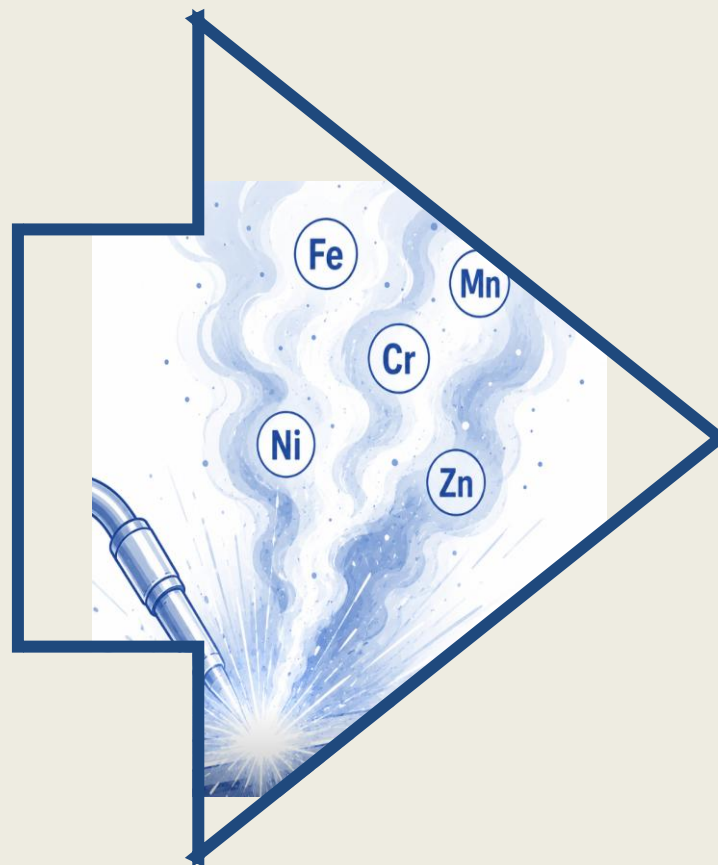
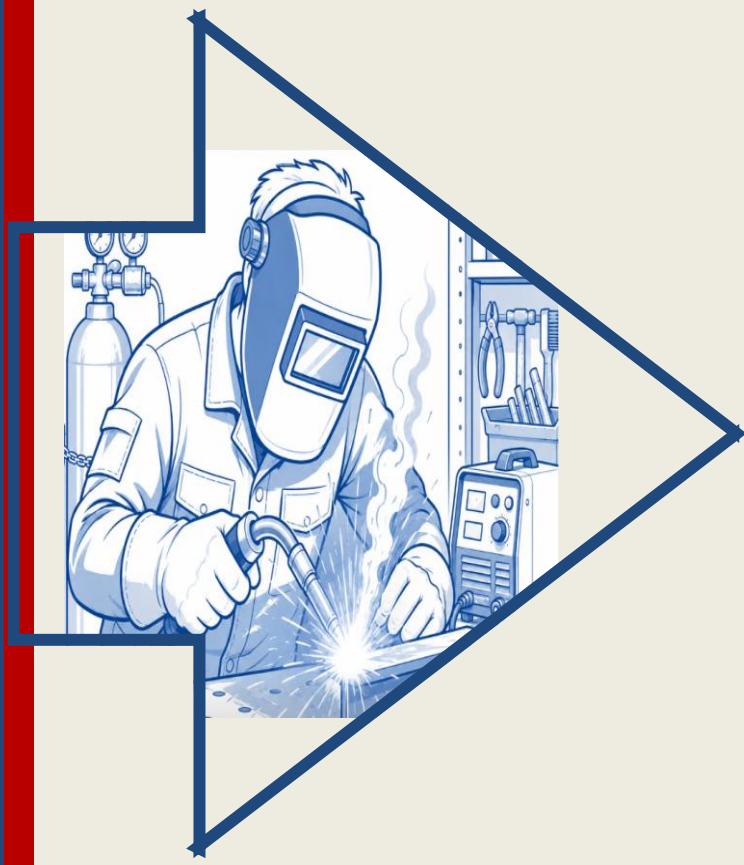
LEV COMMISSIONING – PROVING EXPOSURE CONTROL



**WHAT LEVEL OF EXPOSURE ARE
YOU TRYING TO CONTROL?**

**IF YOU CANNOT DEFINE THE INTENDED
CONTROL OUTCOME, HOW CAN YOU
DEMONSTRATE THAT
THE LEV IS EFFECTIVE?**

WHAT ARE YOU CONTROLLING?



WHAT IS THE PURPOSE OF COMMISSIONING?

- Confirm the system performs as intended
- Establish the commissioning benchmark
- Demonstrate effective exposure control



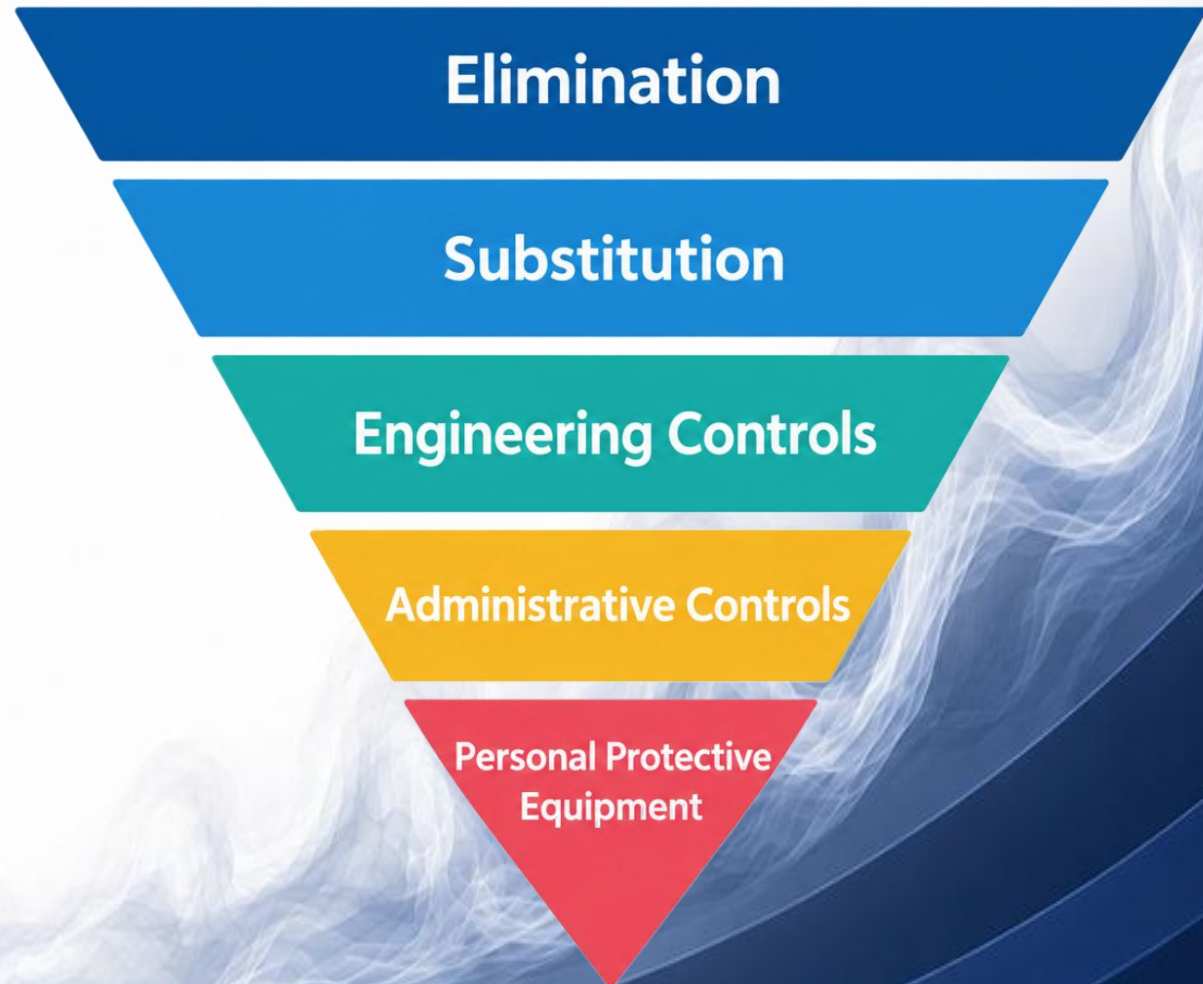
WHAT ENGINEERING TESTING SHOWS

- Airflow and capture performance
- Duct velocities and system pressures
- Hood performance
- Filter condition



WHAT ENGINEERING TESTING DOESN'T SHOW

- LEV systems do not provide 100% control of the hazardous substance
- Therefore we need to look at the wider control strategy incorporating the hierarchy of control.



WHAT ENGINEERING TESTING DOESN'T SHOW

- Operator exposure to airborne contaminants
- Exposure is below the agreed benchmark
- Operator interaction with the LEV
- Operator training and working practices
- Whether COSHH controls are effective in practice
- Impact of combined controls, e.g. RPE
- Signage and procedures (clearance times, capture distances etc)



**A SYSTEM CAN PERFORM WELL FROM AN
ENGINEERING PERSPECTIVE, BUT THIS DOES
NOT AUTOMATICALLY PROVE THAT WORKER
EXPOSURE IS ADEQUATELY CONTROLLED.**

WHAT IS AIR SAMPLING?

- Air sampling measures the concentration of hazardous substances present in the air during a process, to assess whether exposure is adequately controlled.
- Uses a calibrated pump and sample head to measure the exposure levels across a shift or task
- Personal monitoring is carried out within the operators breathing zone or static background samples



WHEN DO WE USE AIR SAMPLING?

Confirm
control

Process/substanc
e changes

Benchmark
process

Support the
risk
assessment

Compare
against WELs

New LEV &
re-commissioning



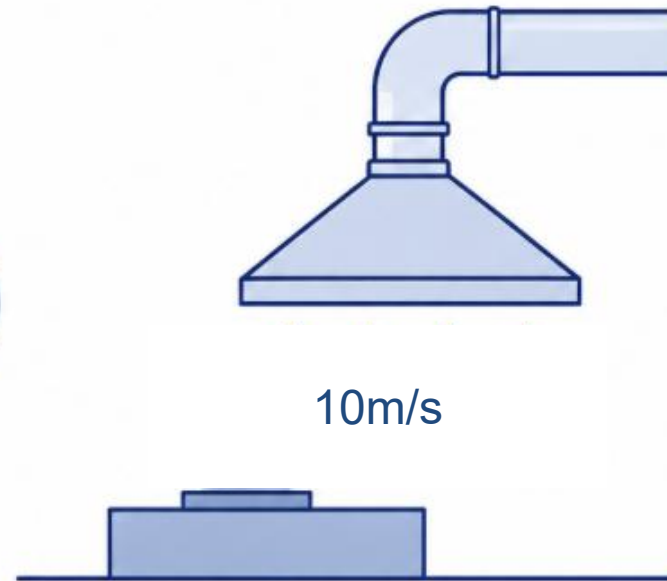
WHAT IS THE BENCHMARK?

EXPOSURE CONTROL BENCHMARK



VS

ENGINEERING PERFORMANCE BENCHMARK



WHAT IS THE BENCHMARK?



CASE STUDY EXAMPLE



CASE STUDY EXAMPLE

**HSE GUIDANCE
OC 634/8**



RPE NOT ENOUGH



NO BENCHMARK

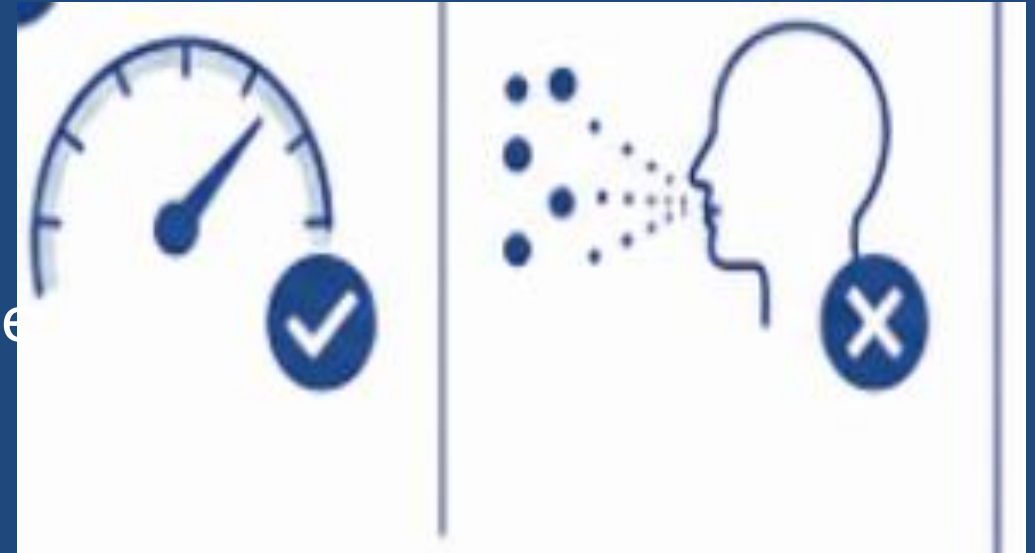


**TARGET NOT
ACHIEVED**

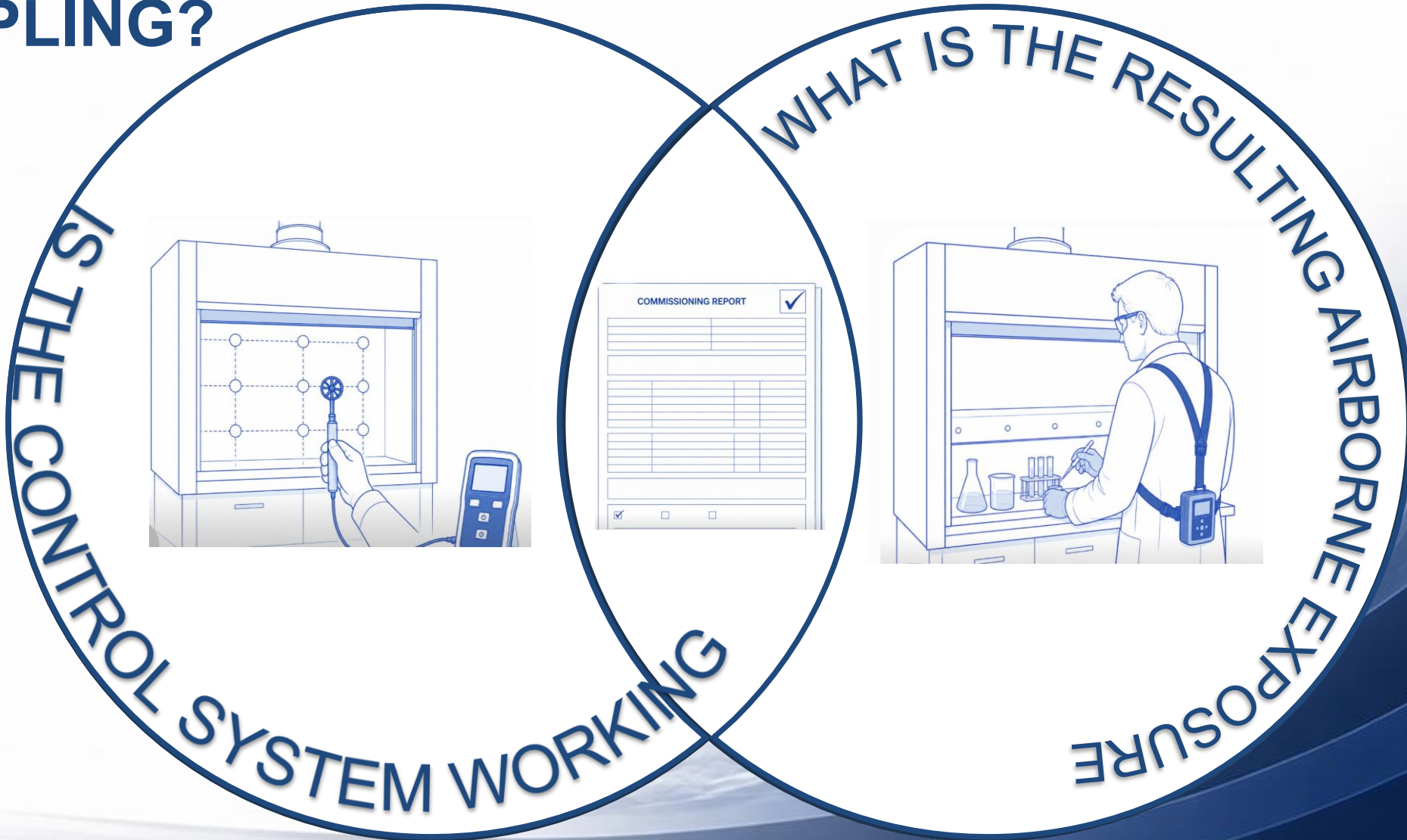


CASE STUDY CONCLUSION

- The LEV could operate as specified and still fail to achieve the duty holder's exposure target



ENGINEERING TESTING VS AIR SAMPLING?



**SUCCESSFUL COMMISSIONING IS NOT JUST
PROOF
THAT THE LEV MOVES AIR AS DESIGNED...**

**... IT IS EVIDENCE THAT THE INTENDED LEVEL OF
EXPOSURE CONTROL HAS BEEN ACHIEVED**

The logo for Armstrong Environmental is a stylized, three-dimensional oval shape. The top half of the oval is red with a glossy finish, and the bottom half is blue with a glossy finish. The words "armstrong" and "environmental" are written in white, lowercase, sans-serif font across the middle of the oval. The background is a solid dark blue. There are red and white L-shaped decorative elements in the top-left and bottom-right corners of the main content area.

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