LEV 2025

HEALTHY AIR IN THE WORKPLACE

7 - 8 October Birmingham

Tales from a Duty Holder- BAE systems Air

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- HSG 258 non- compliant
  - Stack height and efflux velocity
  - Duct velocity
  - Air flow monitoring
  - Filter monitoring
  - No Commissioning Report
- DSEAR non- compliant
- Process changes
- Poor Competency of Suppliers
- No operator or maintenance training

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Site Wide Audit and Improvement Plan

LEV Systems - 420

Surveying Completion of a high level audit has been completed in every building across site. This details compliance with current legislation to understand the risks involved with each system and any recommended actions

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Specifications

- Any specification should set out the operational, functional and performance requirements of the system.
- Understand capture zones, working zones and breathing zones.
- Involve your employees in LEV design or selection.
- Ideally use a knowledge expert to develop the concept and technical design.
- The specification should cover relevant standards, quality of workmanship, manuals , log books and commissioning requirements

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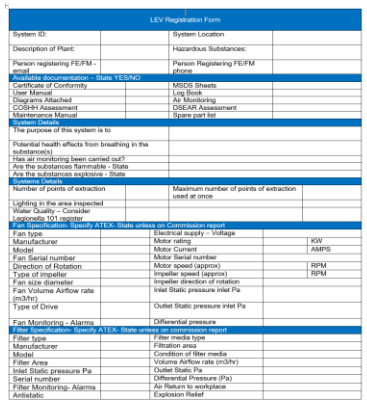
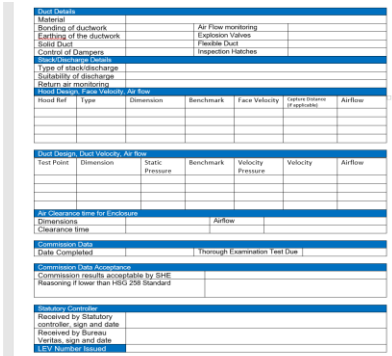
Documentation

- A new Project handover document has been developed
- Improved the LEV procedure to ensure all aspects of HSG258 are captured
- Registration document to ensure all information available for Thorough Examination and Test
- Pre- checklist to ensure Specification covers all aspects required



LEV Registration Form

System ID:		System Location		
Description of Plant:		Hazardous Substances:		
Person registering FE/FM - email		Person Registering FE/FM phone		
Available documentation - State YES/NO				
Certificate of Conformity		MSDS Sheets		
User Manual		Log Book		
Diagrams Attached		Air Monitoring		
COSHH Assessment		DSEAR Assessment		
Maintenance Manual		Spare part list		
System Details				
The purpose of this system is to				
Potential health effects from breathing in the substance(s)				
Has air monitoring been carried out?				
Are the substances flammable - State				
Are the substances explosive - State				
Systems Details				
Number of points of extraction		Maximum number of points of extraction used at once		
Lighting in the area inspected				
Water Quality - Consider Legionella 101 register				
Fan Specification- Specify ATEX- State unless on Commission report				
Fan type		Electrical supply – Voltage		
Manufacturer		Motor rating		KW
Model		Motor Current		AMPS
Fan Serial number		Motor Serial number		
Direction of Rotation		Motor speed (approx)		RPM
Type of impeller		Impeller speed (approx)		RPM
Fan size diameter		Impeller direction of rotation		
Fan Volume Airflow rate (m3/hr)		Inlet Static pressure inlet Pa		
Type of Drive		Outlet Static pressure inlet Pa		
Fan Monitoring - Alarms		Differential pressure		
Filter Specification- Specify ATEX- State unless on commission report				
Filter type		Filter media type		
Manufacturer		Filtration area		
Model		Condition of filter media		
Filter Area		Volume Airflow rate (m3/hr)		
Inlet Static pressure Pa		Outlet Static Pa		
Serial number		Differential Pressure (Pa)		
Filter Monitoring- Alarms		Air Return to workplace		
Antistatic		Explosion Relief		



Duct Details			
Material		Air Flow monitoring	
Bonding of ductwork		Explosion Valves	
Earthing of the ductwork		Flexible Duct	
Solid Duct		Inspection Hatches	
Control of Dampers			
Stack/Discharge Details			
Type of stack/discharge			
Suitability of discharge			
Return air monitoring			

Hood Design, Face Velocity, Air flow

Hood Ref	Type	Dimension	Benchmark	Face Velocity	Capture Distance (if applicable)	Airflow

Duct Design, Duct Velocity, Air flow

Test Point	Dimension	Static Pressure	Benchmark	Velocity Pressure	Velocity	Airflow

Air Clearance time for Enclosure			
Dimensions		Airflow	
Clearance time			
Commission Data			
Date Completed		Thorough Examination Test Due	
Commission Data Acceptance			
Commission results acceptable by SHE			
Reasoning if lower than HBG 258 Standard			
Statutory Controller			
Received by Statutory controller, sign and date			
Received by Bureau Veritas, sign and date			
LEV Number issued			

ACCEPTANCE TEST FORM 10.0 – COSHH and DSEAR		
Purpose: To ensure that other risks associated with the equipment and facility are adequately controlled.		
Standard (linked to the Control of Substances Hazardous to Health Regulations 2002, Dangerous Substances Explosive Atmosphere Regulations 2002 and HSG 258 LEV guidance.):	**Checked?**	
Ensure the following areas are checked:	FAT	IAT
• Where required, a DSEAR Risk Assessment covering possible ignition sources (e.g. for fume, gases and dust), the basis of safety is established (including upper and lower exposure limits - UEL's and LEL's) and hazard area classifications are completed		
• Substances and workplace exposure limits are identified		
• Material Safety Data Sheets (MSDS) and Risk Assessments supplied		
• Residual risks identified		
• Commissioning report (including baseline operating ranges), systems layout drawings provided and identified and labelled test points		
• Ducting is verified to be earth-bonded and dampers / valves are appropriately labelled. Manually operated dampers are lockable to prevent inadvertent modifications		
• Where multiple extraction points are implemented, the maximum design number should be clearly stated.		
• Where applicable, full enclosure extraction should have clearly stated volume clearance times with a time-delayed interlock (if implemented)		
• Confirm extract stack design and implementation compliance with HSG 258		
• At IAT stage, BAE Systems (if applicable) to ensure attachment of LEV plate, inclusion on LEV register and that the CAFM team are notified	X	
• Ensure where applicable, the provision of information for the control of Legionella - BAE Systems to ensure this is passed to internal statutory controller (Form 101)		
Comments / Findings: The difference between FAT & IAT comments should be clear i.e. different coloured text or denoted with an 'F' or 'I', for FAT and IAT respectively.		

FAT Status (Pass / Fail):		**IAT Status (Pass / Fail):**	
BAE Systems Approval:		**BAE Systems Approval:**	
Print Name	Signed	Print Name	Signed
Supplier Approval:		**Supplier Approval:**	
Print Name	Signed	Print Name	Signed

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