

# Local Exhaust Ventilation (LEV) Thorough Examination & Test Report

**System ID:**

**Date of Inspection:**

**Report Reference:**

Summary of the Assessment of Control

**Satisfactory**

**Unsatisfactory**

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

*Table of Contents*

|  |    |
|--|----|
| Section 1 Executive Summary.....             | 2  |
| Section 2 Clients Details.....               | 2  |
| Section 3 Site Details.....                  | 2  |
| Section 4 LEV Plant Details .....            | 2  |
| Section 5 Test Engineers Details.....        | 3  |
| Section 6 Additional Plant Information ..... | 3  |
| Section 7 DSEAR & ATEX.....                  | 3  |
| Section 8 Conclusions and Comments .....     | 3  |
| Section 9 Schematic.....                     | 4  |
| Section 10 Photographs.....                  | 5  |
| Section 11 Assessment .....                  | 6  |
| Section 12 Calibration Certificates .....    | 10 |

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

## Section 1 Executive Summary

The "enter system description" has been subjected to a thorough examination and test to ensure it can provide adequate control to comply with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 (as amended). The outcome of this assessment is that the system has been deemed Satisfactory / Unsatisfactory, there are some areas that require attention to improve the system or bring the system into compliance. These are listed below in order of priority

| Item | Responsible person | Due date |
|------|--------------------|----------|
| 1    |                    |          |
| 2    |                    |          |
| 3    |                    |          |
| 4    |                    |          |
| 5    |                    |          |

## Section 2 Clients Details

Name:  
Address:

## Section 3 Site Details

Address/site:

Area/room number/name:

Conditions during test:

## Section 4 LEV Plant Details

Serial number:

Asset  
number:

Brief description of system:

(what to be controlled, how to be controlled, number of hoods to be used at any time, system details)

Description of process to be controlled:

(including: type of tool/equipment/machinery, frequency of process, duration of process, quantities of substances, operating temperatures, other control measures to be used)

Identify Hazardous Agent(s) to be controlled (chemical/biological):

(including: substance name, WEL, quantity being used, physical form, corrosivity, vapour density)

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

Has anything changed since commissioning?

Yes

No

## Section 5 Test Engineers Details

I can confirm that the system addressed by this report has been carried out in full accordance with COSHH Regulation 9 and is providing adequate control of the hazardous substance(s) being used.

Name:

Signature:

Contact details:

## Section 6 Additional Plant Information

|                                     |         |           |            |                 |
|-------------------------------------|---------|-----------|------------|-----------------|
| Frequency of testing:<br>(Tick one) | Monthly | 6 monthly | 14 monthly | Other (specify) |
|-------------------------------------|---------|-----------|------------|-----------------|

|                        |                             |                             |                             |  |
|------------------------|-----------------------------|-----------------------------|-----------------------------|--|
| Evidence of:<br>(Tick) | COSHH Reg 6 Risk Assessment | DSEAR Reg 5 Risk Assessment | Material Safety Data Sheets |  |
|------------------------|-----------------------------|-----------------------------|-----------------------------|--|

|                        |                      |         |            |                       |
|------------------------|----------------------|---------|------------|-----------------------|
| Evidence of:<br>(Tick) | Design Specification | Logbook | O&M Manual | User training records |
|------------------------|----------------------|---------|------------|-----------------------|

## Section 7 DSEAR & ATEX

Is the substance:      Flammable?      Y/N      Explosive?      Y/N

|   |           |                        |          |
|---|-----------|------------------------|----------|
| Is the generation of an explosive atmosphere?<br>(Tick one) | Present   | Likely                 | Unlikely |
| DSEAR Zoning:<br>(Tick one)                                 | Work area | Hood                   | Plant    |
| Lower Explosive Limit:                                      |           | Upper Explosive Limit: |          |

|                                      |     |                          |     |
|--------------------------------------|-----|--------------------------|-----|
| Explosion vent panel:                |     |                          |     |
| Is one required?                     | Y/N | Is one fitted?           | Y/N |
| Is it venting to a safe place?       | Y/N | Is it in good condition? | Y/N |
| Explosion non-return damper:         |     |                          |     |
| Is one required?                     | Y/N | Is one fitted?           | Y/N |
| Is the connecting ductwork suitable? | Y/N |                          |     |

## Section 8 Conclusions and Comments

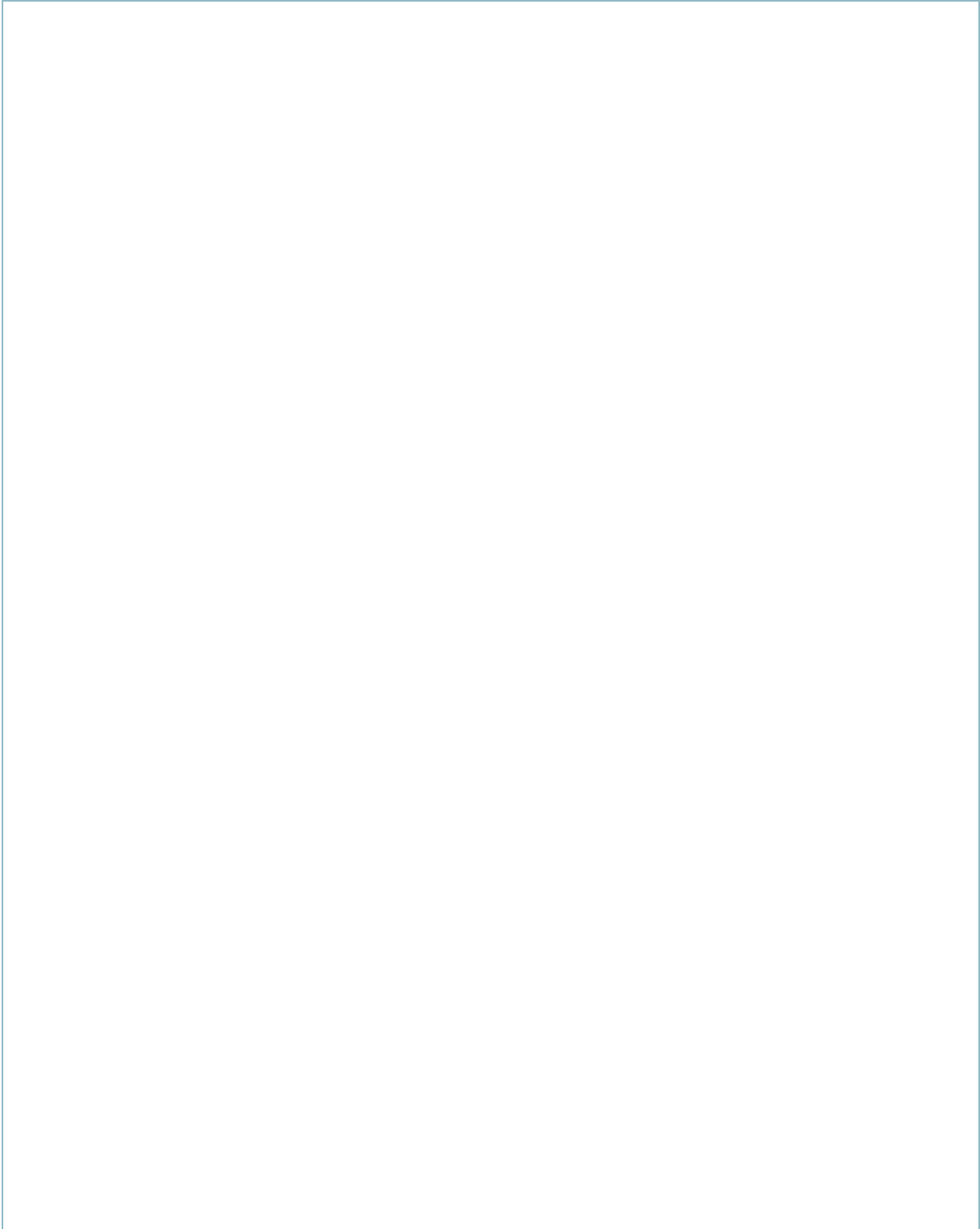
e.g., repairs or adjustments made, items likely to fail prior to next test

- 1
- 2
- 3
- 4

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

## Section 9 Schematic

Line schematic to show key components of the system.



Notes/Comments:

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

## Section 10 Photographs

Photo

Description/Comments

1

2

3

4

5

## Section 11 Assessment

| Hoods    |  |                   |                         |                          |                                  |                     |                         |  |
|----------|--|-------------------|-------------------------|--------------------------|----------------------------------|---------------------|-------------------------|--|
| Hood Ref | Type   | Dimensions<br>(m) | Benchmark               |                          | Airflow<br>(m <sup>3</sup> /sec) | Measured            |                         | Test kit used<br>Hotwire / Rotating Vane |
|          | Receiving   Capture   Partial   Full Enclosure   Other (specify) |                   | Static pressure<br>(Pa) | Face Velocity<br>(m/sec) |                                  | Velocity<br>(m/sec) | Static Pressure<br>(Pa) |  |
|          |  |                   |                         |                          |                                  |                     |                         |  |
|          |  |                   |                         |                          |                                  |                     |                         |  |
|          |  |                   |                         |                          |                                  |                     |                         |  |

Hood diversity \_\_\_\_\_ of \_\_\_\_\_ in use at any given time.

Statement on effective capture zone: **The contaminant is / is not released in the effective capture zone of the hood.**

Method of test: **Smoke release | Dust Lamp | Other (specify)**  
 (Provide photographic evidence)

Notes/comments:  
*e.g., Comparison with commissioning, Installed in accordance with design, appropriateness, usage, effectiveness of control, air flow indication devices etc.*

| Clearance time |         | Is appropriate?                               | YES (complete below)                          |                             | NO (move to next section)   |          |
|----------------|---------|---|---|-----------------------------|-----------------------------|----------|
| Hood Ref       | Size    | Air volume flow rate<br>(m <sup>3</sup> /sec) | Benchmark                                     |                             | Clearance time<br>(minutes) | Comments |
|                | (m x m) |   | Air volume flow rate<br>(m <sup>3</sup> /sec) | Clearance time<br>(minutes) |                             |          |
|                |         |   |   |                             |                             |          |

| Filter            | Is a filter fitted? | YES (complete below) | NO (move to next section) |
|-------------------|---------------------|----------------------|---------------------------|
| Visual assessment |                     |                      |                           |

- |   |   |
|---|---|
| Filter type   | Manufacturer  |
| Model   | Serial number   |
| Filter media type   | Filtration area (m <sup>2</sup> )                           |
| Antistatic  | Condition of filter media                                   |
| Air Return to working environment (if yes see below)        | Filter Monitoring e.g., Alarms                              |
| Cleaning device type (compressed air/shaker/water pump etc) | Condition   |
| Duration of cleaning period                                 | Frequency of cleaning                                       |
| ATEX Rating   | Explosion Relief  |
| Earth bonding   | Explosion relief location                                   |
| Explosion non-return damper                                 | High pressure ducting (between plant and non-return damper) |

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

| Quantitative assessment  |           |                   |          |
|--|-----------|-------------------|----------|
|  | Benchmark | Measured          | Comments |
| Inlet Static pressure (Pa)   |           |                   |          |
| Outlet Static (Pa)   |           |                   |          |
| Differential Pressure (Pa)   |           |                   |          |
| Volume Airflow rate (m <sup>3</sup> /hr)   |           |                   |          |
| Contaminant Breakthrough   |           | Filter efficiency |          |
| Notes/comments:<br><i>e.g., Installed in accordance with manufacturers design, pressure gauges fitted either side of filter, noise levels, vibration, corrosion etc.</i> |           |                   |          |

|                    |   |                      |                          |                           |                          |
|--------------------|---|----------------------|--------------------------|---------------------------|--------------------------|
| <b>HEPA Filter</b> | Is the air returned to the working environment? | YES (complete below) | <input type="checkbox"/> | NO (move to next section) | <input type="checkbox"/> |
|                    | Is a HEPA filter fitted?                        | YES (complete below) | <input type="checkbox"/> | NO (move to next section) | <input type="checkbox"/> |

| Visual assessment                |   |
|----------------------------------|---|
| Filter type                      | Manufacturer                                |
| Model                            | Serial number                               |
| Filter media type                | Filtration area (m <sup>2</sup> )           |
| Condition of filter media        | Filter Monitoring e.g., Alarms              |
| Has it been tested to ISO14644-3 | Test results                                |
| Date of last test                | Date of next test<br>(minimum 6 to 12month) |

| Quantitative assessment  |           |                   |          |
|--|-----------|-------------------|----------|
|  | Benchmark | Measured          | Comments |
| Inlet Static pressure (Pa)   |           |                   |          |
| Outlet Static (Pa)   |           |                   |          |
| Differential Pressure (Pa)   |           |                   |          |
| Volume Airflow rate (m <sup>3</sup> /hr)   |           |                   |          |
| Contaminant Breakthrough   |           | Filter efficiency |          |
| Notes/comments:<br><i>e.g., Installed in accordance with manufacturers design, pressure gauges fitted either side of filter, compliance to ISO14644-3 etc.</i> |           |                   |          |



**System ID:**  
**Date of Inspection:**  
**Report Reference:**

## Fan

### Visual assessment

|                       |                                |
|-----------------------|--------------------------------|
| Fan type              | Type of impeller               |
| Manufacturer          | Impeller plate RPM             |
| Model                 | Impeller direction of rotation |
| Fan Serial number     | Fan Monitoring - Alarms        |
| ATEX Rating           | Fan size                       |
| Direction of Rotation |                                |

### Quantitative assessment

|  | Benchmark | Measured | Comments |
|--|-----------|----------|----------|
|--|-----------|----------|----------|

Static pressure:

Inlet (Pa)

Outlet (Pa)

Fan Volume Airflow rate (m<sup>3</sup>/hr)

Total pressure (Pa)

Notes/comments:

*e.g., Installed in accordance with manufacturers design Are pressure gauges fitted either side of fan, noise levels, vibration, corrosion etc.*

| Fan Drive type | Direct |  | Belt |  |
|----------------|--------|--|------|--|
|----------------|--------|--|------|--|

|                   |  |                    |
|-------------------|--|--------------------|
| Fan pulley size   |  | No. of belts       |
| Motor pulley size |  | Belt type          |
| Pulley centres    |  | Belt tension       |
| Measured fan RPM  |  | Measured motor RPM |

Notes/comments:

## Motor

|                             |                               |
|-----------------------------|-------------------------------|
| Electrical supply – Voltage | Motor rating (kW)             |
| Manufacturer                | Motor Current Plated (Amps)   |
| Model                       | Motor Current Measured (Amps) |
| Motor Serial number         | Motor plate RPM               |
| ATEX Rating                 |                               |
| Notes/comments:             |                               |

**System ID:**  
**Date of Inspection:**  
**Report Reference:**

### Controls

|   |                                 |
|---|---------------------------------|
| On/Off or Variable Speed Drive  | Manual / Automatic              |
| Speed setting   | Alarms / Warning devices fitted |
| Electrical compliance<br><small>(evidence of certification to IEE BS7671)</small> | Condition                       |
| Notes/comments:   |                                 |

### Other

Fire suppression system

Notes/comments:

### Ducting

Visual assessment

|                            |                     |
|----------------------------|---------------------|
| Material                   | Condition – inside  |
| Balancing dampers          | Condition – outside |
| Flexible ducting condition | Inspection hatches  |
| Earth bonding              | Explosion hatches   |

Notes/comments:

*e.g., Installed in accordance with design*

Quantitative assessment

| Test point<br>Ref | Diameter<br>(m) | Benchmark                  |                                  | Measured                   |                                  | Comment<br><i>e.g., Comparison benchmark v Measured,<br/>Potential for blockage, Ease of access, suitability<br/>of test point etc.</i> |
|-------------------|-----------------|----------------------------|----------------------------------|----------------------------|----------------------------------|---|
|                   |                 | Static<br>pressure<br>(Pa) | Transport<br>Velocity<br>(m/sec) | Static<br>pressure<br>(Pa) | Transport<br>Velocity<br>(m/sec) |   |

### Discharge Arrangement

|              |                          |
|--------------|--------------------------|
| Type         | Location                 |
| Stack height | Stack discharge velocity |

Notes/comments:

*e.g., Effectiveness, risk of  
recirculation, effect on  
neighbours, source of make-up  
air etc.*

|                             |                                       |   |  |
|-----------------------------|---------------------------------------|---|--|
| <b>Air sampling results</b> | Has air monitoring<br>been conducted? | YES (complete below) <input type="checkbox"/> | NO (move to next section) <input type="checkbox"/> |
|-----------------------------|---------------------------------------|---|--|

|                  |                |
|------------------|----------------|
| Report reference | Date of report |
|------------------|----------------|

Notes/comments:

System ID:  
Date of Inspection:  
Report Reference:

## Section 12 Calibration Certificates

Hotwire Anemometer

Rotating Vane Anemometer

Manometer

Tachometer

Other:

Other: