



# Worker Comfort

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## Dust in Air Surveys

Dust and fumes in the workplace atmosphere can cause health problems and be potentially dangerous due to explosions and fire risks. Being regularly exposed to high levels of dust in a workplace can affect the respiratory system and cause workers to become ill.

Employers are reminded that the Control of Substances Hazardous to Health Regulations 2002 (COSHH) require that you protect workers from the harmful health effects of hazardous substances in the workplace, including the effects of dust.

It is vital that dust is controlled in manufacturing environments such as paper/tissue, food/flour and building materials manufacture, during building and construction work as well as in welding, quarrying and woodworking and other manufacturing processes that produce dust.

FEG provide risk assessment and dust monitoring services to ensure employers are aware of what is required to maintain worker comfort and comply with the health and safety COSHH legislation.

## Noise Surveys

Noise is part of daily life, however, excessive noise can cause permanent and disabling hearing damage. Employers, especially in manufacturing and industrial environments where machinery and processes contribute to the overall noise levels in the work area, have a legal obligation to ensure that workers' hearing is protected.

Hearing loss gets worse over time with exposure to noise and can be caused by sudden, extremely loud noises. It is important that employers assess noise and take action to reduce exposure to noise and provide personal hearing protection and health surveillance to employees. Employees are also advised to make use of personal hearing protection or other control measures provided.

When equipment is designed and installed in the workplace, suppliers need to design tools, machinery and process plant that operates quietly.

FEG Noise Surveys are carried out on site to determine the impact of noise in the workplace and on the workforce. We also carry out boundary noise assessments to evaluate noise levels and identification of the source. The information can then be used to influence the employers decision to implement remediation to comply with the law.

## Temperature and CO<sub>2</sub> Monitoring

Carbon Dioxide (CO<sub>2</sub>) emissions can build up in the workplace from manufacturing processes such as carbonated drinks bottling, brewing/fermentation processes, chemical manufacture, in bakeries and silos as well as in welding, water treatment, fire extinguishing/suppression systems and leaks from storage tanks. Combined with warm temperatures and insufficient ventilation it causes drowsiness in employees. Continued exposure can produce signs and symptoms of increased/laboured respiratory rate, lethargy,

sleepiness, headache, convulsions, sweating, dizziness and unconsciousness.

Employers must ensure that workplace areas that are prone to high ambient temperatures and possible CO<sub>2</sub> emissions are monitored and effectively ventilated to ensure employee health and safety. FEG Temperature and CO<sub>2</sub> Monitoring services are carried out in accordance with Health and safety Executive (HSE) and American Conference of Governmental Industrial Hygienists (ACGIH) recommendation.

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## Dust in Air Surveys

Assessment and management of dust in air is a legal requirement to ensure worker comfort as well as health and safety. It is important that dust levels are assessed in the workplace by doing a dust survey to identify:

- If the workplace has a dust issue
- Any individual workers that are likely to be exposed to dust
- Which tasks may generate high levels of dust
- What controls may be needed to reduce exposure to an acceptable level

As part of the Dust in Air Survey FEG perform static monitoring as well as personal monitoring to acquire a complete analysis of dust levels within the workplace.

FEG Dust in Air Surveys address sampling and analysis to meet the needs of the specific type of workplace area required by HSE recommendations HSG258.

Our dust survey includes recommendations for:

- Identifying the hazards
- Deciding who might be harmed and how
- Evaluation of risks and deciding on precautions
- Recording findings and implementing them
- Risk assessment review and update if necessary

FEG will provide recommendations with a free quotation for any work and our skilled engineering team can then implement necessary repairs, a re-design or install a new Local Exhaust Ventilation (LEV) system.

## Temperature and CO<sub>2</sub> Monitoring

Where temperature, inadequate ventilation and carbon dioxide (CO<sub>2</sub>) emissions are a concern, FEG offer real-time data logging in multiple positions including external ambient evaluation and will measure the effect of process and external conditions. Using lamps, thermal image cameras, air quality meters, and smoke pens we can track air movements, flow patterns, and establish the effectiveness of ventilation against HSE and ACGIH worker comfort figures.



## Noise Surveys

The Control of Noise at Work Regulations 2005 (the Noise Regulations) came into force for all industry sectors in Great Britain on 6 April 2006. The aim of the Noise Regulations is to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them to lose their hearing and/or to suffer from tinnitus (permanent ringing in the ears).

### How can FEG help you?

FEG provide Noise Surveys that enable assessment and management of noise risks and noise levels throughout the workplace area.

FEG consider all of the following points:

- All factors related to risks from noise exposure
- Steps needed to achieve and maintain adequate control of the risks
- How to implement these steps into action

This can often be achieved by good machine and process plant design, using quieter equipment or a different, quieter process. If necessary carrying out engineering/technical changes to reduce the noise at source. There may also be an opportunity to adjust the layout of the workplace to create quiet workstations and areas as well as ways of improving working practices to reduce noise levels and limiting the time operators spend in noisy areas.

The supply of operator hearing protection and the use of screens, barriers, enclosures or absorbent materials all contribute to a safe and healthy work area.

FEG also provide Boundary Noise Assessments which are useful to help companies respond to complaints upheld by the Environment Agency. We assess the noise level and identify the key noise emitters. FEG then explores and identifies measures, acceptable to the Environment Agency, to reduce the boundary noise to below the permitted figure. Our understanding of fan performance and air movements helps us understand the practicality and viability of potential reduction measures.

FEG will provide recommendations and where necessary offer a free quotation for any work and installation of new equipment.



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