

Occupational Hygiene Monitoring and Consultancy

Environmental Scientifics Group's Occupational Hygiene team enables organisations to lead the way in employee welfare whilst being considerate to the environment. Our highly qualified specialists provide a market leading service offering the assurance of compliance with Legislation and Regulations, including the COSHH Regulations, Control of Noise at Work Regulations and Control of Vibration at Work Regulations.

Every year in the UK, over two million people experience ill health caused or worsened by their working conditions. 10,000 workers per year die from occupational exposure to harmful substances and 750,000 workers have time off with work-related illness each year.

ESG's experienced occupational hygienists, technologists and technicians undertake a range of services to assist clients in monitoring, assessing and controlling human exposure to chemical, physical and biological hazards in the workplace offering you peace of mind.

Services include:

- Occupational exposure monitoring
- Noise assessments and noise monitoring
- Hand-Arm and whole body vibration assessment
- Local Exhaust Ventilation (LEV) assessment
- Exposure to physical agents including radiation surface contamination and dose assessment
- COSHH assessments, Audits and Training
- Workplace comfort assessments
- Surface contamination swabbing and analysis
- Compressed breathing air quality

ESG's highly experienced, independent experts offer a flexible approach, individually designed solutions and local personnel to help protect the health of employees in the workplace.



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Occupational Exposure Monitoring

A wide range of hazardous substances are used and/or generated in industry. Exposure to many of these can be assessed through effective monitoring by ESG's skilled teams. These substances include:

- Welding fumes
- Diesel exhaust emissions
- Paint fumes (organic solvents, isocyanates)
- Total inhalable and respirable particulates
- Organic solvents
- Lead particulates
- Asbestos and other fibres (e.g. MMMF)
- Respirable crystalline silica, in quarries and from ballast/aggregate handling
- Acid and alkali mists from industrial processes
- Oil mists (mineral oils, water soluble cutting fluids, PCBs)
- Specific contaminants from ground disturbance of contaminated sites

ESG uses the latest techniques to monitor exposure against current HSE guidance. Monitoring is facilitated by the use of direct reading instruments, two stage monitoring using pumps and collection media and passive sampling.

Together with measurement and monitoring, ESG's experienced and qualified occupational hygienists can offer consultancy and advice on control strategies, problem solving, and interpretation of regulations and procedures.

Noise Assessments and Noise Monitoring

The Control of Noise at Work Regulations require employers to make a suitable and sufficient assessment of the risk to hearing of employees whose work is liable to expose them to noise at, or above, a given exposure action level. Noise assessments and noise monitoring by 'competent persons' is essential for identifying those people at risk and to determine their exposure.

ESG's team use the latest, high-specification instrumentation to accurately measure occupational noise exposure. These include sound level meters which can be used for fixed point measurements, measurements close to the operator, or for octave band, or one-third octave band frequency analysis. Dosimeters, which are worn by a person and can continuously monitor noise exposure, are also utilised.

Hand-Arm and Whole Body Vibration

Workers whose hands are regularly exposed to high vibration may suffer injuries which can include vascular disorders (known as 'vibration induced white finger'), neurological and muscular damage. Whole body vibration arising from shaking or jolting of the human body can lead to lower back problems.

The Control of Vibration at Work Regulations specify 'exposure action values' and 'exposure limit values'. They require employers to reduce exposure to harmful levels of vibration to a minimum.

ESG's team provide clients with measurement and assessment of hand-arm vibration and of whole body vibration. They can also provide a calculation of maximum permitted daily usage and consultancy as well as offer advice on control strategies.

Local Exhaust Ventilation (LEV)

COSHH Regulation 9 requires that where LEV is used to control exposure to substances hazardous to health, a thorough examination and test be undertaken at least once every 14 months.

A number of techniques are used to check LEV systems. These include flow checks, using specialist anemometers, pilot tubes and smoke tests, pressure measurements and visual examination.

Exposure to Physical Agents

ESG's team can make a full assessment of exposure to physical agents, such as thermal factors, lighting and non-ionising radiation. In the case of ionising radiation, monitoring may include an assessment of surface contamination either by direct reading or surface swab, making a dose exposure assessment using an electronic dose rate meter or electronic personal dosimeter.

COSHH Assessments, Audits and Training

COSHH Regulations require that the health risk created by work involving hazardous substances should be assessed, and exposure to such substances prevented or controlled. ESG can provide full assessments, audits and training to support compliance.

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