

Case Study

Client

Herefordshire, Ludlow & North Shropshire College

Sector

Education

Services

Occupational hygiene exposure monitoring of COSHH regulated substances and Workplace noise risk assessments.

Project Overview

Herefordshire, Ludlow & North Shropshire College is a further education college, for 16-18 year olds, as well as adults, and provides an outstanding learning environment covering a wide range of academic and vocational education to over 3000 full-time and 5000 part-time students.

AEC were approached by the college's health and safety team to carry out occupational hygiene exposure monitoring and workplace noise risk assessments within workshops across the Hereford and the Home Lacy campuses.

AEC's Approach

Occupational Hygiene Exposure Monitoring Assessments

Exposure monitoring was required for a range of COSHH regulated substances within the workshops / teaching areas across both campus locations. Across the site there are several purpose-built workshops and training facilities catering for the practical teaching of various disciplines including brick work, carpentry, plumbing, motor vehicle repairs, welding and blacksmith forges.

Activities within the workshop / teaching areas can create a range of hazardous substances, which if not sufficiently controlled can give rise to a series of health issues including respiratory illness and associated health concerns.

Therefore it is vital to undertake regular monitoring and assess control measures in order to reduce risk and ensure workplace exposure limits are not exceeded. On this occasion exposure monitoring was undertaken across a number of areas for a wide range of airborne contaminants such as:

Welding workshop (Welding fume, NO / NO2 and Ozone)	Forge / Farrier areas Inhalable dust	Carpentry workshops Wood dust	Brick work areas Respirable crystalline silica	Motor vehicle workshop Diesel Fume (as elemental carbon)
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During the exposure programme AEC's hygienists:

- Monitored a wide range of areas / activities over a three day period covering standard teaching / workshop activities and typical working hours.



- Carried out both personal and fixed-point sampling, covering lecturers, technicians and typical workshop locations.
- Observed the working practices of both staff and students and detailed the control measures currently being used, in order to advise on possible improvements.

Following the site work, analysis of the collected samples indicated that exposure levels across all areas were well below the current workplace exposure limits (WELS) and showed no cause for concern, on this occasion, and that the current control measures in place were sufficient.

Workplace Noise Risk Assessments

Due to the possible presence of elevated noise levels within a number of workshops / teaching areas across both campus locations, a series of workplace noise risk assessments were undertaken in order to assess typical noise exposure levels, while staff and students carried out normal daily activities.

Noise levels were sampled using both a sound level meter to collect spot measurement data and personal dosimeters in order to estimate an individual's daily noise exposure. Activities that generated elevated noise levels included:

Shaping metal within the Forge / Farrier workshops	Use of power tools and fixed-plant machinery within the carpentry workshops	Use of hand tools / hammers within various workshops	Welding, grinding and steel cutting activities	Mortar mixing and brick cutting within the brick workshop
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The monitoring procedure involved:

- Sampling noise levels covering a wide range of areas / activities over a three day period.
- Personal dosimetry measurements and spot readings, covering staff and typical workshop locations.
- Observed the working practices of both staff and students and detailed the control measures being used, in order to advise on possible improvements.

Analysis of the data indicated that noise levels within the majority of areas were acceptable and that where elevated exposure were present these were being suitably controlled. Suggestions were put forward regarding best practice, how to reduce individual noise exposure and how to comply with current legislation. All findings, along with any relevant observations and recommendations, were presented to the health and safety team, within a detailed report.

AEC continue to support Herefordshire, Ludlow & North Shropshire College with their regular compliance programme delivering services on time and within budget to enable them to maintain high levels of compliance at all times.

Testimonial

“ When planning our monitoring exercise, we naturally obtained a number of quotes. We selected AEC Ltd, partly on cost effectiveness but also on the pre-survey service they offered which included a free site visit to accurately assess the monitoring required. All the staff we dealt with were professional and knowledgeable. The written reports were comprehensive, timely and as well as detailing legal requirements, also offered best practice recommendations. ”

Contact

If you would like to discuss compliance within your workplace, please contact our team



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