
New workplace exposure limits

Categories : [Safety & Security](#)

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3M Gas & Flame Detection is advising businesses or public services that do not comply with updated workplace / occupational exposure limits to chemical agents, could potentially face stern consequences, including prosecution. August 2018 saw the deadline pass for compliance with the revised EU Directive 2017/164/EU. However, for businesses that remain concerned, 3M Gas & Flame Detection is offering guidance to ensure the regulations are met.

Indicative occupational exposure limit values (IOELV) are health-based, non-binding values which are derived from recent scientific data and take into account the availability of reliable measurement techniques. For any chemical agent with an IOELV set at EU level, Member States are required to establish a national occupational exposure limit. In the UK, for example, EH40 Workplace exposure limits from the Health and Safety Executive (HSE) have been updated directly in line with EU Directive 2017/164/EU. In the latest revision of EH40, which was introduced in August 2018, new limits have been introduced for 31 substances.

“The updated regulations set out the latest IOELV limits. These have been established in relation to a reference period of 8 hours and are referred to as long-term exposure limit values. In addition, for certain chemical agents, shorter reference periods exist, typically 15 minutes, and these are referred to as short-term exposure limit values. In line with the ongoing desire to create safer workplaces, IOELV limits have consequently been reduced in the updated regulations. This means any business that believes it was working safely to previous limits, may now be exceeding them.”

Neil Gwinnutt, UK & Ireland Sales Manager, 3M Personal Safety Division - Portable Gas Detection

By way of example, consider carbon monoxide (CO), which is an extremely common by-product of many industrial processes such as wastewater treatment, steelmaking, forging, chemical production, and oil and gas extraction. The 8-hour exposure limit for CO has been reduced from 30ppm to 20ppm while the 15-minute exposure limit has been tightened from 200ppm to 100ppm.

Another common gas, hydrogen cyanide (HCN), which is found widely in the plastics manufacturing industry, has seen a new 8-hour exposure limit introduced at 0.9ppm while its 15-minute exposure limit has been reduced from 10ppm to 4.5ppm.

“New limits have also been introduced for nitrogen dioxide (NO₂) and nitric oxide (NO), which are commonplace in the rail industry and generated by diesel locomotives,” says Mr Gwinnutt. “As a result, rail companies need to ensure that engineers working in maintenance depots or in tunnels are not exposed to levels beyond those stated.”

The long-term effects on health resulting from exposure to chemical agents are well documented. Employers contravening the new exposure limits could not only be risking the health and safety of their team, but find themselves subject to prosecution. To help avoid this situation, any concerned employer is urged to contact 3M. The Application Engineering group offers complete end-to-end consulting, from design, through to equipment specification, installation recommendations, maintenance and service.