Welding: Changes in HSE enforcement expectations

There is new scientific evidence that exposure to welding fume, including mild steel welding fume, can cause lung cancer. As a consequence the HSE has strengthened its enforcement expectations.

For all indoor welding activities, suitable Local Exhaust Ventilation (LEV) is required. Where LEV alone does not adequately control exposure, it should be supplemented by adequate and suitable respiratory protective equipment (RPE) to protect against any residual fume.

For all outdoor welding activities, adequate and suitable RPE will need to be worn.

Welders must be suitably instructed and trained in the use of these controls.

What you will need to do

This bulletin must be drawn to the attention of managers, and anyone else with responsibility for welding activities and you should confirm action taken.

Managers (and any other person responsible for welding activities) will need to review their risk assessments and work activities to ensure that no indoor welding takes place without suitable LEV and no outdoor welding takes place without appropriate RPE. Make sure all controls are correctly used, suitably maintained and monitored. LEV must be subject to thorough examination and test.

Any person who appoints contractors will need to check that where welding activities are being undertaken, the contractors’ risk assessments and method statements meet the above standards. You will also need to satisfy yourself that contractors are not putting themselves or others at risk.

Why you need to take action

Following scientific research mild steel welding fume has been reclassified as a human carcinogen. Manganese, which is also present in mild steel welding fume, can also cause neurological effects similar to Parkinson’s disease. UV radiation from welding is also a carcinogen.

The HSE’s new guidance applies to all welding fumes. Regardless of duration, the HSE will no longer accept any welding undertaken without suitable exposure control measures in place, as there is no known level of safe exposure.

Further information

You can use the BOHS Welding Fume Control Toolkit to help you identify the best controls for your welding activities.

For further information see: HSE Enforcement Expectations for Welding Fumes. Also see HSE information on respiratory protective equipment (RPE) and local exhaust ventilation (LEV).

Please contact your lead Health and Safety Adviser if you require further advice.