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## Exposure Limits Safe Working Practices

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The levels of airborne contaminants in the workplace are governed by 'maximum exposure limits' (MELs) and 'occupational exposure standards' (OESs) as laid down under the **Control of Substances Hazardous to Health Regulations 1999** (COSHH), as amended and in Guidance Note EH40 (which is revised annually). Collectively these limits are terms 'occupational exposure limits', an expression which replaces the old 'threshold limit values'. Maximum exposure limits and occupational exposure standards, as introduced by COSHH, replace 'control limits' and 'recommended limits' respectively.

### OCCUPATIONAL EXPOSURE LIMITS AND GUIDANCE NOTE EH40

The list of occupational exposure limits given in Guidance Note EH40 unless otherwise stated, relates to personal exposure to toxic substances in the air of workplaces and is divided into two parts.

#### **Part 1: Maximum Exposure Limits**

These replace the former 'control limits' by virtue of also being listed in Schedule 1 of COSHH have a legal status.

#### **Part 2: Occupational Exposure Standards**

These replace the former 'recommended limits' and although having no legal status are considered to represent good practice and realistic criteria for the control of exposure, plant design, engineering controls and if necessary, the selection and use of personal protective equipment.

#### **Long and Short Term Exposure Limits**

The long-term exposure limit is concerned with the total intake over long periods and is therefore appropriate for protecting against the effects of long-term exposure or reducing the risks to an insignificant level. The short-term exposure limit is aimed primarily at avoiding acute effects, or at least reducing the risk of the occurrence. Specific short term exposure limits are listed for those substances for which there is evidence of a risk of acute effects occurring as a result of brief exposure. For those substances for which no short term exposure limit is listed, it is recommended that a figure of three times the long term exposure limit averaged over a 10 minute period be used as a guideline for controlling exposure to short term excursions.

Both the long term and short-term exposure limits are expressed as time weighted average (TWA) concentrations (which are simply airborne concentrations averaged over a specified period of time). The period of the long-term limit is normally eight hours and for the short term period ten minutes.

For further information:-

HSE Guidance Note EH41 - Monitoring Strategies for Toxic Substances

HSE Guidance Note EH40 - OELs