

In the line of fire chemicals guidance

What's the risk?

All work activities involve the use of or contact with various forms of chemicals or liquids. It is important that we understand what these are, how we should use them, how they can harm us and what we can do to prevent this.

All chemicals and substances differ in terms of how they can potentially cause harm. For some simply having them on our skin is enough to cause a huge amount of damage, for others it is only if they are ingested, inhaled, absorbed through our skin or make contact with our eyes that they can cause us any harm.

When we find ourselves in the line of fire with chemicals whether it be through a splash in the face, a spill onto our skin or a leak that creates inhalable fumes, the effects can be extremely harmful and in certain cases life-changing or fatal.

Some examples of chemicals and hazardous materials we deal with in our business

<ul style="list-style-type: none">• Treatment chemicals• Chlorous• Fuel (diesel, petrol)• Vehicle fluids (hydraulic oil, AdBlue, engine oil)• Domestic chemicals (bleach, cleaning sprays and salts)• Contaminated water	<ul style="list-style-type: none">• Laboratory testing chemicals• Gases in confined space areas (hydrogen sulphide, methane, carbon monoxide)• Sewage• Cement, sand, salt, grit• Hot drinks
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Controlling and managing the risks

Risk assessment – Is there a risk? Who is at risk? What can be done to control it? Is it enough?

- The first stage in managing risks associated with chemicals and hazardous substances is identifying the specific tasks where they are used, who could be at risk and how.
- It is then important to understand how the risks can be controlled. The COSHH regulations 2002 set clear standards around controlling these risks. If the use of the substance can't be completely removed then we need to establish whether there is



an alternative that is less dangerous or can be used in such a way that no contact will be made. If this cannot be done then additional control measures will be required including a safe system of work, providing training and information (in the form of chemical safety data sheets and COSHH assessments) supervision and PPE (see below).

- For any work involving chemicals it is important that the risk assessment is recorded so that everyone can look back at it and understand the risk but also so that it can be reviewed as the business changes and new products, processes and ways of working come about.

Following a safe system of work

- Specific processes may be introduced for managing specific chemicals and substances. This could be anything from the work location that the activity should take place in, to good practice for storage and movement of chemicals.
- Trained and competent personnel – depending on the type of operation the work must be carried out, supervised and authorized by a competent person. The chemical properties, hazards and control measures specific to any chemical involved in a work process must be communicated to all personnel likely to be effected.

Dynamic risk assessment

- No two jobs are the same - the activity, location and pieces of equipment appear not to have changed it is important never to make assumptions. We should all continually assess risk before, during and after a work activity. Weather, temperature, time of day and individual approach can all effect the levels of risk in a job and may trigger a requirement for additional control measures.

Personal Protective Equipment

- Our minimum standard for PPE is in place to protect all staff from the hazards most common in their work activity. On some occasions additional PPE will be required in order to carry out specific tasks. This may include protective goggles, full face protection, protective overalls or different types of hand protection.

COSHH Assessments and Material Safety Data Sheets

- All chemicals used in the workplace must have a COSHH risk assessment completed which results in a summary document available for employees as to the key hazards, necessary control measures for safe use, handling and disposal and what to do in the event of a spillage, leak or fire. Material safety data sheets are provided by manufacturers to inform purchasers and end users of the chemical properties of a product and recommended control measures and emergency procedures for use.



Key messages

- If you find yourself in the line of fire when working with chemicals and substances you could be faced with severe injury, illness or even death.
- Familiarise yourself with the chemicals in your workplace and work activities and ensure you know a) what the risks are and b) how to keep yourself, your colleagues and the public out of the line of fire.
- If you are in any doubt please discuss with your line manager and safety team immediately.

Further information and reference documents

TW HSP 45 Control of Substances Hazardous to Health

TW HSP 35 COMAH hazard identification and risk assessment

HSE guidance - <http://www.hse.gov.uk/coshh/basics.htm> ;
<http://www.hse.gov.uk/toolbox/harmful/index.htm>

HSE guidance (COMAH) - <http://www.hse.gov.uk/comah/>