Lead at Work Standard



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1 Introduction

The purpose of this standard is to document the requirements needed in ensuring that work with lead containing products is carried out safely and eliminating the health possible effects to anyone who may be affected by the work.

2 Scope

The scope of the SHEMS covers all persons, workplaces and operations in our business

Exceptions will be documented through a SHEMS Appendix B process (<u>SHEMS-FOR-GR-999</u>), authorised by the SHE Director responsible for coordinating SHE.

Unitas SHEMS (<u>SHEMS-STD-GR-003</u>) provides guidance and signposting for the compliance, implementation, monitoring, audit and review of our systems, demonstrating continual improvement and achievement of business Vision and SHE Objectives.

2.1 Definitions and Acronyms

CLAW	Control of Lead at Work Regulations 2002	
EMAS	Employment Medical Advisory Service	
HSE's EMAS Doctor Appointed Doctor	Where testing/monitoring is required to undertaken by a HSE's EMAS Appointed Doctor (CLAW Regulations 2002). Unitas will appoint specialist doctors to undertake relevant medical assessments. A copy of the letter of registration from the HSE for the appointment of the doctor must be available on site	
ICATS	Industrial Coatings Applicator Training Scheme	
Lead	Is a poisonous substance that can damage nervous connections (especially in young children) and cause blood and brain disorders. Lead is a potent neurotoxin that accumulates in soft tissues and bone over time	
Significant exposure	 Exposure is considered to be significant if: A person's exposure exceeds half the occupational exposure limit (OEL) for lead in the atmosphere (0.075mg/m3) There is a substantial risk of a person ingesting lead There is a risk of a persons' skin coming into contact with lead (in a form where it is likely to be absorbed) Work with materials that contain 1% or more of lead for the total percentage within the existing paint/ substrate 	



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3 Unitas Requirements

3.1 Initial Assessment of Structure and Work to be carried out

The management team are responsible for delivering the work, must carry out an initial assessment to determine whether persons are likely to be exposed to lead and whether that exposure is likely to be significant. Site management undertake the initial assessment which must record:

- The amount of lead by weight in the structure
- The work to be undertaken
- Persons likely to be exposed
- Whether that exposure is likely to be significant

The assessment must take into consideration the following issues, but not exclusive to:

- Make an assessment of the risks to the health of persons created by the work, and include whether the
 exposure is significant
- Identify and implement measures to prevent or adequately control exposure
- Assess the location
- Record the findings of the assessment and communicate them to all persons identified in the assessment

An HSE's Employment Medical Advisory Service (EMAS) Appointed Doctor will be identified for possible subsequent testing and screening, if the exposure is considered to be significant.

3.2 Enclosure

An assessment of the methodology to remove lead materials/ substances shall include, in some circumstances, the construction of an enclosure to prevent the spread of materials/ substances containing lead leaving the site area. Line managers must ensure that during the planning phase consideration is given to reduce the spread of materials/ substances containing lead.

3.3 Significant exposure

This will normally include persons whose work activities involve direct contact and exposure to lead and may involve the following groups, but not limited to: Steelworkers, grit blasters, painters, scaffolders, direct labour support and site management staff.

Visiting site management and client personnel are not considered to be significantly at risk to exposure. This is controlled via exclusion from areas where lead exposure is taking place. If inspecting areas between works, adequate PPE must be provided to prevent secondary exposure through direct contact.

3.4 Monitoring

Monitoring must take into consideration the procedure for monitoring blood tests and the procedure for monitoring releases of lead to atmosphere for the impact on the surrounding workers and the environment. A robust regime must be put in place for persons significantly exposed. Once set up and agreed, the safe system of work must be reviewed regularly and recorded on site to ensure that the monitoring is sufficient for site conditions.

Consideration must also be given towards the build-up of vapour from paints, solvents, etc with suitable ventilation established.

3.5 Blood Testing

Prior to commencing work, base line blood level testing must be undertaken as close to the commencement of the work date. Confirmation of testing arrangements must be made available to Unitas line management prior to starting works. All results to be made available within 14 days.

Where individuals are under regular monitoring, a letter from the requisite employer stating no exposure to lead since last test can be accepted.



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After ten days, a second blood test is taken to ensure that control measures are accurate. If an individuals blood lead results have indicated an increase, the work will be suspended and existing control measures checked and a further blood test taken within ten days. Where the project length is less than ten days in duration, individual blood tests are to be taken at the end of the job, to establish total lead exposure throughout the works.

Additional blood test throughout the works will depend on the length of the project and will be set by the Appointed Doctor based on each person's individual blood lead result.

Final blood tests are to be taken at the end of the job to establish total lead exposure throughout the job.

All records will be maintained and a copy issued to the individuals employer.

3.6 Blood Suspension Levels

Employees who are liable to be exposed to lead at work are subject to a suspension level. This is the blood-lead concentration at which the doctor decides whether to certify that the employee should no longer be exposed to lead. If the suspension level is reached by any employee a repeat test will be conducted **within ten days** of the initial test to confirm the result. If the second test result is equal to or greater than the suspension level the employee will be removed from any work with lead.

3.7 Air Monitoring

An initial air sample must be taken at the commencement of the work which will monitor the potential release of lead into the air. This will then determine whether the control measures put in place are adequate or need to be increased. Where existing control measures are inadequate, works will be suspended and control measures reviewed.

Consideration must also be given towards the build-up of vapour from paints, solvents, etc.

Continued air monitoring will continue whilst there is a potential of lead entering into the air.

3.8 Decontamination & Welfare

Once it has been established that persons are likely to be exposed to lead, suitable welfare and decontamination facilities must be provided. These include separate changing and washing facilities for those persons likely to be exposed and implement a strict regime of persons washing before all breaks (smokers need to be considered).

A strict no smoking on site policy will be enforced by line management. This requirement will be briefed as part of the initial site induction and monitored throughout the works. Offenders will be warned, and any second warning will result with the offender being removed from site.

Periodic checks will be undertaken within the welfare unit for the presence of lead, utilising lead check sticks.

3.9 Personal Protective Equipment (PPE)

In addition to the mandatory minimum PPE, task specific PPE must be provided to all persons who may be exposed to lead, these will include:

- Overalls, either cotton or disposable (Tyvek type 5). If cotton overalls are provided and used, a cleaning regime will be set up so persons are not taking contaminated overalls home
- Gloves suitable for task being undertaken, which will be included in the risk assessment
- Respiratory PPE will be as indicated below, or similar approved:
 - Full air fed mask for grit blast operatives
 - Arco Filtermax Silicone face mask (01333) (EN136) with P3 Filtermax high efficiency filters (01313) (EN143) for persons within enclosure but not directly involved in grit blasting operations
 - Arco ABEK2 Filtermax organic/ inorganic gas filters (01315) (EN143) for persons involved in burning operations either directly or indirectly.



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Fit test reports must be available for all employees who wear RPE incorporating tight fitting face pieces. The employer must retain fit test records and ensure these are available on site. In addition task specific PPE must be considered e.g. harnesses for scaffolders.

3.10 Training

Where required, contractors shall be registered with the ICATS Scheme and at least 80% of operatives employed to apply coatings to the metal substrate shall be trained and accredited to the scheme and where there are fewer than 5 operatives, they shall all be fully trained.

In addition, on Unitas sites, at least 50% of operatives must be trained and accredited to the scheme.



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