

Lead Exposure

Summary

University Facilities (UF)

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Approved by: Bob Wells, updated Todd Barnette

This document covers the Procedures and operations involving the use, maintenance, and disturbance of lead-containing materials on Clemson owned and occupied properties. The complete document can be viewed at

http://media.clemson.edu/research/safety/comp_ehs/Ch14%20Worker%20Exposure%20Lead%20Mgt%202011.pdf

Scope

This document applies to any work where Clemson personnel may be exposed to lead or lead containing materials. Occupationally, these exposures may include:

- Demolition or salvage of structures where lead-containing materials may be present.
- Removal or encapsulation of materials containing lead (e.g. lead paint abatement).
- New construction, alteration, repair or renovation of items containing lead.
- Installation of materials containing lead.
- Lead contamination or emergency cleanup.
- Maintenance operations involving the disturbance of lead or lead-containing materials.
- Firing range operations.

Unless working in a relatively new building (built since 1980), all paint should be treated as lead containing unless sampling shows otherwise.

Disturbance is defined as scraping, washing, limited wet sanding, grinding, welding, drilling, small surface cutting for installation of equipment, repainting activities, cleaning activities and minor surface modifications.

Regulatory Summary

The following actions will be taken in order to comply with the OSHA Lead Standards (29 CFR 1910.1025 and 1926.62) and DHEC/EPA regulations:

Contractors performing lead abatement must be licensed by the South Carolina Department of Health and Environmental Control (DHEC).

Prior to the performance of any demolition or renovation activities, materials must be assessed for the presence of lead.

Representative and periodic air monitoring will be conducted for all employees with airborne (fume, dust) lead exposure.

Employees with 8-hour time-weighted average (TWA) exposures over 30 ug/m³ (Action Limit) for thirty days per year will be enrolled in a lead medical surveillance program.

All employees with potential exposure to lead must receive training.

Employees with lead exposure in excess of the Permissible Exposure Limit (PEL) of 50 ug/m³ as an 8-hour TWA will be provided appropriate protective clothing and respiratory protection.

Engineering controls will be implemented, if feasible, to reduce lead exposures below the PEL.

A written compliance plan will be implemented if airborne concentrations of lead exceed 50 ug/m³ as an 8-hour TWA.

Surfaces will be maintained as free as possible from accumulation of lead dust.

Signs will be posted outside areas where employees' lead exposures exceed the PEL.

Certain work practices such as open flame burning, dry sanding and dry scraping of lead-containing substances are not permitted.

Specific containment procedures are stipulated to control emissions from interior and exterior lead abatement sites.

Surfaces in lead abatement sites must be cleaned.

Lead-containing wastes must be handled, transported and disposed per DOT and EPA/DHEC regulations.

Specific surface lead dust testing will be performed in residential properties following lead abatement to verify adequate cleanup.