



## Lead in Building Renovations

If you occupy a building built before 1978, there may be lead based paint on interior structures such as woodwork, sheetrock walls, block walls, doors, windows, or plaster walls. In addition, the exterior of the building may be painted with lead based paint. Proper planning of renovations will help prevent employee exposures and building contamination.

Determining whether lead paint is present is the first step in the planning process. A survey can be done by collecting representative paint samples and submitting them for analysis, or by conducting a survey of painted surfaces with an XRF analyzer and **SMART**ouch technology software from 1Source. An experienced Lead Surveyor and Risk Assessor should conduct the survey. Some states and local governments require the surveyors and contractors conducting lead abatement to be licensed.

If lead is present, the contractor must comply with the requirements of the OSHA Lead in Construction standard, 29 CFR 1926.62. In particular, the Contractor may need to provide medical monitoring, hand washing facilities, protective clothing, and respiratory protection. The degree of employee protection will depend on the actual or anticipated concentrations of lead in the air during the various operations. Personal air sampling will determine if employees are exposed at or above the Action Level of 30 micrograms lead per cubic meter of air ( $\text{ug}/\text{m}^3$ ), or the Permissible Exposure Limit of  $50 \text{ ug}/\text{m}^3$ . The OSHA standard lists several operations that would be expected to expose workers to concentrations exceeding  $50 \text{ ug}/\text{m}^3$  but less than  $500 \text{ ug}/\text{m}^3$ , or less than 10 times the PEL. These operations include:

- Manual demolition of sheetrock or block walls
- Dry manual scraping or sanding
- Using a heat gun to remove paint
- Power tool cleaning with HEPA dust collection

In addition, some operations such welding on painted steel may expose the worker to concentrations of lead exceeding  $2,500 \text{ ug}/\text{m}^3$ , or more than 50 times the PEL. Paint must be removed from steel before welding to prevent the generation of high concentrations of lead fume.

Lead dust remaining on surfaces may expose building occupants or the public. Lead dust and paint chips must be cleaned by HEPA vacuuming and wet wiping with tri-sodium phosphate (TSP). For more information on lead in paint and our **SMART**ouch technology, please contact Daniel Bruun, CIH 610.524.5525 ext 17, or [dbruun@1ssh.com](mailto:dbruun@1ssh.com).