

# LESSONS LEARNED:

CONSTRUCTION ENGINEERING IN THE BUILT ENVIRONMENT

## OBSERVATIONS AND LESSONS FROM THE SCHOOL OF EXPERIENCE

### EPA LEAD-BASED PAINT REGULATIONS RENOVATION, REPAIR AND PAINTING (RRP) RULE

Lead is highly toxic and can affect virtually every system of the human body. Children are especially susceptible and vulnerable to lead poisoning. The most common route of lead exposure is the ingestion of lead-based dust from the deterioration and chalking of lead-based paint. The renovation and demolition of buildings can disturb lead-based paint and be a source of lead dust.

Lead-based paint is generally defined as any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 milligram per square centimeter (mg/cm<sup>2</sup>) as measured by X-Ray Fluorescence (XRF), or 0.5 percent by weight. Local definitions may vary. For example, the State of Maryland has adopted a threshold value of 0.7 mg/cm<sup>2</sup>.

Effective April 22, 2010, contractors performing renovations, repairs, or painting in residences (single and multi-family) and "child-occupied facilities" as defined by the EPA (daycare centers, elementary schools, hospitals, etc.) built before 1978 that disturbs painted surfaces are subject to the RRP rule. Any activities which disturb 6 sf or more of interior painted surfaces in a room, or 20 sf of an exterior painted surface, or the replacement of windows regardless of size and number, are covered under the RRP rule.

Under the rule, in buildings built before 1978, contractors must assume paint disturbing activities involve lead-based paint, or test the paint to be disturbed using an EPA approved chemical spot-test kit or collect a paint chip sample (analyzed by an accredited lab) to determine if lead-based paint is present. Alternatively, a lead-based paint assessment can be performed by a state licensed and EPA accredited Lead-Based Paint Inspector using a hand-held XRF analyzer which provides instant results without physical damage to the painted surface.

During construction activities subject to the RRP rule, the contractor must contain the work area using polyethylene sheeting, use work practices which control the creation of dust, and thoroughly clean the work area once activities are complete. Other OSHA, local, or state health and safety regulations usually need to be followed in addition to the EPA requirements.

Contractors must apply to the EPA to be an approved Certified Renovation Firm before performing this work. This requires submitting documentation verifying at least one employee of the firm has received the necessary training from an EPA accredited training provider for Lead Safe Work Practices. Contractors must assign a Certified Renovator to each project subject to the RRP rule. The Certified Renovator is responsible for documenting that lead safe work practices are used throughout the project. Certifications expire 5 years from their date of issuance meaning many contractors who obtaining initial training and certification in 2009 and 2010 should start looking now for their first re-fresher training.

Contractors are also responsible for providing property owners and building occupants with the EPA pamphlet "*Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools*" prior to the start of any project subject to the RRP rule. Proof of the distribution of the pamphlet must be documented.

Contractors are required to evaluate the visual presence of lead dust at the completion of a project. Typically, a dust wipe is compared to an EPA reference card showing "clean" and dust-laden wipes. Evaluating the presence of lead dust visually is very subjective, and does not provide written documentation of the absence of lead dust. Alternatively, a Lead-Based Paint Inspector can collect lead dust wipes for laboratory analysis. Providing laboratory documentation and the findings of a visual assessment in a report prepared by a licensed Lead-Based Paint Inspector provides written documentation of compliance with the RRP rule.

Landlords, public and private school maintenance personnel, property managers, and public housing managers are also required to comply with the RRP rule and be certified by EPA if they perform paint disturbing maintenance within their residential and/or "child-occupied facilities". Under the RRP rule, these groups are treated the same as contractors. Property owners and managers should insist that all contractors bidding on work for their properties provide written documentation of their status as an EPA Certified Renovation Firm prior to starting any work which will be subject to the RRP rule. Oftentimes state and local regulating agencies have additional lead-based paint regulations that differ from, or go beyond the EPA requirements. Local and state regulations should be checked before performing activities that may disturb lead-based paint. Additional information on lead hazards and complete information on the RRP rule can be found at: <http://www.epa.gov/lead/>.

Finally, the RRP rule only applies to individuals or companies that are compensated for work that disturbs lead-based paint. The RRP rule does not apply to homeowners and uncompensated individuals performing work in their own residence; however, to protect family members from lead exposure, homeowners should consult the "Renovate Right" EPA pamphlet and the EPA website.

We hope that this brief discussion of the EPA's RRP rule has been informative. Should you have any questions regarding this topic, or need assistance with a project potentially involving lead-based paint, please contact your nearest ECS office.

Respectfully,

**ECS Corporate Services, LLC**

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