CONTROLLING LEAD PAINT HAZARDS IN BUILDINGS

Lead paint can be found in nearly every type of setting where AFSCME members work. When lead paint gets old or damaged, it can release small particles and dust. Workers and building occupants can get lead poisoning when they breathe or swallow the lead dust. Young children are at greatest risk of serious illness from lead. Exposure to lead paint in buildings can be prevented if the following steps are carefully followed:

FIND OUT WHICH SURFACES HAVE LEAD PAINT

You can’t tell if paint contains lead by looking at it. Painted surfaces should be tested to find out if they contain lead. It should be assumed that all painted surfaces contain lead unless a test or other reliable information exists that shows the paint is lead free. Lead was used in house paint until 1978.

EVALUATE THE HAZARD

The next step is to identify areas where lead paint is already a problem and where problems may develop. The assessment must consider all the reasons that paint is damaged, or may deteriorate. Some of the major causes of lead hazard include:

- moisture from leaky roofs or plumbing, and condensation in ventilation systems;
- friction that occurs when painted surfaces such as window sashes rub against each other; and
- building maintenance, especially if power tools are used.

The assessment must also consider who uses the building. Because children under the age of seven are most at risk, decisions about how to prevent exposure will be different in housing units and other places where young children may be present.

TAKE ACTION TO CONTROL EXPOSURE

There are two basic approaches for preventing exposure to lead. ABATEMENT means permanently eliminating lead-based paint hazards. INTERIM CONTROLS are a set of actions that reduce exposure until the lead paint is abated or the building is demolished. These measures include special cleaning, repair, and maintenance procedures.
ABATEMENT METHODS

Paint Removal Methods

- **Wet Scraping**: Lead paint should not be dry scraped. Wet scraping reduces dust levels.
- **Heat-Based Removal**: A heat gun forces hot air onto a surface which soften the paint.
- **Chemical Paint Removers**: Chemical paint stripper are useful to preserve the detail on old door, moldings and decorative trims. Their main advantage is that they do not create dust and will not damage woodwork. Off-site stripping is safer because the chemicals used are hazardous.
- **HEPA (High Efficiency Particulate Air) Power Tools**: Regular power sanders produce a great amount of dust and should not be used. The HEPA-vacuum has special filters that can trap the tiny dust particles.

Painted Removal Methods

- Torch of flame burning
- Dry scraping
- On-site use of any substance containing methylene chloride
- Use of solution with potassium hydroxide or sodium hydroxide (except in paste form and with special precautions)
- Open abrasive blasting on interior surfaces
- Machine sanding (except if the sander is equipped with a HEPA vacuum. Sanding should only be used for finishing surfaces and feathering)
- On-site use of flammable solvents

Replacement of Lead-Painted Surfaces

In some cases it is easier and cheaper to replace building parts than to strip them. Replacing windows is especially cost effective. Heating and cooling cost usually go down as a result of more energy-efficient windows.

**Encapsulation**

Encapsulation means covering or sealing lead painted surfaces. One method of encapsulation is to cover lead-painted surfaces with an airtight, solid barrier. This is also called an **enclosure**. Materials commonly used to enclose lead painted surfaces include: sheet rock, aluminum, vinyl, plywood, formica and tile.

Wall paper, contact paper and new paint are NOT encapsulants. Repainting a surface and with non-lead-based paint, without first removing or covering the lead based paint is not an acceptable method of lead abatement.
INTERIM CONTROLS

An operations and maintenance (O&M) program describes procedures to:

- Safely clean-up lead dust and debris and prevent future build up of dust.
- Repair and maintain painted surfaces in good condition.
- Control lead dust and chips during cleaning and maintenance work.
- Check the condition of lead painted surfaces regularly.

A complete O&M program should include all of the following steps:

1. **Assign a Lead Program Manager (LPM).**
   As a first step, the employer should assign someone to be the Lead Program Manager. The LPM is in charge of all activities relating to lead, including inspections, O&M activities, and abatement. The LPM must ensure that workers and occupants are notified where lead is located, the hazards of exposure, and what will be done to prevent exposure.

2. **Conduct a building inspection to identify sources of lead and assess hazards.** Assume paint contains lead unless a test or other information shows the paint is free of lead.

3. **Develop a written operations and maintenance plan.**
   This plan should explain how the O&M plan will work. It should describe duties and responsibilities of all staff who are involved with lead.

4. **Notify workers and occupants about lead.**
   The employer must ensure that workers and occupants are notified where lead is located, the hazards of exposure, and what will be done to prevent exposure.

5. **Establish a system of work permits.**
   A work permit system is meant to control all work that might involve lead paint. The system applies to both the building staff and outside contractors.

6. **Select special work practices.**

7. **Ensure the proper use respirators and other personal protective equipment (PPE).**
   Those who work around lead must use respirators and other protective gear. The employer must comply with all parts of a complete respiratory protection program. This includes a test to check the fit of the respirator. The workers will also need protective coveralls and shoes and head covers.

8. **Train O&M workers on protective equipment and proper work practices.**
9. **Establish a medical surveillance program that includes:**
   - A medical exam for workers who will be required to use respiratory protection;
   - Blood lead level (BLL) test prior to assignments that involve exposure to lead and regularly thereafter.

10. **Develop an air monitoring program.**
    Workers’ exposure to lead should be measured during tasks that disturb lead paint. Personal air sampling is done with a small sampling pump worn by the worker.

11. **Check the condition of lead paint surfaces.**
    The condition of lead painted surfaces should be checked regularly. In addition to periodic visits by an inspector, the custodial and maintenance staff should be trained to recognize changes in paint conditions that should be addressed.

12. **Keep complete and accurate records of activities that involve lead.**

    September 2011

For more information about protecting workers from workplace hazards, please contact the AFSCME Research & Collective Bargaining Department, Health and Safety Program at (202) 429-1215. You can also contact our office located at 1625 L Street, NW Washington, DC 20036.