

LEAD TESTING PROTOCOL for USA829 WORKERS

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We are often asked to work in older buildings, warehouses, and other venues where the paint on the walls and other materials may contain lead. The following is an outline of the steps to take to find out if you or your fellow workers are in danger.

1. Identify materials on the job site that are likely to be lead. These might include:

- * Old paint - any indoor or outdoor surface you estimate may have been painted before 1980. This includes the underlayers of paint on recently painted walls if they are being disturbed.
- * Old wall paper may not only contain lead, if it is really old it may contain arsenic pigments such as Paris Green.
- * New specialty paints. Artists paints and inks, sign paints, metal priming paints, auto and boat paints, and a number of special paints are exempt from lead paint laws today and may contain lead.
- * Dusts in the workplace. If activities involving lead have occurred in the past, high levels of lead in the dust in the building can put all workers at risk. Buildings in which there have been previous lead paint removal projects, old target shooting facilities, old factory buildings, and similar venues we have used as film locations have been found to contain hazardous levels of lead dust.
- * Solder, plumbing pipes and accessories. Old solder and old pipes, old water cooler coils, faucets and fixtures, are commonly lead. Lead solders are still used for crafts.
- * Plastics. Vinyl and other plastics may contain lead fillers/stabilizers, pigments, and biocides. Mini blinds of vinyl plastic made before 1997 have all been recalled because lead leaches to the surface in hazardous amounts. Toys, vinyl purses, decals, and many other plastic items for children have been recalled on occasion but it is likely that many similar lead-containing products go undetected. Electrical and telephone wire insulation of certain colors (usually white, blue, yellow, and green) contains enough lead pigment that even adults have been affected by pulling the insulation off with their teeth on the job.

2. Determine if our workers are exposed. Exposure should be considered likely:

- * if paint is scraped, torched, heat gunned, sanded, or disturbed in ways to create dust or fume;
- * if new lead-containing paints or inks are sprayed, airbrushed, roller painted, sanded or used in ways that dust, fume, or spatters get airborne;
- * if painted materials anywhere in the worksite are being welded, burned, sawed, or disturbed;
- * if plastic materials are being torched for aging, burned for disposal, or cut or sanded; or
- * if workers are soldering, removing or altering old plumbing pipes or fixtures, or using any other lead-containing metal alloy.

3. Use a field test kit to determine if high lead levels are present. Most large hardware stores have lead test kits which can be used for a fast check. They are not as accurate as lab tests so negative results do not always mean there is no problem. However, high positive results may provide enough evidence with which to approach cooperative employers.

4. Take a bulk sample (paint chips, a little piece of the substance, or sweep up some of the dust). It is best to call your safety officer or another industrial hygienist to take this sample to avoid legal problems later. If this is not possible, have a business rep, charge, or shop steward take the sample and be sure there is someone else present who will witness as to where it was taken from and what mark was put on the envelop. If possible, take a picture of the area from which the sample was taken.

5. Get a wipe sample in dusty workplaces. If this is needed, an industrial hygienist must take the sample. There is a protocol involving marking off an exactly one square foot area, using distilled water to wet low ash filter paper, swiping the area in a particular way and having a lab analyze the paper.

6. Get the samples to a reliable laboratory. Take a direct route to the laboratory from the site. Do not let the samples out of your control for even a minute. You will be asked to fill out a "chain of custody" document on arriving at the lab to attest that it never left your control. Leaving the samples in your car over night, handing them to a colleague for a while, or any similar scenario will break the legal chain of custody for those samples.

There are many labs, but one good source for those working in the New York area is: ATC labs, 104 E. 25th Street, 10th Floor Contact Monona or Beverly Miller for advice first.

MEANING OF BULK SAMPLE TESTS: Any wet paint containing $\geq 0.06\%$ and any dried paint sample $\geq 1\%$ or more is of concern. Even lower amounts are hazardous if sanding or torching are done.

MEANING OF WIPE SAMPLE TESTS: The level that EPA and HUD enforce for federal housing is 40 micrograms/square foot ($\mu\text{g}/\text{ft}^2$) of floor space and 250 $\mu\text{g}/\text{ft}^2$ for window sills. While workplaces are not homes, these levels are of concern.

7. Determine if Air Sampling is needed. If tests above confirm the materials contain lead and it is getting airborne, the employer is required to do air monitoring of each potentially exposed employee. A "competent person" must place a filter holder on a person's lapel and attach it to a calibrated pump on their belt. The sample is taken over a period of hours and the filter is lab-analyzed.

MEANING OF THE AIR SAMPLE RESULTS: The OSHA permissible exposure limit is 0.05 milligrams per cubic meter (mg/m³) (time weighted average). Amounts at 0.03 mg/m³ trigger the OSHA standard requirements.

On the basis of these tests, OSHA assigns various levels of precautions. These precautions can be very expensive and include blood lead testing, showers and changing rooms on site, barriers and special temporary HEPA filtered ventilation systems, and more.

It is far too expensive and time-consuming for employers to properly train and equip our workers for the job and they should hire trained/certified lead-abatement contractors and workers.

Local USA829 workers must refuse to remove lead paint or alter any other lead surface treatments when asked to do so by employers. It is a violation of OSHA regulations to disturb or remove lead surface coatings without special training and certification.

OSHA Laws Applicable to Lead

Both OSHA and EPA have jurisdiction in workplace lead exposure and disposal. There also are many state and local laws affecting lead abatement and requirements for certification of lead abatement workers. It is useful to inquire about the state regulations once it has been determined that there is a lead problem in the workplace. However, it makes more immediate sense to look at the two federal OSHA laws (or their state equivalents) that apply across the board.

* Lead in construction (1926.62)

If any old paint is to be removed or disturbed in the process of construction of sets, renovation, or redecorating, it comes under this Construction Standard. The paint must be analyzed for its lead content. If it is lead, workers must be specially trained lead paint abatement workers or else the employer must specially train our workers to do this work and provide expensive precautions.

* General Industry Lead Standard (1910.1025)

This rule applies only to regular use of lead materials in a permanent shop. Included might be painting with any lead containing paints or surface coatings, lead soldering, or being in the same shop where people are welding lead painted metal. The law says that if workers are regularly exposed to lead materials that can become airborne, air monitoring must be done. If these tests show airborne lead above the action level (0.03 mg/m³), then other provisions are required.