

# PAPM Guidelines for the Evaluation and Control of Lead-based Paint Hazards

The following guidelines have been prepared by the Philippine Association of Paint Manufacturers (PAPM) for the safe removal of old paints that might have lead compounds.

Lead is commonly used in paints as:

- A catalyst to accelerate the film formation of alkyd (enamel) paints. In other words, it helps the paint dry faster.
- Pigments for products that require high UV and heat resistance like coil coatings and certain appliances.

However, lead has been found to be dangerous to health, causing problems in the nervous system and serious brain development problems in children, affecting both the child's IQ and behavior.

The PAPM, together with the EcoWaste Coalition, has been working to remove lead in Philippine paints. By 2016, the DENR is expected to come up with an order setting the limits for lead content of Philippine paints at 90ppm, well below dangerous levels.

To address the lead that is present in current old paints, the PAPM and the EcoWaste Coalition are issuing the following guidelines in order to protect the workers that will be removing old, lead-containing paints, the residents, and their neighbors. If not properly handled, the lead dust that is created during the scrubbing of old paints can be very dangerous to those exposed.

## Things to Consider:

- Appropriate evaluation and control response for lead hazards
- Safety of the workers and residents
  - Workers should wear proper protection. They should be equipped with complete overalls, hair covers, and respirators to protect them from the lead dust.
  - Residents and tenants should stay away from the work area.
- Control of the whole process so that no new lead hazards are created
- Placing of warning signs



## Risk Assessment and Re-evaluation:

- Take note of the residents that may be affected during the lead removal (e.g. Children playing outside the house, random passersby)
- Survey the condition of the house
- Conduct paint testing (Be very careful in handling the sample. Properly dispose of dust and other paint materials that might fall during the sampling)
- Send the samples to a PAPM-recognized laboratory

## Abatement Methods:

- Building Component Replacement
- Enclosure Method
- Paint Removal Method
- Soil Abatement
- Encapsulation

### 1. Building Component Replacement

- Dampen the part to be replaced and its surrounding area
- Carve all affected paint seams with a utility knife to minimize paint chipping and dust formation
- Wrap lead-contaminated building components in a durable, puncture-resistant plastic and seal it with tape

### 2. Enclosure Method

- Enclose the area with waterproof and airtight plastic, making sure to cover enough area to collect all paint chips and debris
- Avoid working in windy conditions to minimize the scattering of lead dust
- Transfer all movable items to at least 20 feet away from the working area. Immovable items must be sealed with protective sheeting
- Install the selected enclosure material (fiberboard, wood paneling, laminated products, rigid tile, etc.) directly to the painted surface using an adhesive then fasten it with nails or screws

### 3. Paint Removal Method

- Mechanical Removal– Use mechanical or machine sanding with HEPA equipped tools
- Wet Scraping– Use a spray bottle or wet sponge to keep the surface wet while scraping
- Chemical Removal– First test the chemical paint remover on a small area to determine its effectiveness. Make sure to use gloves, face shields, respirators with combination filter cartridges, and chemical-resistant clothing.

Portable eyewash stations capable of providing a 15-minute flow must be on-site. Apply the chemical using a spatula, trowel, or brush and wait the required period of time. Remove the softened paint using a scraper or a putty knife and place the material in a watertight and corrosion proof container.

### 4. Soil Abatement

- Identify if there is soil-lead hazard (1,200 ug/g of lead for a 9 square feet area and 400 ug/g for small, high-contact play areas)
- Determine the proper soil abatement method
- Soil removal and replacement
- Soil cleaning
- Paving of soil with concrete or asphalt

### 5. Encapsulation Method

- Prepare surface to be treated by cleaning, de-glossing, removing loose paint, or preparing the exposed bare substrates
- Apply and ensure adhesion of the encapsulants applied on the surface

## Daily Clean-up

- Wrap dust and debris and store it in a secure area
- Mop floors that were used as pathways by workers
- Clean-up any paint debris and remove protective sheets
- Repair any damaged protective sheets that are in use
- Put used protective sheets in a secure area

## Final Clean-up

- Place working clothes, shoes, and tools in sealed bag. Wash and clean them separately
- Place used mop heads and rags in tightly sealed, heavy-duty plastic bags and dispose properly
- Clean any protective sheet before removing them to reduce airborne dust and debris
- Place removed plastic sheets into properly sealed, heavy-duty plastic bags and label appropriately as "hazardous"
- Mop the entire containment area including passageways used by workers and storage areas

## Proper Waste Disposal

Dispose any lead-based paint waste at any DENR-EMB accredited treatment/storage/disposal (TSD) facilities for hazardous wastes ([www.emb.gov.ph](http://www.emb.gov.ph))

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