

Yerhot Environmental Solutions, LLC Presents:

New EPA RRP Regulations: How will it affect regulating renovations?

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Course Overview

- Why Should I Be Concerned About Lead Paint?
 - History of Lead Poisoning
- Regulations
 - EPA's requirements for work in homes built before 1978
- How RRP Regulations will affect insurance claims
 - Disturbance of more than 6' will increase the scope of work and price.

WHY CARE?

- Lead poisoning is a major problem for homeowners.
- Contractors want fair payment for their services and major suppliers are forced to be compliant.
- RRP compliance is straightforward. Contractors face the potential for big fines for noncompliance.
- Insurance companies want to keep their claims costs as low as possible and will affect insurance coverage on older homes

- Re-sale of a home which had renovations performed without compliance can cause significant problems for the homeowners.
- It is a Federal Law governed by both the federal government and in some states local government.

Why Should we be Concerned about Lead Paint?

Overview

- What is lead-based paint?
- What health risks and health effects are related to lead exposure?
- Why is lead-contaminated dust a problem

What Is Lead-Based Paint?

- Federal standards define lead-based paint as:
 - Any paint or surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or more than 0.5 percent by weight.
 - Some states and localities regulate paint with lower concentrations of lead.
 - It is the primary source of lead-contaminated dust in housing.
- Why was lead used in paint?
 - Lead was added for color and durability.
- Lead-based paint was banned in 1978.

Health Risks of Lead

- Very hazardous to children.
 - Damages the brain and central nervous system; can cause decreased intelligence, reading and learning difficulties, behavioral problems, and hyperactivity.
 - Damage can be irreversible, affecting children throughout their lives.
- Hazardous to pregnant women.
 - Damage to the fetus.
- Also hazardous to workers and other adults.
 - High blood pressure.
 - Loss of sex drive and/or capability.
 - Physical fatigue.
- Lead exposure causes permanent damage.

Why are Dust and Debris a Problem?

- Renovation activities that disturb lead-based paint create dust and debris. Debris becomes dust.
- Lead-contaminated dust is poisonous.
- Very small amounts of lead-contaminated dust can poison children and adults.
 - Children swallow dust during ordinary play activities.
 - Adults swallow or breathe dust during work activities.
- Workers can bring lead-contaminated dust home and poison their families.

A Little Dust Goes a Long Way

- You can't see it.
- It's hard to sweep up.
- And, it travels.

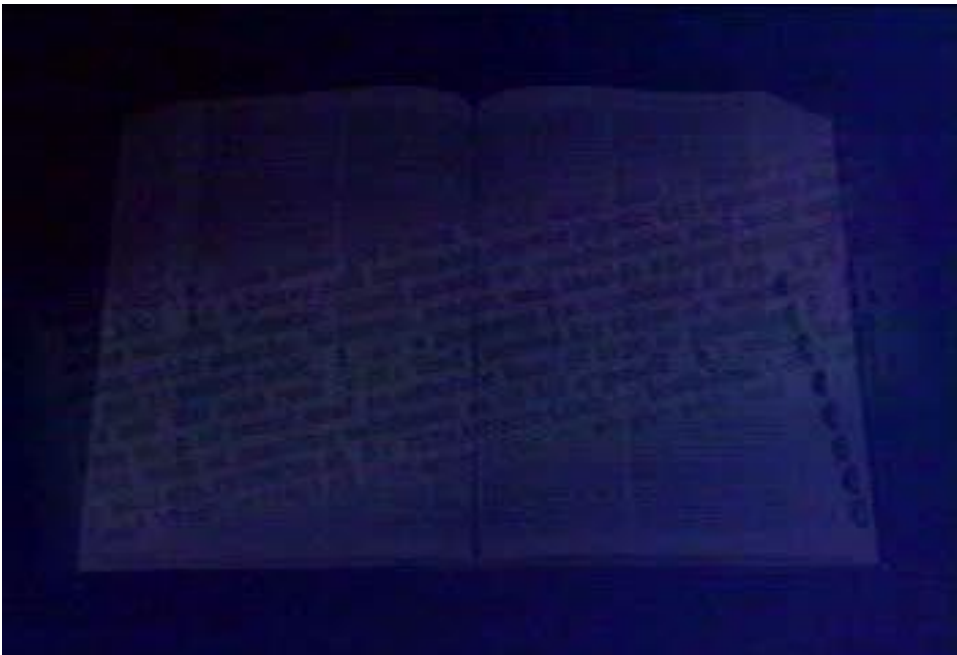


**One gram of lead-based paint
can contaminate a large area!**





**Video Clip of a Contractor Who
Poisoned His Own Kids**



**Video Clip of Parent of a Child Poisoned by
Renovation**

Will this be like the mold hype?



- Property occupant harm is more easily proven by comparisons of surface samples to federal regulations and occupant blood tests that can be matched with medical consensus limits.
- Together, these facts enhance the liability risk on both the insurance company and the restoration company. This should dictate quick acceptance of the lead control costs by the insurance industry.

Now You Know...

- What lead-based paint is and the adverse health effects of lead.
- Dust is the problem.
- Lead poisoning is hard to spot and the effects can be permanent.
- Kids are most at risk for lead poisoning.
- Lead poisoning is preventable.

Regulations

- **U.S. Environmental Protection Agency (EPA):**
 - Established accredited training and certification programs for workers, supervisors, inspectors and risk assessors conducting evaluation or abatement of lead-based paint.
 - Established requirements for pre-renovation education.
 - Promulgated the Renovation, Repair, and Painting Program Final Rule (RRP Rule).
- **U.S. Department of Housing and Urban Development (HUD):**
 - Established actions in Federally-assisted target housing.
 - Established Federal grant programs.
 - Established guidelines for lead-based paint evaluation and control; established the Lead Safe Housing Rule.
- **U.S. Occupational Safety and Health Administration (OSHA):**
 - Established worker protection standards.

The RRP Rule

- Addresses activities that disturb lead-based paint in target housing and child-occupied facilities. It requires:
 - Renovators to be certified through training.
 - Firms to be certified.
 - Training providers to be accredited.
 - Lead-safe work practices during renovations.
 - Pre-renovation education in target housing and child-occupied facilities.
- On or after April 22, 2010, firms working in pre-1978 homes and child-occupied facilities must be certified and use lead-safe work practices during renovations.
- EPA may authorize states, territories and tribes to enforce the Rule.

How will all this affect remodeling and insurance claims?

- Increase in scope = increase costs
- Potential Liability
- Most stringent laws must be followed: Contractors and Building code enforcers need to be aware of this constantly changing law

Building code enforcers need to be sure contractors are compliant

- There will be job related costs specific to the kind of work performed. Examples could include additional labor, tape, plastic sheeting, cleaning solutions, sprayers, staples, disposable wipes, HEPA filters, trash bags, tack pads etc.
- We need to make sure that the contractors are actually protecting themselves and the homeowner.
- If a contractor is not charging to be compliant, how can we be sure they are? Who has the liability?

Non-compliance can cause huge liability

- Civil Suits for violating the EPA RRP will be filed under the Consumer Protection Act.
- Poisoning can be proven by a blood test.
- If adjusters don't allow contractors the funds to be compliant on every claim, they could have liability.



Where is the Liability?

- Lead blood levels found to be high in a child after a water or fire mitigation claim could lead to litigation.
- Referring a non-compliant company can put other in liability.
- Homeowners should make sure that the companies that mitigate their claims have the proper pollution insurance.

No Pollution Coverage on a GL policy

- There is usually no coverage on a General Liability Policy. Small contractors, painters, electricians, plumbers and restoration companies most likely have lack of coverage for lead damages.

The RRP Rule: Work Practice Standards

The Renovation, Repair, and Painting Final Rule covers setup of the work area, prohibited work practices, cleanup and the cleaning verification procedure.

- Homeowner notification, renovate right brochure.
- Setup practices, such as posting signs and containing the work area.
- Prohibited practices and dust reduction suggestions
- Cleanup practices and cleaning verification procedures.
- Recordkeeping

The RRP Rule: Enforcement

- EPA may suspend, revoke, or modify a firm's certification if the Certified Firm or Certified Renovator is found to be in non-compliance.
- Those firms found to be non-compliant may be liable for civil penalties of up to \$37,500 for each violation.
- Those firms who knowingly or willfully violate this regulation may be subject to fines of up to an additional \$37,500 per violation, or imprisonment, or both.

The RRP Rule: Exclusions

- **Renovation activities where affected components do not contain lead-based paint.**
- **Emergency renovations (requires cleanup and cleaning verification).**
- **Minor repair and maintenance activities.**
Note: This exclusion does not apply to window replacement, demolition or activities involving prohibited practices.
- **Renovations performed by homeowners in their own homes.**

State and Local Regulations

- States and localities may have different regulations than EPA and HUD for renovations in target housing.
- Check with your state and local housing and environmental agencies to obtain information about such requirements.

HUD Rules are more stringent than the EPA Rules

- One example of the HUD rule being more stringent is:
 - The EPA excludes any area where less than 6 square feet is being disturbed
 - HUD excludes any area where less than 2 square feet is being disturbed.

Now You Know...

- That the EPA Renovation, Repair, and Painting Program Final Rule (RRP Rule) applies to renovation in housing and child-occupied facilities built before 1978 that contain lead-based paint.
- To determine whether your renovation job is regulated by EPA, HUD, both, or neither.

Before Beginning Work

Overview

- Requirements to educate owners and residents.
- That the use of lead-based paint was widespread.
- To determine if lead-based paint is present.
 - About EPA-recognized test kits to check for lead-based paint.
 - How to decide which rule(s) apply.

Educate Owners and Residents

The Pre-Renovation Education Rule:

- Requires Renovation Firms to provide the *Renovate Right* pamphlet to owners/residents prior to renovation activities in pre-1978 housing and child-occupied facilities.
- We need to be sure that contractors are informing homeowners of the risks. They may not want to invest in being compliant if they are not paid for their efforts. We have to think of our liability in our claims.

How Widespread is Lead-Based Paint in Housing?

Year House Was Built	Percent of Houses with Lead Based Paint
Before 1940	86 percent
1940-1959	66 percent
1960-1978	25 percent
All Housing	35 percent

EPA Recognized Lead Testing Kit



Lead thresholds for exposure

- Window sills HUD 250 ug/ft² EPA 125 ug/ft²
- Floors HUD 50 ug/ft² EPA 25 ug/ft²
- Chipping Paint - 0.5% or 5,000 ppm
- HUD/EPA Blood Lead Threshold 10 ug/dl
- HUD/EPA Definition of Lead-Poisoned Child (consecutive blood results) 15 ug/dl
- HUD/EPA Guidance for High-Contact Play Areas 400 ppm or ug/g
- HUD/EPA Guidance for Bare Areas of the Yard 2,000 ppm or ug/g

Using Decision Logic Charts

- You can practice use of the decision logic charts found in the *Small Entity Compliance Guide to Renovate Right*.
- The decision logic charts will assist you in making decisions regarding how the EPA RRP Rule applies to your claim.
- Determine if the property is Federally-assisted and if it is, then determine what to do next.

Now You Know...

To properly plan a renovation, you must:

- Educate owners and residents.
- Who can and how to test for lead based paints.
- Thresholds for exposure
- Determine what requirements from the EPA and HUD Rules apply to your renovation activities.

Contain Dust During Work

Overview

- What is containment?
- Containing dust for interior activities.
- Containing dust for exterior activities.

What Is Containment?

- “Containment” is a system of temporary barriers used to isolate a work area so that no dust or debris escapes while the renovation is being performed.
- Benefits of containment.
 - **Protects residents and workers.**
 - **Prevents spread of dust to rest of house/building or neighboring properties.**
 - **Easier cleaning at the end of the job.**
 - **Containment is required.**

What is containment: Interior

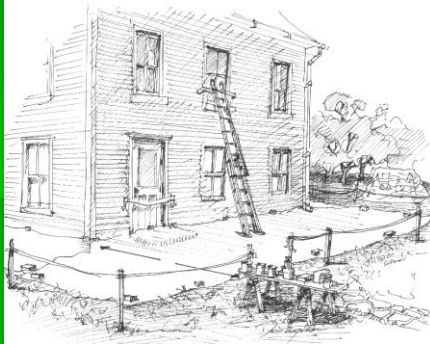
- Poly and tape
- HVAC – Supplies and returns
- Windows
- Floors 6' way from affected surface and all carpeted areas in area of containment
- It is not required to use negative pressure but it is required that restoration companies document due diligence to reduce the amount of dust that they create and to contain it.

Interior Containment: Limit Access and Post Signs



- Notify residents to stay away from the work area.
- Do not allow residents or pets near the work area.
- Do not allow eating, drinking, or smoking in the work area.
- Post warning signs.

Exterior Containment: Establish the Work Area



- Cover the ground with protective sheeting.
 - If space permits, extend a minimum of 10 feet from the work area.
 - Pay special attention and cover nearby vegetable gardens and children's play areas.
- Limit access, place signs.
 - Establish a 20 foot perimeter around the work area if space permits.

Exterior Containment: Extra Precautions

- Extra precautions taken to prevent the spread of dust.
- Extending work area.
- Vertical containment.
- Avoid working in windy conditions, where possible.



Now You Know...

- How to setup for a job
 - Interior containment
 - Exterior containment

During the Work...

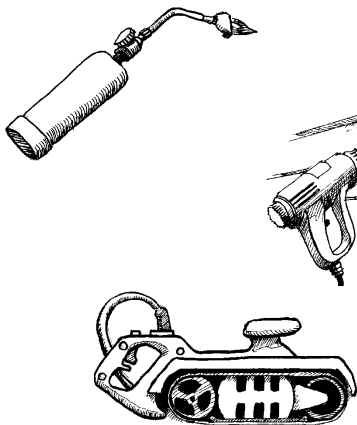
Overview:

- Traditional renovations create airborne dust.
- Prohibited practices.
- Protect yourself and make a personal protective equipment toolkit.
- Control the spread of dust.
- Increase in Scope

Traditional renovations... think about the amount of dust created

- Carpet removal
 - Extensive microbial, dust and lead contamination
- Drywall/Plaster removal
 - Lead paint could be layers deep
- Window removal
 - Trim could be contaminated
- Exterior clapboard removal

Prohibited Practices



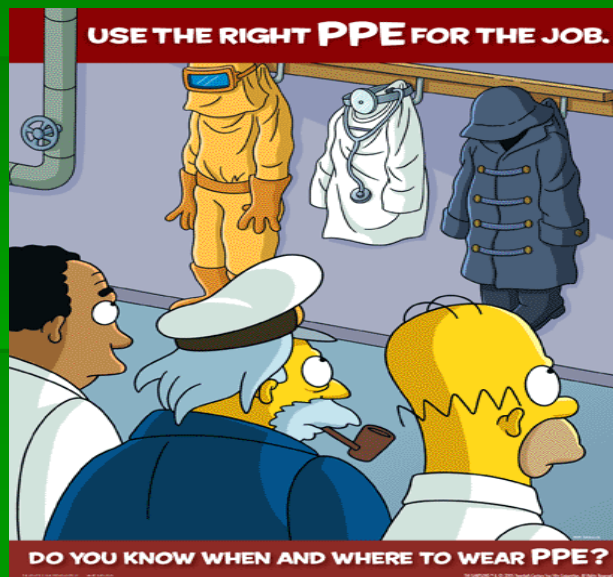
- Open-flame burning or torching.
- Heat gun above 1100° F.
- Power sanding, power grinding, power planing, needle guns, abrasive blasting and sandblasting, without HEPA vacuum attachment.

Protect Yourself

- Workers should wear:
 - Disposable painter's hat.
 - Disposable coveralls.
 - Repair tears with duct tape.
 - Dispose of in plastic bag.
 - Disposable N-100, R-100 or P-100 respirator.
- Wash face and hands frequently and at the end of each shift.
 - Washing helps to reduce hand-to-mouth ingestion of leaded dust.
- OSHA may require more protection depending on what work is done.



Lead remediation PPE



Control the Spread of Dust

- **When you leave the work site, clean yourself and your tools.**
 - Remove shoe coverings and HEPA vacuum or wipe shoes.
 - Walk on disposable tack pads to remove dust from your soles.
 - HEPA vacuum and remove coveralls, and HEPA vacuum your clothes.
 - Remove gloves if used, and carefully wash your hands and face.
 - Dispose of all used disposable clothing in plastic bags.
 - HEPA vacuum clothes, shoes, etc.
 - Change your clothes, and dispose of or place dusty work cloths in a plastic bag to wash separately from household laundry.

Don't hug your family until you get clean!

- Wash your hands and face.
- Shower as soon as you get home.

Now You Know...

- What work practices produce dust.
- What work practices are prohibited by EPA and HUD.
- How to work safely around lead-based paint and leaded dust.
- Proper personal protective equipment.

Cleaning Activities and Checking Your Work

Overview

- What is effective cleanup?
- Interior cleaning techniques.
- Exterior cleaning techniques.
- How to check your work.
- Cleaning verification procedure.
- Clearance testing.
- Safe disposal practices.

What is Effective Cleanup?

- Keeping dust from getting back into areas already cleaned.
- Cleaning all surfaces, tools and clothing.
- Checking your work.
 - **Usually will involve performing cleaning verification (CV)**
 - **Could include a clearance examination.**
- Safe and secure disposal of waste.

Interior Cleaning Requirements



- Collect all paint chips and debris, and seal in heavy duty plastic bags.
- Mist, remove, fold (dirty side in) and tape or seal protective sheeting. Dispose of sheeting as waste.
- Plastic sheeting between non-contaminated rooms and work areas must remain in place until after cleaning and removal of other sheeting.
- HEPA vacuum or wet wipe walls from high to low, then HEPA vacuum remaining surfaces and wipe with a damp cloth.
- Clean 2 feet beyond the contained work area.
- Use disposable wipes or change cloths frequently.
- For carpet or rug, use HEPA vacuum with beater bar.
- HEPA vacuum and wet mop uncarpeted floors - two-bucket mopping method or wet mopping system.

Cleaning Verification (CV) Procedure

- Wipe each window sill within the work area. Use a single wet disposable cleaning cloth per window sill.
- Wipe uncarpeted floors and all countertops with wet disposable cleaning cloths. Wipe up to a maximum of 40 ft² per cloth.
- Compare each wipe to the CV card. If the cloth matches or is lighter than the CV card, the surface has passed cleaning verification and no further action is required.
- If the cloth is darker than the CV card, re-clean and repeat the CV process.
- If the second wet cloth fails, wait 1 hour or until surfaces are dry, and then wipe with an electrostatically-charged white disposable cleaning cloth designed to be used for cleaning hard surfaces. **This completes the cleaning verification.**

Disposal

- **At the work site:**
 - Place waste in heavy duty plastic bag.
 - “Gooseneck seal” the bag with duct tape.
 - Dispose of waste in accordance with Federal and other regulations.
 - HEPA vacuum the exterior of the waste bag before removing it from the work area.
 - Store waste in a secure area.



Disposal – Federal, State and Local Information

- **According to Federal law:**
 - In housing: Waste must be disposed of as normal household waste.
 - In non-residential child-occupied facilities: If waste exceeds 220 lbs, treat all debris as hazardous.
- **Always check local requirements!**

Now You Know...

- How to clean the work area systematically.
- How to check the effectiveness of cleaning.
- How to perform the cleaning verification procedure.
- How to properly dispose of waste.

Recordkeeping

Overview:

- In this section, you will learn about records required for each job.
- Record keeping is crucial to reducing your liability
- Records must be retained and made available to EPA, upon request, for 3 years following completion of renovation.

On-The-Job Records

- Copies of Certified Firm and Certified Renovator certifications (must be kept on site).
- Lead-based paint testing results when an EPA-recognized test kit is used.
- Proof of owner/occupant pre-renovation education. Renovate Right
- Non-certified worker training documentation (must be kept on site).

Sample Confirmation of Receipt of *Renovate Right*

I have received a copy of the pamphlet, *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools*.

Recipient Signature: _____ Printed Name: _____
Date: __/__/__

Self-Certification Option (for tenant-occupied dwellings only)
- If the lead pamphlet was delivered but a tenant signature was not obtainable, you may check the appropriate box below.

- Refusal to sign.
- Unavailable for signature.

Gather the following information:

- Printed name and signature of person certifying lead pamphlet delivery.
- Date and time of lead pamphlet delivery.
- Unit address.

Recordkeeping: Test Kit Reporting

If an EPA-recognized test kit is used to test surfaces in the work area, the firm must:

- **Submit a report to the person contracting for the work within 30 days after the end of the renovation, containing:**
 - **Manufacturer and model of the EPA-recognized test kit.**
 - **A description of the components tested.**
 - **The location of components tested.**
 - **Results of the testing.**
- **Retain a copy of the test kit documentation form.**

Now You Know...

- To have records available at the work site of:
 - **Training of Certified Renovators and non-certified renovation workers.**
 - **Certifications for the Certified Firm and Certified Renovators.**
- To retain all records for at least 3 years after completion of the renovation.
- To keep records of:
 - **Training and certifications for all renovation personnel, and for certification of the firm.**
 - **Distribution of required information.**
 - **Communications with and certifications from owners and residents.**
 - **Work activities in compliance to the Rule.**
 - **Post-renovation reports.**

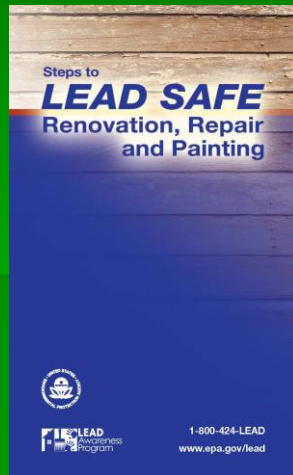
Training Non-Certified Renovation Workers

Certified Renovators are responsible for teaching lead-safe work practices to non-certified renovation workers.

Teaching Lead Safe Work Practices Means:

- Training workers to properly use signs, dust barriers, dust minimizing work practices, and dust cleanup practices during the course of renovation, repair, and painting activities to prevent and/or reduce potentially dangerous dust-lead contamination in the home.
- To effectively train workers you need to:
 - Know lead safety yourself.
 - Show students what you know.
 - Review the shopping list in *Steps to LEAD SAFE Renovation, Repair, and Painting* and have appropriate materials at hand.

Use the “Steps” Guide



- *Steps to LEAD SAFE Renovation, Repair and Painting* covers basic lead safe practices and can be used as a training guide outside of the classroom in conjunction with on-the-job demonstrations and hands-on training.
- It is strongly recommended that you use this guide as a basis for training.

Example of a job...

- **Water damage/remodel**
 - House was built in 1972
 - Three children and a pregnant woman in the home.
 - Forced hot air system
 - Old carpeting
 - Test kits showed positive for lead

Line Item Examples of a Water Damage Estimate

With RRP Rule Requirements

- On-Site training
- HEPA Vacuum and wipe entire area: Ceiling, Walls and Floors
- Containment: Doors, windows, HVAC
- Poly off contents and areas around the floor
- Full PPE
- CV
- Documentation
- Lead Testing

Big Changes

- This water damage estimate was increased from : \$6507.69 to : \$12,450.39
 - This shows an increase of over 49% to the job.

Increase in Scope

- As you can see with these numbers, we need to re-evaluate how we are going to price any claims that happen in the target housing.
- This new rule will increase the scope quite significantly and we all need to be sure that we limit our liability by complying with the rule.

**Lead Free
Is The Way
To Be!**

