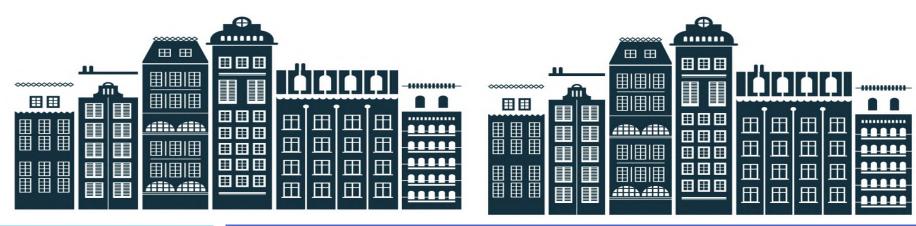
U.S. Department of Housing and Urban Development (HUD)
Office of Lead Hazard Control and Healthy Homes (OLHCHH)

#### 2019 Program Manager School

# LEAD HAZARD CONTROL 201 Jonnette Simmons and Eileen Carroll







#### Scope of Work

- Scope of work must correlate with the LIRA and recommended remediation options.
- Whatever is placed in the scope of work is what the contractor will be held responsible for – must be thorough.
- Be specific document number of components (i.e. 5 doors), measurement (i.e. sq. ft.), location (i.e. bedroom) and treatment (i.e. paint stabilization/replacement), etc.
- Scope of Work should include the "How" work is to be completed.

#### Abatement vs. Interim Controls

Abatement – any set of measures designed to "permanently" eliminate lead-based paint or lead-based paint hazards:

- Paint Removal
- ✓ Enclosure
- Encapsulation
- Replacement
- Removal or "permanent" covering of soil-lead hazards.
- Abatement is performed in compliance with methods and standards under a program authorized by the EPA 40 CFR 745.227 (e)

Interim Control – measures designed to reduce "temporarily" human exposure or likely exposure to LBP hazards.

- Paint Stabilization
- Friction and Impact Surface Treatment
- Dust Control
- Soil Interim Controls



## Terminology

Deterioration – Paint is disturbed and causing dust:

Surface Deterioration – chalking, mildew

Bulk Deterioration – checking, cracking, alligatoring

Layered Deterioration – blistering, scaling,









Friction Surface – any surface that rubs against another (ex. Windows).

Impact Surface – surface that has forceful contact over and over again.

**Chewable Surface** – an interior or exterior surface painted with LBP that a young child can mouth or chew. A chewable surface may also be called an "accessible surface"

What is "Permanent"?

Answer: Expected design life of at least 20 years.

What is "Temporary"?

Answer: Expected design life of less than 20 years.

When choosing treatments, consider the probability of its endurance.

### Abatement Treatment Strategy

- Component Replacement: Pros Permanent solution; can improve building through upgrades; can lower heating bills and maintenance costs: Cons May involve demolition work; PPE may be necessary.
- Enclosure: Pros Uses locally available materials; durable and long-lasting; low generation of waste and dust: Cons LBP is still there LBP may be disturbed during routine work on enclosure Enclosed surfaces must be monitored for damage.

#### Abatement Treatment Strategy, cont'd

- ✓ Encapsulation: Pros Little dust is generated -lower cost than other abatement options -many choices are available: Cons LBP is still there LBP may be disturbed during routine work on enclosure NOT useful for impact for friction surfaces may create hazardous waste.
- ✓ Paint Removal: Pros LBP is gone maybe? Useful for historic preservation projects or detailed components: Cons Tedious and time-consuming dust is generated strippers create hazardous waste Surface must be properly prepared or new surface will fail.

### Interim Control Treatment Strategy

- Reason for deterioration must be corrected dry-rot, rust, moisture-related defects, crumbling plaster.
- Surface must be properly prepared/repaired. —
- Remove damaged paint (remember prohibited activities).
- Remove damaged components
- Allow sufficient time to dry.

- ✓ FRICTION AND IMPACT SURFACES TREATMENT
- For friction surfaces Eliminate friction points or treat the friction surface so that paint is not subject to abrasion.
- Rehanging/planning doors so that the doors do not rub against the door frame.
- Installing window channel guides that reduce or eliminate abrasion of painted surfaces.
- Paint on stair treads shall be protected with a durable cover or coating (ex. carpeting, tile, and sheet flooring).
- For impact surfaces Protect the paint from impact.
- Installation of treatments that eliminate impact with the painted surface (ex. Door stop to prevent a door from striking a wall or baseboard).

- ✓ CHEWABLE SURFACE TREATEMENT
- According to LSHR chewable surfaces are required to be treated if:
- There is evidence of teeth marks indicating a child of less than 6 years of age has chewed on the painted surface, and
- ✓ LBP is know to be present on the surface.
- ✓ Interim control for chewable surface treatment to make the LBP inaccessible for chewing by children less than 6 years of age.
- Enclosures, or coating that cannot be penetrated by the teeth of a child.



#### **Dust Control Methods**

- Thorough cleaning of all horizontal surfaces, such as window sills, window troughs, floors, and stairs.
- Start at the top and work down.
- Utilize a HEPA Vacuum Wet Wipe HEPA Vacuum Cycle
- Horizontal surfaces such as floors, stairs, window sills and window troughs, that are rough, pitted, or porous shall be covered with smooth, cleanable covering or coating (plastic, polyurethane, or linoleum).
- Consider replacement of dust "traps" such as carpet and area rugs, upholstery, radiators, HVAC filters, registers, window troughs, hardwood floor gaps.
- Dust only projects are not eligible for grant funding.

#### **DUST CONTROL METHODS - CARPETING**

- Floor surface under a rug or carpeting shall be cleaned where feasible, including upon removal of the rug or carpeting, with a HEPA Vacuum.
- When carpet is unattached in an area with LBP hazards -Protective measures shall be used to prevent the spread of dust during removal of a rug, carpet or padding from the dwelling (ex. Misting).
- Items shall be wrapped or otherwise sealed before removal from the worksite.
- Follow PGI 2013-04 Lead Hazard Evaluation and Control of Lead Dust Hazards in Carpeting.

# Bidding the Work

- Determine bidding process (i.e. lowest responsive bid, round robin, fixed price, blanket purchase order, etc.)
- Provide contractors with scope of work and LIRA.
- ✓ GTR approval for over cost projects (Lead -\$20,000; HH \$5,000.
- Contract for work should be with contractor, grantee and owner.
- Issue Proceed Order with project completion date (10 days).
- Retain all submitted competitive bids in the case file. File retention: at least 3 years from the end of the award's period of performance.

# Occupant Protection Plan 40 CFR 745.227 & 24 CFR 35.1345)

- REQUIRED for abatement
- Unique to each project.
- Describe the measures and management procedures that will be taken during the abatement to protect the occupants from exposure to any leadbased paint hazards.
- Developed prior to abatement in consultation with occupant.
- Developed by Certified Lead Supervisor or Project Designer.

### Temporary Relocation

When should occupants be temporary relocated?

- the lead hazard reduction and the final cleanup of the work area and adjacent areas cannot be accomplished in one 8 hour working day; and
- the areas available for occupancy do not provide sufficient bathroom, kitchen and sleeping facilities and entry egress pathways to meet the needs of the occupants; and
- during high dust generating lead activities.

#### Work Practices Video Links

**EXTERIOR WORK PRACTICES** 

□ INTERIOR WORK PRACTICES

# Work Project Management

#### Grantees are responsible for monitoring job worksites

- Has the worksite been set up properly and in compliance with Local/State/EPA/HUD regulations, and does the setup appear to be working as planned?
- Are residents being kept out of the work area?
- Are workers avoiding the use of prohibited work practices?
- Is waste being handled correctly?
- Are workers using worker protection methods appropriate to the job?

# Work Project Management, cont'd

- Document all worksite monitoring (findings, corrections made) in the case files.
- Conduct a visual inspection of the project to insure all work has been completed in accordance with the Scope of Work before scheduling clearance testing.

## Clearance Testing

- A Clearance inspection is required for each unit receiving funding under the Lead Hazard Control Grant program.
- Clearance can be conducted 1 hour after cleanup.
- Conduct Visual Assessment (Form 15.1): The visual assessment that is part of the standard EPA-HUD clearance procedure.
- (1) to identify any remaining deteriorated paint that is or may be lead-based paint; and
- (2) to identify visible dust, paint chips; or paintrelated debris.



# Clearance Testing, cont'd

- The purpose of clearance is to test the containment methods used and ensure safety of the unit prior to re-occupancy.
- The expectation is the unit will receive a full clearance which means the sampling must be randomized and include both rooms that work was done and not done, entry ways, and exterior visuals. PLUS PORCHES!!!
- Area(s) determined to be high risk/high use areas for children.

Porch Floors

### Clearance Testing, cont'd

#### Lead Clearance Standards (µg/sf)

EPA Standard

**New Action Level** 

< 40

Floors	< 40	< 10
Window Sills	< 250	< 100
Window Troughs	< 400	< 100

NA

#### Post Remediation

- Provide the owner with all documents (LIRA, Scope of Work, Clearance Test Results).
- Provide the owner with an On-going Maintenance Plan.
- Conduct at least one reevaluation of project to monitor the effectiveness of hazard control methods used.