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
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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.
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.
Interim Controls, cont’d

✓ FRICITION 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).
Interim Controls, cont’d

- CHEWABLE SURFACE TREATMENT
- 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 known 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.
Interim Controls, cont’d

**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 lead-based 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
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.
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 paint-related 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.
# Clearance Testing, cont’d

## Lead Clearance Standards (μg/sf)

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<thead>
<tr>
<th></th>
<th>EPA Standard</th>
<th>New Action Level</th>
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<tbody>
<tr>
<td>Floors</td>
<td>&lt; 40</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Window Sills</td>
<td>&lt; 250</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Window Troughs</td>
<td>&lt; 400</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Porch Floors</td>
<td>NA</td>
<td>&lt; 40</td>
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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.