FY19 NEW GRANTEE ORIENTATION

LEAD INSPECTIONS AND RISK ASSESSMENTS (LIRAs) BASICS

Presented By: Jonnette H. Simmons, Senior Technical Assistance Specialist
“All OLHCHH grantees that conduct lead-based paint hazard control activities are required to conduct a complete Lead Inspection (LI) AND Risk Assessment (RA)…”
HIN Grants require full inspections and assessments for:

Every owner occupied single family residence

Every rental occupied single family residence

Every vacant/rental single family residence

Every multifamily dwelling of 4 or less attached/detached residential units

Every multifamily dwelling of 5 or more must use the sampling method for FULL assessments as stated in Chapter 5 of HUD Guidelines, page 5-64
Why are OLHCHH Grant requirements for LI/RA different from other HUD programs?

Other HUD housing programs allow for the presumption of lead, requiring abatement or interim and clearance without an inspection or assessment.

The intent and policy of the OLHCHH program is to identify and remove lead based paint hazards.

OLHCHH requires a Full LI/RA

NO Partial, Screens, EBL, OR LI only/RA only

NO presumption of lead is allowed
Lead-Based Paint Inspection

- Surface-by-surface examination of painted or finished surfaces for lead-based paint
- Interior and exterior
- Comprehensive
- Includes intact paint and areas not to be disturbed
- Performed by a certified LBP inspector or risk assessor
Lead-Based Paint Inspection

a. XRF Lead-Based Paint Testing Results

<table>
<thead>
<tr>
<th>No.</th>
<th>Time</th>
<th>Type</th>
<th>Duration</th>
<th>Units</th>
<th>Sequence</th>
<th>Component</th>
<th>Feature</th>
<th>Substrate</th>
<th>Color</th>
<th>Hide</th>
<th>Condition</th>
<th>Room</th>
<th>Site</th>
<th>Inspector</th>
<th>Results</th>
<th>Depth Index</th>
<th>Action Level</th>
<th>PbC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12/20/2017 10:50</td>
<td>SHUTTER_CAL</td>
<td>190.16</td>
<td>cps</td>
<td>Final</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>1.39</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>2</td>
<td>12/20/2017 10:50</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1.07</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>3</td>
<td>12/20/2017 10:51</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>0.83</td>
<td>1</td>
<td>0.03</td>
</tr>
<tr>
<td>4</td>
<td>12/20/2017 10:51</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1.08</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>5</td>
<td>12/20/2017 10:51</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1.07</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>6</td>
<td>12/20/2017 10:52</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Drywall</td>
<td>Green</td>
<td>A</td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>10</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>7</td>
<td>12/20/2017 10:52</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Drywall</td>
<td>Green</td>
<td>B</td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>10</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>8</td>
<td>12/20/2017 10:53</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Drywall</td>
<td>Green</td>
<td>C</td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>10</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>9</td>
<td>12/20/2017 10:54</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Drywall</td>
<td>Green</td>
<td>D</td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>10</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>10</td>
<td>12/20/2017 10:55</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>4.9</td>
<td>1</td>
<td>3.9</td>
</tr>
<tr>
<td>11</td>
<td>12/20/2017 10:55</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Baseboard</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.13</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>12</td>
<td>12/20/2017 10:55</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Floor</td>
<td>Wood</td>
<td>Skin</td>
<td>Intact</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1</td>
<td>1</td>
<td>0.01</td>
</tr>
<tr>
<td>13</td>
<td>12/20/2017 10:56</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.9</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>12/20/2017 10:56</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>7.83</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>12/20/2017 10:56</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.55</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>12/20/2017 10:56</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.43</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>12/20/2017 10:57</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.26</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>12/20/2017 10:57</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>5.81</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>12/20/2017 10:58</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>5.31</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>12/20/2017 10:58</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>3.34</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>12/20/2017 10:59</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1.87</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>12/20/2017 11:00</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Living Room</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>3.8</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>12/20/2017 11:00</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Den</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>0.84</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>12/20/2017 11:01</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Den</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>12/20/2017 11:02</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Den</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>12/20/2017 11:03</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Den</td>
<td>1226</td>
<td>Chapman</td>
<td>Negative</td>
<td>3.17</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>12/20/2017 11:03</td>
<td>PAINT</td>
<td>800.00</td>
<td>mg / cm²</td>
<td>Final</td>
<td></td>
<td></td>
<td>Window</td>
<td>Casing</td>
<td>Wood</td>
<td>White</td>
<td>Deteriorated</td>
<td>Den</td>
<td>1226</td>
<td>Chapman</td>
<td>Positive</td>
<td>4.23</td>
<td>1</td>
</tr>
</tbody>
</table>
The OLHCHH recognizes that windows are costly and therefore require clear justification when being replaced.

Testing of only a single window (or even a few windows) as representing a testing combination for the entire property (interior and exterior) is not allowable.
If the LI/RA requires that more than five (5) windows be replaced in a property with the cost charged to OLHCHH grant funds, the assessor must document each window being replaced with either

a  XRF readings from each window, or

b  a clear, high resolution photo of each window, (labeled and location identified) and must include these in the risk assessment report.
Windows replaced with lead grant funds must be judged to have lead-based paint hazards, not merely lead-based paint. This distinction is critical and must be clearly defined in the LI/RA.
Lead present in items other than painted items, such as unpainted ceramic tile and porcelain bathtubs, does not contain lead-based paint; therefore, removing or treating such items is outside the scope of the authorizing statute for the lead hazard control grants program, and is not eligible for reimbursement to the OLHCHH grant as a lead hazard control activity.
Risk Assessment

- Identification of LBP hazards
- Includes
  - Visual inspection for deteriorated paint
  - Information on occupant use patterns
  - Testing of deteriorated paint and possibly other surfaces
  - Dust sampling
  - Soil sampling
  - Reports results and recommendations
- Performed by a certified risk assessor
LIRA Basics

Only 2 acceptable responses for paint condition in the inspection report

INTACT

DETERIORATED
Dust Samples
“These Guidelines recommend that risk assessors select a **minimum** of four rooms for dust sampling (except, of course, when the dwelling unit has less than four rooms).”

Page 5-38 of the HUD Guidelines.
“Dust samples must be collected ‘in all living areas where’ young children “are most likely to come into contact with dust” (40 CFR 745.227(d)(5))

- Sample the sill and floor from each of such rooms.
- Must be a representative sample per the Risk Assessor’s judgment.
- Field Blank
### New Lead Dust Hazard Action Levels:

Floors: ≥ 10 µg/ft²  
Window Sills: ≥ 100 µg/ft²

### New Lead Clearance Action Levels:

Interior Floors: < 10 µg/ft²  
Porch Floors: < 40 µg/ft²  
Window Sills: < 100 µg/ft²  
Window Troughs: < 100 µg/ft²
Composite sampling for the risk assessment and clearance of lead hazards is not authorized under OLHCHH grant programs.
Check your old reports. If more than 12 months old, perform a new assessment and update your report prior to writing your work specifications.
LIRA Basics

Check your inspector’s and assessor’s certifications to verify they are current.
Check your PCS sheet for your XRF to verify it is up to date.
Composite Soil Sampling

- The risk assessor should determine whether the soil outside of a dwelling poses a significant hazard to children
  - Bare soil areas to be sampled for lead contamination are:
  - Each play area with bare soil.
  - Non-play areas in dripline/foundation areas.
  - Non-play areas in the rest of the yard, including, but not limited to vegetable gardens, pet sleeping areas, and bare pathways.
  - Vegetable gardens (recommended).
Composite Soil Sampling

- Soil samples must be composite samples.

- EPA's standard for lead in soil:
  - bare soil in play areas = 400 ppm and
  - non-play areas – 1200 ppm
Scope of Work

- Scope of work must match the lead-based paint hazards identified in the LIRA.

- Activities identified in the scope of work is what the contractor will be held responsible and must be specific.

- For example: designated windows, quantity and unit of measure.
Interim Controls V. Abatement

- **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

- All contractors must have Lead Abatement and RRP Licenses.
- All workers must have lead abatement worker and RRP trainings.
Interim Controls V. Abatement

- **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)

- All contractors must have Lead Abatement and RRP Licenses.
- All workers must have lead abatement worker and RRP trainings.
Abatement Strategies

COMPONENT REPLACEMENT

• Pros
  - Quick way to remove LBP
  - Permanent solution
  - Can improve building through upgrades
  - Can lower heating bills and maintenance costs.

• Cons
  - May involve demolition work
  - PPE may be necessary
Prohibited Practices
(40 CFR 745.227 (e)(6) & 24 CFR 35.140)

• **NO** open flame or torch burning of lead-based paint (LBP)

• **NO** machine sanding, grinding, abrasive blasting, or sandblasting of LBP without a HEPA exhaust control.

• **NO** dry scraping of LBP is permitted *UNLESS*
  • Work is within 1 ft of electrical outlet (*LSHR*), or
  • Treating defective paint spots totaling no more than 2 sq. ft in any one interior room, or
  • Treating a spot no more than 20 sq. ft. on exterior surfaces.

• **NO** use of a heat gun that is above 1100 degrees Fahrenheit, or that chars paint (*LSHR*)

• **NO** use of a volatile stripper in poorly ventilated space.
Lead Poisoning is Preventable!