New EPA Lead Dust Standards

Joy Finch, Greenville Technical College
Session Overview

• 5 W?’s (What, Where, Why, Who and When)
• How did we get here?
• Details of the new lead dust standards
• Results of the changes
• What should YOU do?
The New EPA Rule

- Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint
- Final Rule
- Published in Federal Register on July 9, 2019
- Effective January 6, 2020
What and Where

The New EPA Rule:

• Lowers the **Dust Lead Hazard Standard (DLHS)**
• Used to identify dust lead hazards *during risk assessments*
• Does NOT affect dust lead clearance levels (more on this later...)
• Does NOT include hazard standard for window troughs
• Does NOT changed the definition of **Lead Based Paint (LBP)**

<table>
<thead>
<tr>
<th>Dust sample location</th>
<th>Old DLHS</th>
<th>New DLHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floors</td>
<td>40 μg/ft²</td>
<td>10 μg/ft²</td>
</tr>
<tr>
<td>Window Sills</td>
<td>250 μg/ft²</td>
<td>100 μg/ft²</td>
</tr>
</tbody>
</table>
What and Where

• Applies to *target housing* and *child-occupied facilities*
  - Target housing: most pre-1978 housing
  - Child occupied facility: pre-1978 non-residential properties where children <6 spend a significant amount of time (such as daycare centers and kindergartens)
• Applies to risk assessments performed by Certified Risk Assessors
• Does NOT apply to abatement activities (unless triggered by HUD Lead Safe Housing Rule)
• Does NOT apply to Lead Renovation, Repair and Painting activities (unless triggered by HUD Lead Safe Housing Rule)
• But... it may “apply” to YOU!
Why and Who

- EPA promulgated rule change in response to 2009 petition to EPA to lower DLHS
- Major affected parties

<table>
<thead>
<tr>
<th>Responsible Party</th>
<th>Action to be taken</th>
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<tbody>
<tr>
<td>Certified Risk Assessor</td>
<td>Identify and report on hazards in target housing and COF</td>
</tr>
<tr>
<td>Property owner or property manager of target housing</td>
<td>Disclose hazards to purchaser or lessee</td>
</tr>
<tr>
<td>HUD property owner or rehab specialist</td>
<td>Perform hazard reduction activities in accordance with new standards</td>
</tr>
<tr>
<td>NLLAP Laboratory</td>
<td>Meet lower quantitation limit and detection limit</td>
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</table>
**Who (EPA New Rule Preamble)**

<table>
<thead>
<tr>
<th>Potentially affected entity</th>
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</thead>
<tbody>
<tr>
<td>Building Construction (residential construction and remodeling)</td>
</tr>
<tr>
<td>Specialty Trade Contractors (plumbing, HVAC, painting, electrical, finish carpentry, drywall, insulation, siding, tile, glass)</td>
</tr>
<tr>
<td>Real Estate (residential lessors and property managers)</td>
</tr>
<tr>
<td>Child Day Care Services</td>
</tr>
<tr>
<td>Elementary/Secondary Schools (with kindergartens)</td>
</tr>
<tr>
<td>Other Technical Schools (Lead training providers)</td>
</tr>
<tr>
<td>Engineering Service and Building Inspection Services</td>
</tr>
<tr>
<td>Lead Abatement Professionals</td>
</tr>
<tr>
<td>Testing Laboratories (that analyze dust wipe samples)</td>
</tr>
<tr>
<td>Federal/State Agencies (that own residential properties)</td>
</tr>
<tr>
<td>Property owners (particularly if receiving federal assistance)</td>
</tr>
<tr>
<td>State Agencies (with authorized lead programs)</td>
</tr>
</tbody>
</table>
Why (EPA Preamble)

• President’s Task Force on Environmental Health Risks and Safety Risks to Children *Lead Action Plan* (December 2018)
  • EPA still prioritizing important issue of childhood lead exposure
  • Dust is significant exposure route for young children

• Changes in scientific evidence of health effects
  • CDC: no safe Blood Lead Level (BLL) for children, moved to Blood Lead Reference Value based on NHANES top 2.5%
  • DHHS National Toxicology Program Monograph on Health Effects of Low-Level Lead (June 2012): risks of adverse health effects in children at BLLs < 5 μg/dl
  • EPA Integrated Science Assessment for Lead (June 2013): cognitive decrements in children at BLLs < 10 μg/dl

• Children’s Health Protection Advisory Committee recommended EPA/HUD strengthen Lead-Based Paint Hazard Standards for paint dust and soil
Why (EPA Cost/Benefit)

- Estimated annualized benefits
  - $268 million to $2.3 billion (3% discount rate)
  - $58 million to $509 million (7% discount rate)
- Estimated annualized costs
  - $32 million (3%)
  - $117 million (7%)
- Impacts ~15,400 small business (most will have cost impact that is <1% of revenue)
When

- Rule promulgated July 9, 2019
- Effective date January 6, 2020
- Authorized states/tribes/territories have 2 years to meet requirements of the new rule (January 6, 2022)
How did we get here?

<table>
<thead>
<tr>
<th>Year</th>
<th>Agency</th>
<th>Action Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>EPA</td>
<td>Published Lead Hazard Standards for paint, dust, and soil 40 CFR Part 745 Subpart D</td>
</tr>
</tbody>
</table>
| 2017 | HUD    | Lead Safe Housing Rule Amendments  
  - Lowered Elevated Blood Lead Level (EBLL) to 5 μg/dL  
  - Strengthened environmental investigation mandate  
  - Did not change dust lead standards (see below) |
How did we get here?

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</table>
| 2017 | HUD    | - Policy Guidance Number: 2017-01  
- Revised Dust-Lead Action Levels for Risk Assessment and Clearance; Clearance of Porch Floors  
- All Lead-Based Paint Hazard Control (LBPHC) and Lead Hazard Reduction (LHRD) Demonstration Grantees  
- Referenced 2009 EPA petitioned to lower the dust-lead standards ($10 \mu g/ft^2$ for floors, $100 \mu g/ft^2$ for window sills)  
- Grantees required to use new lead dust action levels starting April 1, 2017 |

**New Lead Dust Hazard Action Levels:**
- Floors: $\geq 10 \mu g/ft^2$
- Window Sills: $\geq 100 \mu g/ft^2$

**New Lead Clearance Action Levels:**
- Interior Floors: $< 10 \mu g/ft^2$
- Porch Floors: $< 40 \mu g/ft^2$
- Window Sills: $< 100 \mu g/ft^2$
- Window Troughs: $< 100 \mu g/ft^2$
HUD Policy Guidance #2017-01

Table 1. Attainable Clearance Levels by OLHCHHH Grantees (QuanTech, 2015)

<table>
<thead>
<tr>
<th>Surface</th>
<th>EPA Clearance Level (µg/ft²)</th>
<th>Grantee Obtained Clearance Level (µg/ft²)</th>
<th>Clearance Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floors</td>
<td>40</td>
<td>10</td>
<td>85 %</td>
</tr>
<tr>
<td>Window Sills</td>
<td>250</td>
<td>100</td>
<td>97 %</td>
</tr>
<tr>
<td>Window Troughs</td>
<td>400</td>
<td>100</td>
<td>94 %</td>
</tr>
</tbody>
</table>

- Prefer labs report very low results using Reporting Limit instead of “None Detected”
- Risk assessors may sample a larger area (e.g., 2 ft²)
- Recommends implementing porch floor clearance even when no work done on porch because of tracking hazards
- Consider using interior floor clearance level on porches that are “smooth and cleanable”
Explanatory Note:
745.227 Work Practices
(h) Determinations
(3) A dust-lead hazard is present in a residential dwelling or child occupied facility:
Weighted arithmetic mean

\[
[ (60 \times 1) + (100 \times 3) + (110 \times 4) ] / (1+3+4) = [800] / (8) = 100.
\]

HUD 2012 Guidelines:

- Composite sampling NOT recommended
- If individual dust sample(s) exceed hazard level but weighted arithmetic mean does not, there is no hazard per EPA standard
- Risk assessor should recommend cleaning of the surfaces or spaces with the high levels and untested surfaces of same component type
- Likely locations: (1) entryway floor, (2) a hard surface floor in a dwelling unit with mostly carpeted floors, or (3) high level on a specific window sill with a friction-surface hazard
Clearance levels are values that indicate the maximum amount of lead permitted in dust on a surface following completion of an abatement activity.

(viii) The clearance levels for lead in dust are 40 μg/ft² for floors, 250 μg/ft² for interior window sills, and 400 μg/ft² for window troughs.
HUD Clearance (per EPA Preamble): Confusing Cross References

HUD 24 CFR 35.1320 Lead-based paint inspections, paint testing, risk assessments, lead-hazard screens, and reevaluations

(b)(2): Risk assessors use dust-lead hazard standards “at least as protective” as EPA’s DLHS at 40 CFR 745.227(h)

HUD 24 CFR 35.1340 Clearance

(a) Clearance following abatement references EPA clearance levels

(b) Clearance following activities other than abatement references HUD 24 CFR 35.1320(b)(2)

(d) Standards references HUD 24 CFR 35.1320(b)(2) for both abatement and non-abatement activities

• “...according to HUD, abatements under HUD’s LSHR will be cleared using the EPA’s DLHS”
AIHA Synergist Viewpoint
Kenneth White and Derek Popp

Issues affecting laboratories
• Laboratory reporting limit must be equal to or less than 5 µg/sample
• Minimum detection limit must be to be equal to or less than one half of the laboratory’s reporting limit

Issues affecting LBP professionals
• Contractual, ethical, and liability issues
• Reporting area has passed clearance when hazard still present
• Tort liability for professionals

See https://synergist.aiha.org/201908-epa-lead-hazard-standards
EPA takes step forward then fumbles

- Failed to make a corresponding change to its cleanup standard
- Refused to tighten the lead in paint standard
- Ignored calls to tighten standard for lead in soil

Petition for Review

A COMMUNITY VOICE; CALIFORNIA COMMUNITIES AGAINST TOXICS; HEALTHY HOMES COLLABORATIVE; NEW JERSEY CITIZEN ACTION; NEW YORK CITY COALITION TO END LEAD POISONING; SIERRA CLUB; UNITED PARENTS AGAINST LEAD NATIONAL; and WE ACT FOR ENVIRONMENTAL JUSTICE,

- EPA Rule Violates TSCA
  - Does not identify conditions that adversely affect human health
  - Nonhealth based factors considered in setting the DLHS
  - Outdated clearance levels left in place
  - Ignored duty to update LBP definition and soil-lead standard
  - Failure to align clearance levels and DLHS undermines the purpose of TSCA
Petition for Review

• EPA failed to comply with 2009 Petition and 2017 Writ of Mandamus

• EPA Rule is Arbitrary and Capricious
  • Disavows purported industry constraints
  • Piecemeal approach fails to rationally consider the inter-relationship between sources of lead exposure
  • Attempt to justify EPA failure to revise the clearance level, definition of LBP, and soil standard based on need for more information is arbitrary and capricious
Petition for Review

• Inconsistent with modern science
• Misrepresents availability of key scientific studies
• Create false sense of safety
• Will have disproportionate effect on low-income and minority children
Petition for Review

• EPA has not provided a reasoned explanation for the dust-lead hazard standards

• EPA’s own analysis shows that setting the dust-lead hazard standards at lower levels would be more net beneficial

• EPA fails to provide a reasoned explanation for forgoing benefits
EPA Plan of Action

**RIN** (Regulation Identifier Number): 2070-AK50

**Title:** Review of Dust-Lead Post-Abatement Clearance Levels

- Addressing childhood lead exposure is a priority for EPA
- Considering changes to the dust-lead clearance levels (DLCL) following the recent changes to the dust-lead hazard standards (DLHS)
- EPA must perform health, exposure, and economic analyses related to various DLCLs

**Timetable:**

<table>
<thead>
<tr>
<th>Action</th>
<th>03/00/2020</th>
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<tbody>
<tr>
<td>NPRM</td>
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</table>
State Response

- New Jersey: Proposed amendment
- Change both hazard and clearance levels to new dust lead hazard standards
- Posting date March 16, 2020?
What should YOU do?

• Check with your lab (if you haven’t already)
• Explain issues to your client
• Err on the side of caution
• Keep the kids safe!

• And.. Stay safe and healthy in these weird and trying times!
Thank You!

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Questions?