



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA-HQ-OPPT-2020-0063; FRL-10018-61]

RIN 2070-AK50

Review of Dust-Lead Post Abatement Clearance Levels

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Reducing childhood lead exposure is a priority for the Environmental Protection Agency (EPA). As part of EPA's efforts to reduce childhood lead exposure, and in coordination with the President's Task Force on Environmental Health Risks and Safety Risks to Children, EPA reevaluated the 2001 dust-lead clearance levels (DLCL). Clearance levels indicate the amount of lead in dust on a surface following the completion of an abatement activity. Surface dust is collected via dust wipe samples that are sent to a laboratory for analysis to determine whether clearance has been achieved. The post-abatement dust-lead levels are evaluated against, and must be below, the applicable clearance levels. The DLCL have not changed since they were issued in 2001. EPA is finalizing its proposal to lower the DLCL from 40 micrograms of per square foot ($\mu\text{g}/\text{ft}^2$) to 10 $\mu\text{g}/\text{ft}^2$ for floors, and from 250 $\mu\text{g}/\text{ft}^2$ to 100 $\mu\text{g}/\text{ft}^2$ for window sills.

DATES: This final rule is effective [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA-HQ-OPPT-2020-0063, is available at <http://www.regulations.gov> or at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC.

Please note that due to the public health emergency, the EPA Docket Center (EPA/DC)

and Reading Room was closed to public visitors on March 31, 2020. Our EPA/DC staff will continue to provide customer service via email, phone, and webform. For further information on EPA/DC services, docket contact information and the current status of the EPA/DC and Reading Room, please visit <https://www.epa.gov/dockets>.

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Claire Brisse, Existing Chemicals Risk Management Division, Office of Pollution Prevention and Toxics (Mailcode 7404T), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460-0001; telephone number: (202) 564-9004; email address:

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SUPPLEMENTARY INFORMATION:

I. Executive Summary

A. Does this action apply to me?

You may be potentially affected by this action if you conduct Lead-Based Paint (LBP) activities in accordance with 40 CFR 745.227; if you operate a training program required to be accredited under 40 CFR 745.225; if you are a firm or individual who must be certified to conduct LBP activities in accordance with 40 CFR 745.226; or if you conduct rehabilitations or maintenance activities in most pre-1978 housing that is covered by a Federal housing assistance program in accordance with 24 CFR part 35. You may also be affected by this action if you operate a laboratory that is recognized by EPA's National Lead Laboratory Accreditation Program (NLLAP) in accordance with 40 CFR 745.90, 745.223, 745.227, 745.327. You may also be affected by this action, in accordance with 40 CFR 745.107 and 24 CFR 35.88, as the

seller or lessor of target housing, which is most pre-1978 housing. See 40 CFR 745.103 and 24 CFR 35.86. The following list of North American Industrial Classification System (NAICS) codes is not intended to be exhaustive, but rather provides a guide to help readers determine whether this document applies to them. Potentially affected entities may include:

- Real estate (NAICS code 531), *e.g.*, lessors of residential buildings and dwellings, residential property managers.
- Other technical and trade schools (NAICS code 611519), *e.g.*, training providers.
- Engineering services (NAICS code 541330) and building inspection services (NAICS code 541350), *e.g.*, dust sampling technicians.
- Lead abatement professionals (NAICS code 562910), *e.g.*, firms and supervisors engaged in LBP activities.
- Testing laboratories (NAICS code 541380) that analyze dust wipe samples for lead.
- Federal agencies that own residential property (NAICS code 92511, 92811).
- Property owners, and property owners that receive assistance through Federal housing programs (NAICS code 531110, 531311).

B. What is the Agency's authority for taking this action?

EPA is finalizing this rule under sections 401 and 402 of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 *et seq.*, as created by Title X of the Housing and Community Development Act of 1992 (also known as the “Residential Lead-Based Paint Hazard Reduction Act of 1992” or “Title X”) (Pub. L. 102-550) (Ref. 1).

TSCA section 402 (15 U.S.C. 2682) directs EPA to regulate LBP activities, which include risk assessments, inspections, and abatements. TSCA section 401 (15 U.S.C. 2681) defines abatements as “measures designed to permanently eliminate lead-based paint hazards” and the term includes “all . . . cleanup . . . and post[-]abatement clearance testing activities” (15 U.S.C. 2681(1)). EPA is further directed, in promulgating the regulations, to “tak[e] into account reliability, effectiveness, and safety” (15 U.S.C. 2682(a)(1)).

C. What action is the Agency taking?

Clearance levels are defined as values that indicate the amount of lead in dust on a surface following completion of an abatement activity (40 CFR 745.223). Surface dust is collected via dust wipe samples that are sent to a laboratory for analysis. The post-abatement dust-lead levels must be below the clearance levels, which are the standards used to evaluate the effectiveness of post-abatement cleanings. If the levels are not below the clearance levels, the components (*i.e.* floors, window sills, etc.) represented by the failed sample(s) shall be recleaned and retested. In 2001, EPA originally established DLCL of 40 $\mu\text{g}/\text{ft}^2$ for floors, 250 $\mu\text{g}/\text{ft}^2$ for window sills and 400 $\mu\text{g}/\text{ft}^2$ for window troughs in a final rule entitled, “Identification of Dangerous Levels of Lead.” See 66 FR 1206, January 5, 2001 (FRL-6763-5), also known as the 2001 LBP Hazards Rule (Ref. 2).

On June 24, 2020, EPA proposed to revise the DLCL for window sills and floors. EPA is now finalizing its proposal to lower the DLCL set by the 2001 LBP Hazards Rule, from 40 $\mu\text{g}/\text{ft}^2$ to 10 $\mu\text{g}/\text{ft}^2$ for floor dust and from 250 $\mu\text{g}/\text{ft}^2$ to 100 $\mu\text{g}/\text{ft}^2$ for window sill dust. As explained elsewhere in this preamble, EPA is not revising the DLCL for window troughs at this time. The revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills will not apply retroactively; that is, this final rule will not impose retroactive requirements on regulated entities that have previously performed post-abatement clearance testing using the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ on floors or 250 $\mu\text{g}/\text{ft}^2$ on window sills. While EPA's dust-lead hazard standards (DLHS) do not compel property owners to evaluate their property for hazards or take control actions (40 CFR 745.61(c)), if someone opts to perform a lead-based paint activity such as an abatement, then EPA's regulations set requirements for doing so (40 CFR 745.220(d)). This final rule requires individuals and firms who perform an abatement to achieve values below the DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills at the end of the abatement, which the 2019 rule updating the DLHS (“Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint,” (84 FR 32632, July 9, 2019) (FRL-9995-49), also known as the 2019 DLHS Rule)

did not require under EPA's regulations (Ref. 3).

D. Why is the Agency taking this action?

Reducing childhood lead exposure is an EPA priority. EPA continues to collaborate with its federal partners to reduce lead exposures and, in so doing, to explore ways to strengthen its relationships and partnerships with states, tribes, and localities. In December 2018, the President's Task Force on Environmental Health Risks and Safety Risks to Children released the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts* (Lead Action Plan) (Ref. 4) to enhance the Federal Government's efforts to identify and reduce lead exposure while ensuring children impacted by such exposure are getting the support and care they need to prevent or mitigate any associated health effects. The Lead Action Plan is helping Federal agencies to work strategically and collaboratively to reduce exposure to lead and improve children's health. This final rule, which revises the DLCL, is an action that EPA committed to undertake in the Lead Action Plan (Ref. 5).

In the 2001 LBP Hazards Rule, EPA first established the DLHS that identify dust-lead hazards and the DLCL used to evaluate the effectiveness of cleaning following an abatement. Abatements are designed to permanently eliminate LBP hazards including dust-lead hazards.

In 2019, EPA reevaluated the DLHS (Ref. 3). Based on that reevaluation, the final rule revised the DLHS from 40 $\mu\text{g}/\text{ft}^2$ and 250 $\mu\text{g}/\text{ft}^2$ to 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ on floors and window sills, respectively. EPA based that decision on the best available science, the Agency's review of public comments received on the proposal for that rule, and consideration of the potential for risk reduction, including whether such actions were achievable. At that time, EPA focused its rulemaking on the DLHS and the definition of LBP, which were the two actions that EPA had agreed to undertake in response to a 2009 citizen petition (Ref. 6). In that rulemaking, EPA did not propose to change DLCL in 40 CFR part 745, subpart L.

However, EPA recognizes the important relationship between the DLHS and DLCL: The DLHS are used to identify dust-lead hazards and the DLCL are used to demonstrate that specific

abatement activities have effectively abated those hazards. The purpose of this final rule is to update the DLCL so that attaining these levels demonstrates elimination of dust-lead hazards under the revised 2019 DLHS. Based on the Agency's careful review of the public comments received on the proposal, EPA is finalizing its proposal to revise the DLCL to 10 µg/ft² for floors and to 100 µg/ft² for window sills. EPA finds that attaining these DLCL abates the dust-lead hazards identified under the 2019 standards, taking into account reliability, effectiveness, and safety. EPA has not been persuaded that elimination of the dust-lead hazards (15 U.S.C. 2681(1)) while accounting for reliability, effectiveness, and safety (15 U.S.C. 2682(a)(1)) justifies selecting different clearance levels. Although EPA is not persuaded to deviate from 10 µg/ft² for floors and 100 µg/ft² for window sills for the DLCL, the Agency did consider whether potential reliability, effectiveness, or safety factors supported different clearance levels. In particular, EPA considered the achievability of 10 µg/ft² for floors and 100 µg/ft² for window sills in relation to their application in lead risk reduction programs, how the lower dust-lead loadings can be reliably detected by laboratories, the effectiveness of these levels at eliminating dust-lead hazards, and consistency with the revised 2019 standards and across the Federal Government.

EPA did not propose to change the post-abatement clearance level in 40 CFR 745, subpart L for window troughs, and is not modifying the level at this time. Because the revised 2019 standards updated the DLHS for floors and window sills and because EPA wanted to act as expeditiously as possible to update the DLCL in recognition of the updated DLHS for floors and window sills, EPA believes it has reasonably focused this rulemaking to update the DLCL so that attaining these levels demonstrates elimination of dust-lead hazards under the revised 2019 standards. As a result, and after careful review of the public comments, EPA is finalizing its proposal to only revise the DLCL for floors and window sills at this time.

E. What are the estimated incremental impacts of this action?

EPA has prepared an Economic Analysis of the potential incremental impacts associated with this rulemaking (Ref. 7). The analysis is focused on a subset of the target housing (*i.e.*, most

pre-1978 housing) and child-occupied facilities where abatement activities are subject to this rule. The analysis, which is available in the docket, estimates incremental costs and benefits for abatements where a dust-lead level is between the original DLCL (40 $\mu\text{g}/\text{ft}^2$ for floors and 250 $\mu\text{g}/\text{ft}^2$ for window sills) and alternate levels, including the revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills. Based on data from the U.S. Department of Housing and Urban Development (HUD), EPA estimates that the vast majority of floors and window sills are already clearing at levels below the revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ after the completion of an abatement.

EPA identified in the proposal that there was uncertainty about whether some state and local regulations already use the same levels in EPA's DLHS as DLCL, and about whether some abatement contractors voluntarily conduct additional cleaning to ensure that the dust-lead levels fall below the DLHS following an abatement. To the extent that these situations occur, then the costs and benefits of meeting the DLCL estimated in the Economic Analysis would be attributable to the 2019 DLHS Rule and not to this regulation. For the final rule Economic Analysis, EPA contacted states with authorized lead programs and found that several have already revised or are in the process of revising their regulations to adopt clearance levels of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills. In addition, one locality has adopted clearance levels below the original federal levels of 40 $\mu\text{g}/\text{ft}^2$ on floors and 250 $\mu\text{g}/\text{ft}^2$ on window sills. Abatements in these jurisdictions will clear below the levels of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills even without revisions to the federal clearance levels. As a result, EPA has narrowed the range of estimated benefits and costs in the Economic Analysis of the final rule by including abatements in these jurisdictions in the baseline. EPA estimates that 57% to 61% of the abatements otherwise affected by the clearance levels in this rule will take place in these jurisdictions. As a result, the Economic Analysis does not account for the benefits and costs of these events. The information on state regulations and its use in the final rule analysis is described in sections 2.3 and 3.1.3(C) of the Economic Analysis. EPA did not obtain any

information indicating the extent to which abatement contractors in other states and localities (where the clearance levels are still 40 $\mu\text{g}/\text{ft}^2$ on floors and 250 $\mu\text{g}/\text{ft}^2$ on window sills) are voluntarily using 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills as clearance levels. Instead, section 8.3 of the Economic Analysis presents sensitivity analyses reflecting different assumptions about abatement contractor actions in the baseline. In order to expand the range of possible estimates, EPA's final estimates of the incremental impacts of this action include a lower bound assumption that half of abatement contractors are voluntarily applying the hazard standards as clearance levels.

As in the Economic Analysis for the 2019 DLHS Rule, there is also uncertainty about the blood lead levels at which investigative actions and lead hazard reduction activities might be taken and the exact nature of these activities. Most states set a blood lead level at which an environmental investigation is recommended or required. Based on guidance posted on environmental and public health department websites for each state, these blood lead action levels range from 5 micrograms per deciliter ($\mu\text{g}/\text{dL}$) to 25 $\mu\text{g}/\text{dL}$. In eight states (AK, IN, MD, ME, MI, NE, OR, and PA) the action level for an environmental investigation is a blood lead level of 5 $\mu\text{g}/\text{dL}$. Fourteen states (CA, GA, IL, KS, LA, NC, NH, NJ, NV, OH, TX, VT, WA, and WV) and the District of Columbia use an action level of 10 $\mu\text{g}/\text{dL}$. Nineteen states (AL, AZ, CO, DE, FL, HI, IA, ID, KY, MN, MO, MS, NM, NY, RI, SC, UT, VA, and WI) use an action level of 15 $\mu\text{g}/\text{dL}$. Four states (CT, MA, OK, and TN) use an action level of 20 $\mu\text{g}/\text{dL}$ or above. Five states (AR, MT, ND, SD, and WY) have no policy recommendation or requirement for the blood lead level at which an environmental investigation should be conducted. The differences between states may reflect the prevalence of lead hazards in each state and their relative prioritization of lead hazards and other funding needs.

EPA's analysis includes two scenarios for the number of instances where clearance testing is performed that will be affected by the rule: (1) Where dust-lead loadings are tested because a child's blood lead level equals or exceeds 5 $\mu\text{g}/\text{dL}$ (the current Centers for Disease

Control and Prevention (CDC) blood lead reference value) (Ref. 8), and a loading is at or above the DLHS; and (2) where dust-lead loadings are tested because a child's blood lead level equals or exceeds the action level set by the state the child lives in, and a loading is at or above the DLHS.

Consequently, the Economic Analysis includes a range for the number of abatement events affected by this rule revising the clearance levels. The upper end of the range is approximately 11,000 events, which assumes that when a child's blood lead level equals or exceeds 5 µg/dL an environmental investigation occurs that includes testing the dust-lead loadings in their home. The low end of the range is approximately 1,200 events, which assumes that dust-lead loading testing occurs when a child's blood lead level equals or exceeds the state blood lead level action level. The benefit and cost estimates are highly sensitive to this range. The following is a brief outline of the estimated incremental impacts of this rulemaking.

1. Benefits.

Incremental actions to meet the revised DLCL of 10 µg/ft² for floors and 100 µg/ft² for window sills after abatements where a baseline post-intervention loading is between the original DLCL of 40 µg/ft² for floors and 250 µg/ft² for window sills and the revised DLCL would reduce exposure to lead, resulting in benefits from avoided adverse health effects. In the Economic Analysis of this rule, EPA quantified the benefits of reduced lead exposure to children from avoided Intelligence Quotient (IQ) loss as an indicator of improved cognitive function and, hence, lifetime earnings. For the subset of adverse health effects where these effects were quantified, the estimated annualized benefits are ≤\$13 million to ≥\$202 million per year using a 3% discount rate, and ≤\$3 million to ≥\$44 million per year using a 7% discount rate, with the range representing the uncertainties about the blood lead levels at which an environmental investigation will be triggered and about the relationship between changes in blood lead levels and IQ. The “≤” and “≥” symbols are intended to convey uncertainty in the results. They do not mean that the results are unbounded (i.e., that the true values could be zero on the lower end or

infinity on the higher end). There are additional unquantified benefits due to other avoided adverse health or behavioral effects in children, including attention-related behavioral problems, greater incidence of problem behaviors, decreased cognitive performance, reduced post-natal growth, delayed puberty, decreased hearing, and decreased kidney function (Ref. 9).

2. Costs.

This rule is estimated to result in costs of \leq \$2 million to \geq \$14 million per year using either a 3% or a 7% discount rate. The “ \leq ” and “ \geq ” symbols are intended to convey uncertainty in the results. They do not mean that the results are unbounded (i.e., that the true values could be zero on the lower end or infinity on the higher end). In the events affected by this rule, incremental costs are incurred for specialized cleaning used to reduce dust-lead loadings to below the clearance levels and for retesting lead levels. In some instances, floors will also be sealed, overlaid or replaced, or window sills will be sealed or repainted.

3. Small entity impacts.

EPA estimates that this rule may impact \leq 1,240 to \geq 10,215 small abatement firms; \leq 1,025 to \geq 8,977 may have cost impacts estimated at less than 1% of revenues, \leq 113 to \geq 990 may have impacts estimated between 1% and 3%, and \leq 28 to \geq 240 may have impacts estimated at greater than 3% of revenues. The “ \leq ” and “ \geq ” symbols are intended to convey uncertainty in the results. They do not mean that the results are unbounded (i.e., that the true values could be zero on the lower end or infinity on the higher end). EPA's analysis assumes that in all cases the costs are borne entirely by the lead paint abatement firm (as opposed to being passed through to the property owner). However, it is more likely that some, or perhaps even most, of these costs will be passed on to the property owners.

4. Environmental justice.

This rule would increase the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population.

5. Effects on state, local, and tribal governments.

The rule would not have any significant or unique effects on small governments, or federalism or tribal implications.

F. Children's Environmental Health

Lead exposure has the potential to impact individuals of all ages, but it is especially harmful to young children because the developing brain can be particularly sensitive to environmental contaminants (Refs. 10, 11). Exposure to lead is associated with increased risk of a number of adverse health or behavioral effects in children, including decreased cognitive performance, greater incidence of problem behaviors, and increased diagnoses of attention-related behavioral problems (Ref. 9). Furthermore, floor dust in homes and child-care facilities is a significant route of exposure for young children given their mouthing and crawling behavior and proximity to the floor. Therefore, the environmental health or safety risk addressed by this action may have a disproportionate effect on children (Ref. 12).

Consistent with the Agency's Policy on Evaluating Health Risks to Children (Ref. 13), EPA has evaluated the health effects in children of decreased lead exposure from the lowering of the DLCL. EPA prepared a Technical Support Document for this rulemaking, which models dust-lead exposures and estimates both blood lead levels and associated impacts on IQ at the revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ versus the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ and 250 $\mu\text{g}/\text{ft}^2$ on floors and window sills, respectively (Ref. 12). While no safe level of lead in blood has been identified (Ref. 4), the reductions in children's blood-lead levels resulting from this rule are expected to reduce the risk of adverse cognitive and developmental effects in children. The Technical Support Document shows that health risks to young children decrease with decreasing dust-lead levels.

II. Background

A. Health Effects

Lead exposure has the potential to impact individuals of all ages, but it is especially

harmful to young children because the developing brain can be particularly sensitive to environmental contaminants (Ref. 10, 11). Ingestion of lead-contaminated dust is a major contributor to blood lead levels in children, particularly those who reside in homes built prior to 1978 (Ref. 14, 15). Infants and young children can be more highly exposed to lead through floor dust at home and in child-care facilities because they often put their hands and other objects that can have lead from dust on them into their mouths (Ref. 11).

The best available science informs EPA's understanding of the relationships between exposures to dust-lead loadings, blood lead levels, and adverse human health effects. These relationships are summarized in the Integrated Science Assessment for Lead ("Lead ISA") (Ref. 16), which EPA released in June 2013, and the National Toxicology Program (NTP) Monograph on the Health Effects of Low-Level Lead, which was released by the Department of Health and Human Services in June 2012 ("NTP Monograph") (Ref. 9). The Lead ISA is a synthesis and evaluation of scientific information on the health and environmental effects of lead, including cognitive function decrements in children (Ref. 16).

The NTP, in 2012, completed an evaluation of existing scientific literature to summarize the scientific evidence regarding potential health effects associated with low-level lead exposure as indicated by blood lead levels less than 10 $\mu\text{g}/\text{dL}$. The evaluation specifically focused on the life stage (prenatal, childhood, adulthood) associated with these potential health effects, and on epidemiological evidence at blood lead levels less than 10 $\mu\text{g}/\text{dL}$, because health effects at higher blood lead levels are well-established. The NTP concluded that there is sufficient evidence for adverse health effects in children and adults at blood lead levels less than 10 $\mu\text{g}/\text{dL}$, and less than 5 $\mu\text{g}/\text{dL}$ as well. The NTP concluded that there is sufficient evidence that blood lead levels less than 10 $\mu\text{g}/\text{dL}$ are associated with delayed puberty, decreased hearing, and reduced post-natal growth. In children, there is sufficient evidence that blood lead levels less than 5 $\mu\text{g}/\text{dL}$ are associated with increased diagnoses of attention-related behavioral problems, greater incidence of problem behaviors, and decreased cognitive performance. There is limited evidence that blood

lead levels less than 5 µg/dL are associated with delayed puberty and decreased kidney function in children 12 years of age and older (Ref. 9).

For further information regarding lead and its health effects, and federal actions taken to eliminate LBP hazards in housing, see the Lead Action Plan, the Technical Support Document for this rulemaking and the background section of the Lead Renovation, Repair and Painting Rule, issued on April 22, 2008 (also referred to as the “RRP Rule,” (73 FR 21692, April 22, 2008) (FRL-8355-7), codified at 40 CFR part 745, subpart E) (Ref. 4, 12, 17).

B. Federal Actions to Reduce Lead Exposures

In 1992, Congress enacted Title X of the Housing and Community Development Act (also known as the Residential Lead-Based Paint Hazard Reduction Act of 1992 or “Title X”) (Ref. 1) in an effort to eliminate LBP hazards. Section 1018 of Title X required EPA and HUD to promulgate regulations for disclosure of any known LBP or any known LBP hazards in target housing offered for sale or lease (known as the “Disclosure Rule”) (Ref. 18). (“Target housing” is defined in section 401(17) of TSCA, 15 U.S.C. 2681(17).) On March 6, 1996, the Disclosure Rule was codified at 40 CFR part 745, subpart F, for EPA, and 24 CFR part 35, subpart A, for HUD. It requires information disclosure activities before a purchaser or lessee is obligated under a contract to purchase or lease target housing.

TSCA section 402(a) directs EPA to promulgate regulations covering LBP activities to ensure persons performing these activities are properly trained, that training programs are accredited, and that contractors performing these activities are certified. On August 29, 1996, EPA published final regulations under TSCA section 402(a) that govern LBP inspections, risk assessments, and abatements in target housing and child occupied facilities (COFs) (also referred to as the “LBP Activities Rule,” codified at 40 CFR part 745, subpart L) (Ref. 19). The definition of “child-occupied facility” is codified at 40 CFR 745.223 for purposes of LBP activities. Regulations promulgated under TSCA section 402(a) contain standards for performing LBP activities, while taking into account reliability, effectiveness, and safety.

TSCA section 402(c)(3) directs EPA to promulgate regulations covering renovation or remodeling activities in target housing, public buildings constructed before 1978, and commercial buildings that create LBP hazards. EPA issued the final RRP Rule under TSCA section 402(c)(3) on April 22, 2008 (Ref. 17).

▪ TSCA section 403, 15 U.S.C. 2683, gives EPA a related authority to carry out responsibilities for addressing LBP hazards under the Disclosure and LBP Activities Rules. TSCA section 403 requires EPA to promulgate regulations that “identify . . . lead-based paint hazards, lead-contaminated dust, and lead-contaminated soil” for purposes of TSCA Title IV and the Residential Lead-Based Paint Hazard Reduction Act of 1992. LBP hazards, under TSCA section 401, are defined as conditions of LBP and lead-contaminated dust and soil that “would result” in adverse human health effects (15 U.S.C. 2681(10)). TSCA section 401 defines lead-contaminated dust as “surface dust in residential dwellings” that contains lead in excess of levels determined “to pose a threat of adverse health effects” (15 U.S.C. 2681(11)). The 2001 LBP Hazards Rule established the DLHS to identify conditions of lead-contaminated dust that would result in adverse human health effects. These DLHS were revised in the 2019 DLHS Rule and are used to identify dust-lead hazards.

The 2001 LBP Hazards Rule also established the DLCL (also referred to as “clearance levels” and sometimes referred to elsewhere as “clearance standards”) under TSCA section 402(a). These clearance levels are used to evaluate the effectiveness of cleaning following an abatement. As defined in TSCA section 401 abatements are designed to permanently eliminate LBP hazards, including dust-lead hazards. For purposes of the DLCL, post-clearance dust-lead loadings below the DLHS indicate permanent elimination of dust-lead hazards.

Pursuant to TSCA section 404, 15 U.S.C. 2684, and EPA's regulations at 40 CFR part 745, subpart Q, interested states, territories, and federally recognized tribes may apply for and receive authorization to administer their own LBP Activities and RRP programs. EPA's regulations are intended to reduce exposures, and the LBP Activities regulations in particular are

intended to identify and mitigate hazardous levels of lead. Authorized programs must be “at least as protective of human health and the environment as the corresponding federal program,” and must provide for “adequate enforcement.” See 40 CFR 745.324(e)(2). The 2019 DLHS Rule revised the regulation to improve the process for states, federally recognized tribes, and territories with authorized LBP Activities programs to demonstrate that their programs meet the requirements of 40 CFR 745.325 (by submitting a report pursuant to 40 CFR 745.324(h) with such demonstration within two years of the effective date of a revision).

HUD's Lead Safe Housing Rule (LSHR) is codified in 24 CFR part 35, subparts B through R. The LSHR implements sections 1012 and 1013 of Title X. Under Title X, HUD has specific authority to control LBP and LBP hazards in federally-assisted target housing (including COFs that are part of an assisted target housing property covered by the LSHR, because they are part of the common area of the property). The LSHR aims in part to ensure that federally-owned or federally-assisted target housing is free of LBP hazards (Ref. 20). Under the LSHR, when a child under age six with an elevated blood lead level residing in certain categories of assisted target housing is identified, the “designated party” and/or the housing owner shall undertake certain actions.

C. Applicability and Uses of the DLCL

The DLCL finalized in this regulation support the LBP Activities program, and apply to target housing (*i.e.*, most pre-1978 housing) and COFs (*i.e.*, pre-1978 non-residential properties where children six years of age or under spend a significant amount of time, such as child care centers and kindergartens). Apart from COFs, no other public and commercial buildings are covered by this rule. For further background on the types of buildings to which the LBP Activities program apply, refer to the proposed and final 2001 LBP Hazards Rule (Ref. 2, 21).

The DLCL are incorporated into the post-abatement work practices outlined in the LBP Activities Rule (40 CFR 745.227). LBP Activities regulations apply to inspections, risk assessments, project design, and abatement activities. Pre-abatement dust-lead testing occurs

during a risk assessment, often initiated to comply with HUD's LSHR or in response to discovery of a child with a blood lead level that equals or exceeds the current CDC blood lead reference value (Ref. 9), or the action level set by the state the child lives in. The objective of a risk assessment is to determine, and then report, the existence, nature, severity, and location of LBP hazards in residential dwellings and COFs through an on-site investigation. During a risk assessment, a risk assessor collects environmental samples that include dust wipe samples from floors and window sills that are sent to an NLLAP-recognized laboratory for analysis. NLLAP is an EPA program that defines the minimum requirements and abilities that a paint chips, dust, or soil testing laboratory must meet to attain EPA recognition as an accredited lead testing laboratory. Once the samples are analyzed by an NLLAP-recognized laboratory, the risk assessor compares the results of the dust wipe samples against the DLHS. If the dust-lead loadings from the samples are at or above the applicable DLHS, indicating LBP hazards are present, the risk assessor will identify acceptable options for controlling the hazards in the respective property, which may include abatements and/or interim controls. TSCA section 401 defines abatements as, “measures designed to permanently eliminate lead-based paint hazards,” (15 U.S.C. 2681(1)), while interim controls are “designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards,” (40 CFR 745.83 and 745.223). These options should allow the property owner to make an informed decision about what actions should be taken to protect the health of current and future residents. Risk assessments can be performed only by certified risk assessors.

The DLCL are used to evaluate the effectiveness of a cleaning following an abatement. After an abatement is complete, a risk assessor or inspector determines whether there are any “visible amounts of dust, debris or residue,” which will need to be removed before clearance sampling takes place (40 CFR 745.227(e)(8)). Once the area is free of visible dust, debris and residue, and one hour or more after final post-abatement cleaning ceases, clearance sampling for dust-lead (via dust wipe samples) can take place and will be conducted “using documented

methodologies that incorporate adequate quality control procedures” (40 CFR 745.227(e)(8)). Only a properly trained and certified risk assessor or inspector can conduct clearance sampling. A NLLAP-recognized laboratory must analyze the dust wipe samples and a risk assessor or inspector must compare the results from window sills and floors (and window troughs) to the appropriate DLCL. Every sample must test below the corresponding DLCL, and if a single sample is equal to or greater than the corresponding DLCL, then the abatement fails clearance and the components represented by the sample must be recleaned and retested (40 CFR 745.227(e)(8)). After the dust wipe samples show dust-lead loadings below the DLCL, an abatement report is prepared, copies of any reports required under the LBP Activities Rule are provided to the building owner (and to potential lessees and purchasers under the LBP Disclosure Rule by those building owners or their agents), and all required records are retained by the abatement firm or by the individuals who developed each report.

Achieving the DLCL after an abatement does not mean that the home is free from all exposure to lead, since exposures are dependent on many factors. For instance, the physical condition of a property may change over time, resulting in an increased exposure. EPA will continue coordinating with other Federal agencies to encourage best practices for occupants of post-abatement properties to conduct ongoing maintenance that will help prevent dust-lead from being reintroduced on previously cleared surfaces.

D. Public Comments Summary

The proposed rule provided a 60-day public comment period, ending on August 24, 2020. EPA received public comments from 28 commenters during the comment period. Comments were received from private citizens, state/local governments (including state health departments), potentially affected lead-based paint businesses, non-governmental organizations, environmental and public health advocacy groups and an individual from an academic institution. Several commenters, including individuals, non-governmental organizations, and state/local governments supported the DLCL as proposed at 10 ug/ft² for floors and 100 ug/ft² for window sills. A

number of commenters requested that EPA promulgate DLCL lower than the proposed levels of 10 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills. Some commenters specifically suggested that EPA should revise the DLCL for window sills to 40 $\mu\text{g}/\text{ft}^2$ or lower and/or 5 $\mu\text{g}/\text{ft}^2$ for floors. One commenter explained that within the considered options for the proposal, EPA should have analyzed a floor level lower than 10 $\mu\text{g}/\text{ft}^2$ and that the Agency must consider a lower level for floors before finalizing the rule. Other commenters expressed concern over lower DLCL and that contractors may not be able to meet lower clearance requirements without additional work in some cases, which may make it difficult to attract qualified contractors. A few commenters discussed the discrepancy between the revised 2019 DLHS and the original DLCL from 2001 and noted that due to the inconsistency an abatement could be cleared at levels higher than the DLHS, which is confusing and less protective. In this preamble, EPA has responded to the major comments relevant to this final rule. In addition, the more comprehensive version of EPA's response to comments related to this final action can be found in the Response to Comments document (Ref. 22).

To the extent that commenters discussed issues with the DLHS in their public comments, EPA has previously promulgated the DLHS in the recent 2019 rulemaking and notes that within this DLCL rule, EPA is not re-opening or reconsidering the recently revised DLHS.

III. Final Rule

The purpose of this rulemaking is to update the DLCL so that attaining these clearance levels demonstrates elimination of dust-lead hazards under the revised 2019 standards. EPA carefully considered all the public comments related to the proposed rule and is finalizing its proposal to lower the DLCL for floors from 40 $\mu\text{g}/\text{ft}^2$ to 10 $\mu\text{g}/\text{ft}^2$ and to lower the DLCL for window sills from 250 $\mu\text{g}/\text{ft}^2$ to 100 $\mu\text{g}/\text{ft}^2$. As previously mentioned, because there is no DLHS for window troughs, EPA is not revising the DLCL for window troughs at this time.

A. Approach for Reviewing and Selecting the Final Dust-Lead Clearance Levels

As EPA explained in the LBP Activities Rule (Ref. 19) (61 FR 45778, 45779), the work

practice standards covered by those regulations are intended to ensure that abatements are conducted reliably, effectively, and safely. While considering those three criteria, the 2001 LBP Hazards Rule modified the work practice standards to include dust-lead clearance levels, which “are used to evaluate the effectiveness of cleaning following an abatement.” (Ref. 2) (66 FR 1206, 1211). Abatements are designed to permanently eliminate LBP hazards including dust-lead hazards and the definition of an abatement includes cleanup and post-abatement clearance testing activities (40 CFR 745.223). A dust-lead hazard is identified by the DLHS and the DLCL are used to demonstrate that abatement activities effectively and permanently eliminate those hazards. Therefore, in choosing which DLCL to finalize in this rulemaking, EPA considered how the DLCL will support the reliability, effectiveness, and safety of abatements to permanently eliminate LBP hazards.

The 2001 LBP Hazards Rule adopted the rationale outlined in EPA's 1998 proposed rule (“Identification of Dangerous Levels of Lead,” 63 FR 30302, 30341, June 3, 1998) (Ref. 21). See also 66 FR 1206, 1222-1223 (Ref. 2). EPA chose DLCL that were “achievable using products and methods known to be reliable and effective” (Ref. 21). In the 2018 proposal for the 2019 DLHS Rule (“Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint,” 83 CFR 30889, July 2, 2018), EPA acknowledged that if the DLHS were set too low, the effectiveness of the LBP Activities program may be harmed if the abatement projects became overly expensive and time consuming due to issues of achievability (Ref. 23). That same concern for achievability applies to EPA's decision on which DLCL to set in this rulemaking.

EPA received several comments during the public comment period suggesting that EPA promulgate DLCL lower than the proposed levels at 10 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills, while a subset of commenters specifically requested lowering the DLCL to 5 $\mu\text{g}/\text{ft}^2$ for floors and/or to 40 $\mu\text{g}/\text{ft}^2$ for window sills. A few commenters also noted that lower levels for DLCL have been shown to be feasible by the survey of lead hazard control grantees conducted by HUD's Office of Lead Hazard Control and Healthy Homes (OLHCHH) (also known as the

HUD Clearance Survey) (Ref. 24).

As noted in the final 2019 DLHS Rule and the DLCL proposal, according to the HUD Clearance Survey “reduction in the federal clearance standard for floors from 40 $\mu\text{g}/\text{ft}^2$ to 10 $\mu\text{g}/\text{ft}^2$, a reduction in the federal clearance standard for windowsills from 250 $\mu\text{g}/\text{ft}^2$ to 100 $\mu\text{g}/\text{ft}^2$... are all technically feasible using the methods currently employed by OLHCHH LHC grantees to prepare for clearance” even though, at the time the survey took place, the levels that projects had to be cleared to were the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ and 250 $\mu\text{g}/\text{ft}^2$, respectively (Ref. 24). Additionally, according to public comments, a state department of health and a non-governmental organization believe that most NLLAP-recognized laboratories or those within their state are capable of testing the clearance levels as proposed. Therefore, the final DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills are shown to be achievable using available products and methods that are effective and reliable in permanently eliminating LBP hazards. To the extent commenters argue that lower options, particularly for sills, are *also* achievable, such an argument does not necessitate selecting the lower options because the primary design of the DLCL is to demonstrate permanent elimination of the dust-lead hazards, which EPA finds is achieved by clearance levels of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills. For further information on the HUD Clearance Survey, see the preamble to the 2019 DLHS Rule (Ref. 3).

In addition to the specific criteria of reliability, effectiveness, and safety, the 2001 LBP Hazards rulemaking considered the DLCL in the broader context of Title X, and selected DLCL that are compatible with a “workable framework for lead-based paint hazard evaluation and reduction” (Ref. 21). To this end, EPA chose DLCL that were consistent with the DLHS in part to ensure they were “as easy as possible to understand and implement” (Ref. 21).

EPA maintains the concern for consistency between the DLCL and DLHS for this rulemaking. During the public comment period several commenters expressed concern over the discrepancy between the 2019 DLHS and the 2001 DLCL (Ref. 22). The commenters explained that this inconsistency in the levels created confusion and leads to ethical concerns of clearing a

home with post-abatement levels higher than the 2019 revised DLHS. A few commenters urged EPA to quickly finalize as proposed to, in part, fix the mismatch between the DLHS and the DLCL. Compounding the potential for such confusion is the fact that, as indicated in the 2019 DLHS Rule and described in greater detail elsewhere in this preamble, HUD cross-references EPA's DLHS for clearance work practices under HUD's LSHR. This means that if EPA chose a different DLCL than the DLHS, a segment of the regulated community would have had two sets of clearance levels to consider. The selected DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills will mitigate this confusion within the regulated community.

As stated previously in this preamble, EPA wanted to act as expeditiously as possible to update the DLCL in recognition of the updated DLHS for floors and window sills. EPA believes it has reasonably focused this rulemaking to revise the DLCL so that attaining these levels demonstrates elimination of dust-lead hazards under the revised 2019 standards. When finalizing DLCL of 10 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills, as discussed above, the EPA considered the achievability of these levels, how the lower dust-lead loadings can be reliably detected by laboratories, the effectiveness of these levels, and consistency with the revised 2019 standards and across the Federal Government. For further information on the public comments received and a more comprehensive version of EPA's response to comments related to this final action can be found in the Response to Comments document (Ref. 22).

B. Technical Analysis

The Technical Support Document that accompanies this final rule evaluated the 2001 DLCL, the background dust-lead level, and the five DLCL options (15 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills; and 10 $\mu\text{g}/\text{ft}^2$ for floors, and 40 $\mu\text{g}/\text{ft}^2$, 60 $\mu\text{g}/\text{ft}^2$, 80 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ for window sills) with values between background (lowest) and the 2001 DLCL (highest). The methods for estimating exposure and health impacts utilized for the 2019 DLHS rulemaking are reflected in the Technical Support Document for this rule to analyze the DLCL options. The various components of the model and input parameters used in the Technical Support Document

for the DLHS and this rulemaking have been the subject of multiple Science Advisory Board Reviews, workshops and publications in the peer review literature (Ref. 12, 26). The analysis outlined in the 2019 DLHS Rule was used in that rulemaking to identify conditions that would result in adverse health effects. Where the DLHS are used to identify conditions that would result in adverse health effects, the DLCL must demonstrate that those conditions identified by the DLHS have been eliminated. Therefore, the health impact analysis for the DLCL is less central to the decision-making for this rule than it was to the 2019 DLHS Rule. Regardless, EPA must understand the impact on public health when selecting the DLCL in order to inform the Economic Analysis.

The analyses that EPA developed and presented in both the Technical Support Document for the 2019 DLHS Rule and the Technical Support Document accompanying this final rule, were specifically designed to model potential health effects that might accrue to the subpopulation, *i.e.*, children living in pre-1940 and pre-1978 housing. EPA notes that its different program offices estimate exposures for different populations, different media, and under different statutory requirements and thus different models or parameters may be a better fit for their purpose. As such, the approach and modeling parameters chosen for this rulemaking should not necessarily be construed as appropriate for or consistent with the goals of other EPA programs (Ref. 12).

In its evaluation, EPA estimated blood lead levels and IQ changes as a proxy for changes in cognitive function in children, six and under, exposed long-term to these analyzed dust-lead loading levels. As also reflected in the 2019 DLHS Rule, EPA generated two different modeling approaches to estimate the quantitative relationships between dust-lead and blood lead level data. The first approach used mechanistic modeling data that include consideration of age-specific ingestion rates, activity patterns, and background exposures. The second approach used empirical data that includes co-reported dust-lead and blood lead level measurements in the homes of children. The dust-lead and blood lead level data are used to develop an empirical relationship to

estimate blood lead level for each candidate DLCL. Both approaches (mechanistic and empirical) are compared to provide independent confirmation of the relationship between dust-lead loadings and blood lead level. For additional information summarizing the methodologies employed in the Technical Support Document, see the 2018 preamble to the proposed DLHS rule (Ref. 23).

C. Effect of the Revised DLCL on EPA and HUD Programs

1. LBP Activities Rule – EPA Abatements

Abatements are any measures or set of measures designed to permanently eliminate lead-based paint hazards and include activities such as the removal of paint and dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of painted surfaces or fixtures, and all preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures. Abatements must be conducted by certified abatement workers and supervisors. After LBP abatements are conducted, EPA's regulations require a certified inspector or risk assessor to conduct post-abatement clearance testing (via dust wipe samples) of the abated area. If the dust wipe sample results show dust-lead loadings equal to or exceeding the applicable clearance level, “the components represented by the failed sample shall be recleaned and retested.” See 40 CFR 745.227(e)(8)(vii). In other words, the abatement is not cleared until the dust wipe samples in the work area are below the clearance levels. Under this final rule, inspectors and risk assessors would compare dust wipe sampling results for floors and window sills to the revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$, respectively, and the results for window troughs to the DLCL of 400 $\mu\text{g}/\text{ft}^2$. Dust wipe sampling results at or above the DLCL would indicate that the components represented by the sample must be recleaned and retested. This final rule does not change any other risk assessment requirements.

2. Renovation, Repair and Painting Rule

The revised DLCL will not trigger new requirements under the existing RRP Rule (40 CFR part 745, subpart E). The RRP Rule requires post-renovation cleaning verification under 40

CFR 745.85(b), but the rule does not require dust wipe sampling and analysis using the DLCL. However, although optional under the RRP Rule, dust wipe sampling for clearance using the DLCL in accordance with the LBP Activities Rule (40 CFR 745.227(e)(8)) may be required by contract or by another Federal, state, territorial, tribal, or local law or regulation. At this time, other than HUD's Lead Safe Housing Rule, EPA is not familiar with other laws and regulations that require clearance testing using EPA's DLCL.

3. EPA-HUD Disclosure Rule

Under the Disclosure Rule, prospective sellers and lessors of target housing must provide purchasers and renters with a federally approved lead hazard information pamphlet and disclose known LBP and/or LBP hazards, and any available records, reports, and additional information pertaining to LBP and/or LBP hazards. The information disclosure activities are required before a purchaser or renter is obligated under a contract to purchase or lease target housing. Records or reports pertaining to LBP and/or LBP hazards must be disclosed, including results from post-abatement clearance testing, regardless of whether the level of dust-lead is below the clearance levels.

The revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills will not result in additional disclosures because there are no new information collection requirements to consider under this rule. Property owners would already be disclosing results, records, reports, and any additional information that show dust-lead below the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ on floors or below 250 $\mu\text{g}/\text{ft}^2$ on window sills, and any results, records, and reports of additional cleaning due to the lower DLCL would be reflected in this same record.

4. LSHR Clearance Requirements

The DLCL in this final rule will not change the clearance levels that apply to hazard reduction activities under HUD's LSHR because the LSHR currently requires clearance at the DLHS level, which is reflected by the lower DLCL. The LSHR requires certain hazard reduction activities to be performed in certain federally-owned and assisted target housing including

abatement, interim controls, paint stabilization, and ongoing LBP maintenance. Hazard reduction activities are required in this housing when LBP hazards are identified or when maintenance or rehabilitation activities disturb paint known or presumed to be LBP. The LSHR's clearance regulations, 24 CFR 35.1340, specify requirements for clearance of these projects (when they disturb more than de minimis amounts of known or presumed lead-based painted surfaces, as defined in 24 CFR 35.1350(d)), including a visual assessment, dust sampling, submission of samples for analysis for lead in dust, interpretation of sampling results, and preparation of a report. As explained in the preamble to the 2019 DLHS Rule (Ref. 3), the LSHR clearance regulations cross-reference EPA's DLHS. As a result, the LSHR clearance levels were lowered to 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ for floors and window sills, respectively, when the 2019 DLHS Rule became effective on January 6, 2020. Accordingly, activities under the LSHR are currently required to be cleared using EPA's DLHS.

5. 2017 Policy Guidance – HUD Requirements for Lead Hazard Control Grants

On February 16, 2017, HUD's OLHCHH issued policy guidance to establish new and more protective requirements for dust-lead action levels for its Lead-Based Paint Hazard Control (LBPHC) and Lead Hazard Reduction Demonstration (LHRD) grantees (the requirements also apply to related HUD grants authorized by Title X, section 1011 (42 U.S.C. § 4852), under similar names, including Lead Hazard Reduction (LHR) grants and their High Impact Neighborhoods and Highest Lead-Based Paint Abatement Needs grant categories) (Ref. 27). In particular, the guidance adopted clearance levels of 10 $\mu\text{g}/\text{ft}^2$ and 100 $\mu\text{g}/\text{ft}^2$ for floors and window sills, respectively, for lead hazard control activities performed under these grant programs. The change in requirements was supported by scientific evidence on the adverse effects of lead exposure at low blood-lead levels in children, (<10 $\mu\text{g}/\text{dL}$) as well as the achievability of lower clearance levels based on the HUD Clearance Survey (Ref. 24). The guidance clearance levels for floors and window sills are equal to the final DLCL. Consequently, the changes to the DLCL that EPA is promulgating with this final rule, will not affect the

clearance levels used by the LBPHC and LHRD grantees.

6. HUD Guidelines

The HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing were developed in 1995 under section 1017 of Title X. They provide detailed, comprehensive, technical information on how to identify LBP hazards in residential housing and COFs, and how to control such hazards safely and efficiently. The Guidelines were revised in 2012 to incorporate new information, technological advances, and new Federal regulations, including EPA's LBP hazard standards. Based on EPA's changes to the DLHS in 2019 and the changes to DLCL from this final rule, HUD plans to revise Chapter 5 of the Guidelines on risk assessment and reevaluation and Chapter 15 on clearance, and make conforming changes elsewhere as needed.

7. Previous LBP-Related Activities

The DLCL are used to evaluate the effectiveness of a cleaning following an abatement. After the dust wipe samples show dust-lead loadings below the DLCL, an abatement report is prepared, copies of any reports required under the LBP Activities Rule are provided to the building owner (and to potential lessees and purchasers under the LBP Disclosure Rule by those building owners or their agents), and all required records are also retained by the abatement firm or by the individuals who developed each report. The revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ on floors and 100 $\mu\text{g}/\text{ft}^2$ on window sills will not impose retroactive requirements on regulated entities that have previously performed post-abatement clearance testing using the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ on floors or 250 $\mu\text{g}/\text{ft}^2$ on window sills. These new requirements would only apply to post-abatement clearance sampling and analysis conducted after the effective date of this final rule.

D. Conforming the Definition of Clearance Levels

EPA is finalizing as proposed, clarifying language that defines the achievement of post-abatement clearance, which explains what dust-lead levels are permitted on a surface following an abatement that would achieve clearance. The post-abatement clearance procedures set forth in

40 CFR 745.227 state that clearance is not achieved when post-abatement dust-lead levels (which are a measure of the mass of lead per area, commonly expressed in micrograms per square foot ($\mu\text{g}/\text{ft}^2$)) equal or exceed the clearance levels (40 CFR 745.227(e)(8)(vii)). However, prior to this rule's amended language, 40 CFR 745.223 defined clearance levels as "the *maximum* amount of lead permitted in dust on a surface following completion of an abatement activity" (40 CFR 745.223) (emphasis added). EPA also notes that HUD's clearance standards rule for interim controls of lead-based paint hazards in HUD-assisted target housing is consistent with the procedures set forth in 40 CFR 745.227 rather than 40 CFR 745.223. To resolve this post-abatement discrepancy, EPA is conforming the definition of clearance levels found in 40 CFR 745.223 to the post-abatement clearance procedures in 40 CFR 745.227, in order to clarify in the definition that the post-abatement dust-lead levels must be below the clearance levels.

Three commenters (including state health departments and an environmental non-governmental organization) submitted public comments that supported EPA's decision to clarify in the DLCL definition that the post-abatement dust-lead levels need to be below the DLCL in order to achieve clearance. EPA agrees with the support from the public commenters and is conforming the definition in 40 CFR 745.223 as proposed.

E. State Authorization

Pursuant to TSCA section 404 and EPA's regulations at 40 CFR part 745, subpart Q, interested states, territories and federally recognized tribes may apply for and receive authorization to administer their own LBP Activities programs, as long as their programs are at least as protective of human health and the environment as the EPA's program and provide adequate enforcement. As part of the authorization process, states, territories and federally recognized tribes must demonstrate to EPA that they meet the requirements of the LBP Activities Rule. A state, territory or federally recognized tribe must demonstrate that it meets the revised DLCL in its application for authorization or, if already authorized, in a report submitted under 40 CFR 745.324(h) no later than two years after the effective date of the new requirements. If an

application for authorization has been submitted but not yet approved, the state, territory or federally recognized tribe must demonstrate that it meets the new requirements either by amending its application, or in a report it submits under 40 CFR 745.324(h) no later than two years after the effective date of the new requirements.

IV. References

The following is a list of the documents that are specifically referenced in this document. The docket includes these documents and other information considered by EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

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<https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252>.

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Effects from Exposures to Dust-lead. December 2020.

13. U.S. EPA. *Policy on Evaluating Health Risks to Children.* Policy. October 1995.

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19. U.S. EPA. Lead; Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities; Final Rule. **Federal Register** (61 FR 45778, August 29, 1996) (FRL-5389-9). <https://www.federalregister.gov/documents/1996/08/29/96-21954/lead-requirements-for-lead-based-paint-activities-in-target-housing-and-child-occupied-facilities>.

20. HUD. Requirements for Notification, Evaluation and Reduction of Lead-Based Paint

Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance; Response to Elevated Blood Lead Levels; Final Rule. **Federal Register** (82 FR 4151, January 13, 2017) (FR-5816-F-02). <https://www.federalregister.gov/documents/2017/01/13/2017-00261/requirements-for-notification-evaluation-and-reduction-of-lead-based-paint-hazards-in-federally>.

21. U.S. EPA. Lead; Identification of Dangerous Levels of Lead; Proposed Rule. **Federal Register** (63 FR 30302, June 3, 1998) (FRL-5791-9).

<https://www.federalregister.gov/documents/1998/06/03/98-14736/lead-identification-of-dangerous-levels-of-lead>.

22. U.S. EPA. *Review of the Dust-Lead Post-Abatement Clearance Levels RIN 2070-AK50 Response to Public Comments*. December 2020.

23. U.S. EPA. Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint; Proposed Rule. **Federal Register** (83 FR 30889, July 2, 2018) (FRL-9976-04).

<https://www.federalregister.gov/documents/2018/07/02/2018-14094/review-of-the-dust-lead-hazard-standards-and-the-definition-of-lead-based-paint>.

24. HUD, Office of Lead Hazard Control and Healthy Homes. *Lead Hazard Control Clearance Survey*. Final Report. October 2015.

https://www.hud.gov/sites/documents/clearancesurvey_24oct15.pdf.

25. U.S. EPA. *Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint RIN 2070-AJ82 Response to Public Comments*. June 2019.

<https://www.regulations.gov/document?D=EPA-HQ-OPPT-2018-0166-0571>.

26. U.S. EPA, Office of Pollution Prevention and Toxics. *Technical Support Document for Residential Dust-lead Hazard Standards Rulemaking Approach taken to Estimate Blood Lead Levels and Effects from Exposures to Dust-lead*. June 2019.

27. HUD. *Revised Dust-Lead Action Levels for Risk Assessment and Clearance; Clearance of Porch Floors*. Policy Guidance 2017-01 Rev 1. February 16, 2017.

https://www.hud.gov/sites/documents/LEADDUSTLEVELS_REV1.pdf.

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011). Any changes made in response to OMB recommendations have been documented in the docket. The Agency prepared an analysis of the potential costs and benefits associated with this action, which is available in the docket (Ref. 7).

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is considered an Executive Order 13771 regulatory action (82 FR 9339, February 3, 2017). Details on the estimated costs of this final rule can be found in EPA's analysis of the potential costs and benefits associated with this action (Ref. 7).

C. Paperwork Reduction Act (PRA)

This action does not directly impose an information collection burden under the PRA, 44 U.S.C. 3501 *et seq.* Under 24 CFR part 35, subpart A, and 40 CFR 745, subpart F, and approved under OMB Control Number 2070-0151, sellers and lessors must already provide purchasers or lessees any available records or reports “pertaining to” LBP, LBP hazards and/or any lead hazard evaluative reports available to the seller or lessor. Accordingly, a seller or lessor must disclose any reports showing dust-lead levels, regardless of the value. Thus, this action would not result in additional disclosures. Because there are no new information collection requirements to consider under this rule, or any changes to the existing requirements to consider under this rule, an ICR is not necessary.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA, 5 U.S.C. 601 *et seq.* The small businesses subject to the requirements of this action are abatement firms that may incur costs associated with additional cleaning and sealing in houses where a post-abatement loading is between the original DLCL of 40 $\mu\text{g}/\text{ft}^2$ for floors and 250 $\mu\text{g}/\text{ft}^2$ for window sills, and the revised DLCL of 10 $\mu\text{g}/\text{ft}^2$ for floors and 100 $\mu\text{g}/\text{ft}^2$ for window sills.

EPA's Economic Analysis (Ref. 7) presents low and high scenarios for the number of housing units where a child with a blood lead level that equals or exceeds a Federal or state trigger value lives. For the low scenario, environmental investigations are assumed to be conducted when a child's blood lead level equals or exceeds the trigger value set by that child's state. These values vary from 5 $\mu\text{g}/\text{dL}$ to 25 $\mu\text{g}/\text{dL}$, depending on the state. For the high scenario, environmental investigations are assumed to be conducted when a child's blood lead level equals or exceeds the CDC's reference level of 5 $\mu\text{g}/\text{dL}$. The two scenarios function as bounding estimates, and a more realistic assessment of the number of environmental investigations is that they are between the high and low scenarios. The low and high scenarios for the number of environmental investigations affect the estimated number of small business that might incur costs for cleaning and additional dust wipe testing if EPA promulgates the clearance levels in this final rule.

The Agency has determined that this rule may impact $\leq 1,240$ to $\geq 10,215$ small abatement firms. Of these, about $\leq 1,025$ to $\geq 8,977$ may have cost impacts less than 1% of revenues, ≤ 113 to ≥ 990 may have impacts between 1% and 3%, and ≤ 28 to ≥ 240 may have impacts greater than 3% of revenues. The “ \leq ” and “ \geq ” symbols are intended to convey uncertainty in the results. They do not mean that the results are unbounded (i.e., that the true values could be zero on the lower end or infinity on the higher end). Details of the analysis are presented in the EA, which is available in the docket (Ref. 7).

In addition to the use of the high scenario (which is likely to overestimate the number of small entities with significant impacts), the analysis makes a series of other assumptions that are likely to lead to an overestimate of small entity impacts. In order to estimate the potential impacts of the rule, EPA assumed that an environmental investigation occurs whenever a child's blood lead level is found to equal or exceed a Federal or state trigger value; that the environmental investigation always includes dust wipe testing of the child's home; and that a clean-up occurs whenever the environmental investigation indicates that dust-lead loadings exceed a hazard standard. Neither the DLCL nor the other provisions of EPA's LBP activities regulations require property owners to evaluate their properties for the presence of dust-lead hazards, nor to take action to address the hazards if dust-lead hazards are identified. These assumptions may overestimate the number of abatements affected, and thus the number of small abatement firms with significant impacts.

The analysis also assumes that in all cases where a dust-lead hazard is identified, the property owner performs at least one baseline abatement activity. This likely overestimates costs because some events may only involve interim controls, and EPA does not require clearance testing for such events. Again, this assumption may overestimate the number of abatements affected, and thus the number of small abatement firms with significant impacts.

Finally, the analysis assumes that in all cases the costs are borne entirely by the lead paint abatement firm (as opposed to being passed through to the property owner). However, it is more likely that some, or perhaps even most, of these costs will be passed on to the property owners. In some circumstances the demand for abatements is likely to be relatively inelastic. Furthermore, the costs of this rule for an affected job are a fraction of the costs of a typical abatement, and only a fraction of jobs are estimated to require re-clearance (meaning that the additional costs for a few jobs can be spread over the up-front prices of a much larger pool of abatements). EPA believes it is likely that abatement contractors will be able to raise up-front prices to some degree to account for the potential costs of additional cleaning and associated

activities. Such pass-through of costs would decrease the magnitude of the cost impacts on individual abatement firms.

In light of these conservative assumptions, the small entity impacts analysis likely overstates the number of small businesses with large impacts, both in terms of the magnitude of the impacts and the number of businesses affected.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The total estimated annual cost of the rule is \$3 million to \$14 million per year (Ref. 7), which does not exceed the inflation-adjusted unfunded mandate threshold of \$156 million.

F. Executive Order 13132: Federalism

This action does not have federalism implications, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. States that have authorized LBP Activities programs must demonstrate that they have DLCL at least as protective as the levels at 40 CFR 745.227. However, authorized states are under no obligation to continue to administer the LBP Activities program, and if they do not wish to adopt the new DLCL they can relinquish their authorization. In the absence of a state authorization, EPA will administer these requirements. Thus, Executive Order 13132 does not apply to this action.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). Federally recognized tribes that have authorized LBP Activities programs must demonstrate that they have DLCL at least as protective as the clearance level at 40 CFR 745.227. However, these authorized tribes are under no obligation to continue to administer the LBP Activities program, and if they do not wish to adopt the new DLCL they can

relinquish their authorization. In the absence of a tribal authorization, EPA will administer these requirements. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is economically significant as defined in Executive Order 12866, and EPA believes that the environmental health or safety risk addressed by this action may have a disproportionate effect on children. Accordingly, we have evaluated the environmental health or safety effects of dust-lead exposure in children. The results of this evaluation are contained in Unit I.F. of the preamble titled “Children’s Environmental Health,” Unit II.A. of the preamble titled “Health Effects,” the Economic Analysis and the Technical Support Document, where the health impacts of lead exposure and children is discussed more fully (Ref. 7, 12). The documents referenced above are available in the public docket for this action.

The primary purpose of this rule is to clear abatements to a level that can reliably, effectively and safely eliminate LBP hazards in target housing, including target housing where children reside, and COFs. EPA's analysis indicates that there will be approximately 2,300 to 22,000 children per year affected by the rule (Ref. 7).

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a “significant energy action” as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution or use of energy and the Administrator of the Office of Information and Regulatory Affairs has not otherwise determined that the action is a significant energy action.

J. National Technology Transfer and Advancement Act (NTTAA)

Since this action does not involve any technical standards, NTTAA section 12(d), 15 U.S.C. 272 note, does not apply to this action.

K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority

Populations and Low-Income Populations

EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the Economic Analysis, which is available in the docket (Ref. 7).

L. Congressional Review Act (CRA)

This action is subject to the CRA, 5 U.S.C. 801 *et seq.*, and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 745

Environmental protection, Abatement, Child-occupied facility, Clearance levels,
Hazardous substances, Lead, Lead poisoning, Lead-based paint, Target housing.

Andrew Wheeler,

Administrator.

Therefore, for the reasons set forth in the preamble, 40 CFR chapter I, subchapter R, is amended as follows:

PART 745—[AMENDED]

1. The authority citation for part 745 continues to read as follows:

Authority: 15 U.S.C. 2605, 2607, 2681-2692 and 42 U.S.C. 4852d.

2. Amend § 745.223 by revising the definition for “Clearance levels” to read as follows:

§ 745.223 Definitions.

* * * * *

Clearance levels are values that indicate the amount of lead in dust on a surface following completion of an abatement activity. To achieve clearance when dust sampling is required, values below these levels must be achieved.

* * * * *

3. Amend § 745.227 by revising paragraph (e)(8)(viii) to read as follows:

§ 745.227 Work practice standards for conducting lead-based paint activities: Target housing and child-occupied facilities.

* * * * *

(e) * * *

(8) * * *

(viii) The clearance levels for lead in dust are 10 µg/ft² for floors, 100 µg/ft² for interior window sills, and 400 µg/ft² for window troughs.

* * * * *