PRE-PUBLICATION NOTICE

On July 12, 2023, Michal S. Regan, the EPA Administrator, signed the following document:

Action:	**NPRM**
Title:	**Reconsideration of the Dust-Lead Hazard Standards and Dust-Lead Post-Abatement Clearance Levels**
FRL #:	**8524-01-OCSPP**
Docket ID #:	**EPA-HQ-OPPT-2023-0231**

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA-HQ-OPPT-2023-0231; FRL-8524-01-OCSPP]

[RIN 2070-AK91]

Reconsideration of the Dust-Lead Hazard Standards and Dust-Lead Post-Abatement Clearance Levels

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Addressing childhood lead exposure is a priority for the Environmental Protection Agency (EPA). This rule addresses health concerns for all affected communities, including children living in communities with environmental justice concerns, who have significantly higher blood lead levels (BLLs) than other children. As part of EPA's efforts to reduce childhood lead exposure, and in accordance with a U.S. Court of Appeals for the Ninth Circuit 2021 opinion, EPA is proposing to lower the dust-lead hazard standards (DLHS) from 10 micrograms per square foot (µg/ft^2) and 100 µg/ft^2 for floors and window sills to any reportable level as analyzed by a laboratory recognized by EPA's National Lead Laboratory Accreditation Program. This is a non-numeric value that the Agency refers to as greater than zero µg/ft^2 and may vary based on laboratory or test. While EPA's DLHS do not compel property owners or occupants to evaluate their property for lead-based paint (LBP) hazards nor take control actions (40 CFR 745.61(c)), if an LBP activity such as an abatement is performed, then EPA's regulations set requirements for doing so (40 CFR 745.220(d)). EPA is also proposing to change the dust-lead clearance levels (DLCL), which are the values used to determine when abatement work can be considered complete, from 10 µg/ft^2, 100 µg/ft^2 and 400 µg/ft^2 for floors, window sills, and

window troughs to 3 µg/ft^2, 20 µg/ft^2, and 25 µg/ft^2, respectively. Under this proposal, the DLHS for floors and window sills would not be the same as the DLCL for floors and window sills (*i.e.,* the DLHS and DLCL would be decoupled). Accordingly, dust-lead hazards could remain after an abatement due to the different statutory direction that Congress provided EPA with respect to the DLCL. Additionally, EPA is proposing to change the definition of abatement so that the recommendation for action applies when dust-lead loadings are at or above the DLCL, as well as several other amendments, including revising the definition of target housing to conform with the statute.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. Under the Paperwork Reduction Act (PRA), comments on the information collection provisions are best assured of consideration if the Office of Management and Budget (OMB) receives a copy of your comments on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA-HQ-OPPT-2023-0231, through the Federal eRulemaking Portal at *https://www.regulations.gov*. Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Additional instructions on commenting and visiting the docket, along with more information about dockets generally, is available at *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, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC

20460-0001; telephone number: (202) 564-9004; email address: *brisse.claire@epa.gov*. Hearing- or speech-impaired persons may reach the telephone numbers for the contacts through TTY by calling the toll-free Federal Communications Commission's Telecommunications Relay Service at 711.

For general information contact: The TSCA Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554-1404; email address: *TSCA-Hotline@epa.gov*.

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 or renovations in accordance with 40 CFR 745.226; or if you own, manage, and/or conduct abatement, 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, and 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. You may also be affected by this action if you are a resident of target housing, even if you would not be subject to the proposed requirements of this action. Due to the change in the definition of "target housing," you may also

be affected if you are a firm or individual who must be certified to perform renovations in target housing or child-occupied facilities (COFs) in accordance with 40 CFR part 745, subpart E.

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:

• Building construction (NAICS code 236), *e.g.,* single-family housing construction, multi-family housing construction, residential remodelers.

• Specialty trade contractors (NAICS code 238), *e.g.,* plumbing, heating, and air-conditioning contractors, painting, and wall covering contractors, electrical contractors, finish carpentry contractors, drywall and insulation contractors, siding contractors, tile and terrazzo contractors, glass, and glazing contractors.

• Real estate (NAICS code 531), *e.g.,* lessors of residential buildings and dwellings, residential property managers, and property owners, as well as those property owners that receive assistance through Federal housing programs.

• Child day care services (NAICS code 624410).

• Elementary and secondary schools (NAICS code 611110), *e.g.,* elementary schools with kindergarten classrooms.

• 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).

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

EPA is proposing this rule under the authority of sections 401, 402, 403, 404, and 406 of the Toxic Substances Control Act (TSCA), *15 U.S.C. 2601 et seq.,* as amended 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) and section 237(c) of Title II of Division K of the Consolidated Appropriations Act, 2017 (Pub. L. 115-31, 131 Stat. 789), as well as sections 1004 and 1018 of Title X (42 U.S.C. 4851b, 4852d), as amended by section 237(b) of Title II of Division K of the Consolidated Appropriations Act, 2017.

Regarding the dust-lead hazard standards (DLHS), TSCA section 403 (15 U.S.C. 2683) mandates EPA to identify LBP hazards for purposes of administering Title X and TSCA Title IV. Under TSCA section 401, LBP hazards 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)) and lead-contaminated dust is defined 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)).

As relevant to the dust-lead clearance levels (DLCL), 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's statutory authority for setting the DLCL was laid out differently in Title X and TSCA Title IV than those for the DLHS. As a result, distinct from the DLHS, EPA is further directed, in promulgating the DLCL regulations, to "tak[e] into account reliability, effectiveness, and safety" (15 U.S.C. 2682(a)(1)).

Pertaining to the other amendments presented in Unit IV.F. of this preamble, TSCA section 406 (15 U.S.C. 2686) requires EPA, in consultation with the Secretary of the U.S. Department of Housing and Urban Development (HUD) and with the Secretary of the U.S. Department of Health and Human Services (HHS) to "publish, and from time to time revise, a lead hazard information pamphlet to be used in connection with this subchapter and section 4852d of title 42." TSCA section 406 (15 U.S.C. 2686) also requires EPA's regulations to require any person performing for compensation a renovation of target housing to provide the pamphlet to the owner and occupant prior to commencing the renovation. Additionally, section 1018 of Title X (42 U.S.C. 4852d) mandates that the Lead Warning Statement to be provided in contracts for the purchase or sale of target housing include, among other language, the following text: ". . . The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any **known** lead-based paint hazards" (**emphasis** added). TSCA section 401 (15 U.S.C. 2681(17)) and section 1004 of Title X (42 U.S.C. 4851b), as amended by section 237(b) and (c) of Title II of Division K of the Consolidated Appropriations Act, 2017 (Pub. L. 115-31, 131 Stat. 789), define target housing as "any housing constructed prior to 1978, except housing for the elderly or persons with disabilities or any 0-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing). . . ." In this context, "elderly" refers to 62 years of age or more (40 CFR 745.103).

C. What action is the Agency taking?

In 2019, EPA promulgated a final rule to lower the DLHS to 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills (the 2019 DLHS Rule) (Ref. 2). In 2021, EPA promulgated a final rule to lower the DLCL to 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills (the 2021 DLCL Rule)

(Ref. 3). The 2019 DLHS Rule and the 2021 DLCL Rule continued a long-standing practice of setting the same levels for the DLHS and the DLCL and basing those levels in part on consideration of factors such as laboratory capacity and capabilities.

In keeping with an opinion issued by the U.S. Court of Appeals for the Ninth Circuit in 2021 (described in Unit I.D.) that instructed EPA to consider only health factors when setting the DLHS, EPA is now proposing to change the DLHS from 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills, as established in the 2019 DLHS Rule, to any reportable level of dust-lead analyzed by a NLLAP-recognized laboratory. The Agency refers to this level as greater than zero (GTZ). It is not a specific numeric level set by EPA but rather the numerically reportable level as analyzed by a NLLAP-recognized laboratory, which is sometimes referred to as a "non-numeric" value. However, that term, as used in this document, refers only to the GTZ level and should not be confused with non-numeric standards such as work practice standards. EPA believes GTZ and the standard of "any reportable level" is an appropriate DLHS based on health effects, given there is no identified level of lead in blood that does not cause adverse cognitive impacts in children, and this more protective approach is consistent with the statutory language in TSCA Section 401 that defines what a "LBP hazard" is (*i.e.,* as conditions of LBP and lead-contaminated dust and soil that "would result in adverse human health effects"), and with the results from the Technical Support Document (TSD). There is no evidence of a threshold below which there are not harmful effects from lead exposure, including neurobehavioral and cognitive effects on children (Refs. 4 and 5). The proposed GTZ approach represents a shift in the LBP activities program to a more inclusive DLHS, identifying dust-lead hazards in the context of TSCA Title IV as any condition that causes exposure to lead from lead-contaminated dust in target housing and child-occupied facilities. If finalized as proposed, the GTZ approach will be inclusive of any reportable level of dust-lead and will not distinguish between severe, less severe,

or negligible risks. Additional discussion on GTZ can be found in Unit IV.A.1.

Additionally, EPA is proposing to revise the DLCL, set by the 2021 DLCL Rule, from 10 μg/ft^2 to 3 μg/ft^2 for dust-lead for floors, from 100 μg/ft^2 to 20 μg/ft^2 dust-lead for window sills and from 400 μg/ft^2 to 25 μg/ft^2 dust-lead for window troughs, following a consideration of reliability, effectiveness, and safety, including non-health factors such as laboratory capabilities/capacity and achievability after an abatement. EPA is also requesting comment on an alternative DLCL option of 5 μg/ft^2 dust-lead for floors, 40 μg/ft^2 dust-lead for window sills, and 100 μg/ft^2 for window troughs. If finalized as proposed, the DLHS for floors and window sills would not be the same as the DLCL for floors and window sills (*i.e.,* the DLHS and DLCL would be decoupled), acknowledging the different statutory direction that Congress provided EPA with respect to the DLCL. Although EPA has in the past promulgated rules setting the DLHS and DLCL to be the same values, an opinion by the U.S. Court of Appeals for the Ninth Circuit in May 2021 instructed EPA to consider only health factors when setting the DLHS and affirmed that EPA could consider non-health factors (*e.g.,* laboratory capabilities/capacity, and achievability after an abatement) when setting the DLCL.

The proposed DLCL would not impose retroactive requirements on regulated entities that have previously performed post-abatement dust wipe testing using the current DLCL of 10 μg/ft^2 for floors, 100 μg/ft^2 for window sills, and 400 μg/ft^2 for troughs, or the previous DLCL of 40 μg/ft^2 for floors, 250 μg/ft^2 for window sills, and 400 μg/ft^2 for troughs (Ref. 6). They would apply to post-abatement clearance sampling and analysis conducted after the compliance date for that portion of the regulations (*i.e.,* one year after publication of the final rule). Additionally, while EPA's DLHS do not compel property owners or occupants to evaluate their property for LBP hazards or take control actions (40 CFR 745.61(c)), if an LBP activity such as an abatement is performed, then EPA's regulations set requirements for doing so (40 CFR 745.220(d)). This

rule, if finalized, would change the LBP activities regulations' definition of abatement to be any measure or set of measures designed to eliminate LBP hazards, in the case of dust-lead hazards, to a level below the new proposed DLCL, and would require an additional statement in the final abatement reports that states that LBP hazards (particularly dust-lead hazards) remain after an abatement if clearance testing has found that they do remain.

EPA is also proposing several other amendments, including: conforming changes to the definition of "target housing;" conforming the age requirements throughout the LBP regulations to under six years old; requiring that application payments, applications, and notices be submitted electronically; updating the Disclosure Rule warning statement (Ref. 7); as well as correcting an incorrect reference to the lead-hazard control pamphlet; and deleting obsolete regulatory text where language is out of date or no longer applicable. EPA is also considering adding incorporations by reference of two voluntary consensus standards already included in a relevant definition.

EPA is requesting comment on the changes described in this proposal, in particular the reliability, effectiveness, and safety of the primary and alternative DLCL options, and all other amendments discussed in Unit IV.

D. Why is the Agency taking this action?

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. 4 and 8). Because of this, reducing childhood lead exposure is a priority for both EPA and the Federal Government. 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* (Federal Lead Action Plan) (Ref. 9) 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 Federal Lead Action Plan is helping Federal agencies to work strategically and collaboratively to reduce exposure to lead and improve children's health. On October 27, 2022, EPA released the *Strategy to Reduce Lead Exposures and Disparities in U.S. Communities* (Lead Strategy). The Lead Strategy lays out Agency and government-wide approaches to strengthen public health protections, address legacy lead contamination for communities with the greatest exposures and promote environmental justice. It describes how the Agency will utilize the full suite of EPA authorities, expertise, and resources to continue to reduce lead exposure. This proposed rule, which revises the DLHS and the DLCL (among other proposed regulatory changes), is an action that EPA committed to undertake in the Lead Strategy (Ref. 10).

In 2019, EPA re-evaluated the DLHS (Ref. 2). Based on that evaluation, the final rule revised the DLHS from 40 $\mu g/ft^2$ and 250 $\mu g/ft^2$ to 10 $\mu g/ft^2$ and 100 $\mu g/ft^2$ for floors and window sills, respectively. However, public health advocates filed a lawsuit in the U.S. Court of Appeals for the Ninth Circuit (the Court) seeking judicial review of the 2019 DLHS Rule as insufficiently protective. On May 14, 2021, the Court issued its opinion on the 2019 DLHS Rule. The Court held that "the 2019 Rule lowers the lead hazard level but not to a level sufficient to protect health as Congress has directed, because the EPA has looked to factors in addition to health." *A Cmty. Voice v. U.S. Env't Prot. Agency*, 997 F.3d 983, 992 (9th Cir. 2021). The remedy the Court granted was a remand without vacatur (of the lowered DLHS), and the Court instructed EPA to consider only health factors when setting the DLHS (Ref. 11). This proposed rule is being issued to reconsider the DLHS and DLCL in light of the 2021 Court Opinion, which directed EPA to "reconsider the DLHS . . . [and] the dust-lead clearance levels . . . in the same proceeding" and affirmed that EPA could consider non-health factors when setting the DLCL. *A*

Cmty. Voice, 997 F.3d at 995. This 2021 Court Opinion led EPA to undertake a major shift from its approach in the 2019 and 2021 final rules to the residential LBP hazard control and the LBP activities program because the Opinion found that EPA did not have the authority, when setting the DLHS, to consider non-health factors. Consistent with the 2021 Court Opinion, EPA is proposing to revise the DLHS in this rulemaking based on only health considerations. See Unit IV for more information on the proposed revisions to the DLHS and DLCL.

Additionally, Executive Order 13990, entitled *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, directed agencies to, among other things, review certain regulations promulgated between January 20, 2017, and January 20, 2021 (Ref. 12). The 2019 DLHS and 2021 DLCL final rules were among those specifically designated for review in accordance with Executive Order 13990 (Ref. 13). As a result, the Agency was tasked with immediately considering whether the final rules were aligned with the identified national objectives from Executive Order 13990, such as listening to the science, improving public health and protecting our environment, and limiting exposure to dangerous chemicals. As a result of its own review in response to Executive Order 13990 and the 2021 Court Opinion, EPA has reconsidered the 2019 DLHS and 2021 DLCL final rules. If finalized as proposed, EPA believes this rule will result in a reduction of exposure to dust-lead (beyond the 2019 and 2021 rules).

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

EPA has prepared an Economic Analysis (EA), which is available in the docket, of the potential incremental impacts associated with this rulemaking (Ref. 14). The analysis focused specifically on the subset of target housing and child-occupied facilities affected by this rule. Although the DLHS and DLCL do not compel specific actions under the LBP Activities Rule to address identified LBP hazards, the DLHS and DLCL are directly incorporated by reference into

certain requirements mandated by HUD in the housing subject to HUD's Lead Safe Housing Rule (LSHR). As such, the analysis estimates incremental costs and benefits for two categories of events: (1) where dust-wipe testing occurs to comply with HUD's Lead-Safe Housing Rule and (2) where dust wipe testing occurs in response to blood lead testing that detects a blood lead level (BLL) above state or Federal action levels. The following is a brief outline of the estimated incremental impacts of this rulemaking.

1. Benefits.

This rule would result in reduced exposure to lead, yielding benefits to residents of pre-1978 housing from avoided adverse health effects. For the subset of adverse health effects that were quantified (*i.e.,* the effect of avoided IQ decreases on lifetime earnings as an indicator of improved cognitive function), the estimated monetized and annualized benefits are $1.069 billion to $4.684 billion per year using a 3% discount rate, and $231 million to $1.013 billion per year using a 7% discount rate. These benefits calculations are sensitive to the discount rate used and the range in the estimated number of lead hazard reduction events triggered by children with tested BLLs above state or Federal action levels. With respect to the latter, the wide range is driven largely by uncertainty about the BLLs at which action might be taken, since in many states the action level is currently higher than the Federal blood lead reference value. Additionally, there are unquantified benefits. These additional benefits include avoided adverse health effects in children, including decreased attention-related behavioral problems, decreased cognitive performance, reduced post-natal growth, delayed puberty, and decreased kidney function. These additional unquantified benefits also include avoided adverse health effects in adults, including cardiovascular mortality and impacts on reproductive function and outcomes.

2. Costs.

This rule is estimated to result in quantified costs of $536 million to $784 million per year. These costs are expected to accrue to landlords, owners and operators of child-occupied facilities, residential remodelers, and abatement firms. Real estate agents and brokers may incur negligible costs related to the target housing definition amendment. The cost calculations are highly sensitive to the range in the estimated number of lead hazard reduction events triggered by children with elevated BLLs. In the events affected by this rule, incremental costs can be incurred for specialized cleaning used to reduce dust-lead loadings (*i.e.,* quantity of lead per unit of surface area) to below the clearance levels. In some instances, floors will also be sealed, overlaid, or replaced, or window sills will be sealed or repainted. Additional costs may result from the retesting of lead dust levels. Because of the lower laboratory reporting limits necessary for testing lead dust levels under this rule, incremental laboratory test costs are likely to increase. Additional potential impacts to HUD programs and their beneficiaries are discussed in Unit V.

3. Small Entity Impacts.

This rule would directly impact approximately 39,000 small businesses of which 87% to 91% have cost impacts less than 1% of revenues, 9% to 12% have impacts between 1% and 3%, and 1% have impacts greater than 3% of revenues. These small entities include landlords, owners and operators of child-occupied facilities, residential remodelers, abatement firms, and real estate agents and brokers.

4. Environmental Justice.

EPA is proposing this rulemaking under TSCA Title IV, as explained in Unit I.B. This rule would address lead exposure, as discussed throughout this proposal. EPA prepared an Economic Impact Analysis for this rulemaking that assessed whether there are disproportionate effects to communities from lead exposure. EPA identified an existing concern: children living in communities with environmental justice concerns have significantly higher BLLs than other

children (Ref. 15). This rule addresses health concerns for all affected communities, including those identified with environmental justice concerns. As identified in EPA's Economic Impact Analysis, this rule would reduce identified disproportionate impacts to communities with environmental justice concerns. The primary and alternative regulatory options under consideration are expected to affect housing units receiving Federal assistance under HUD's LSHR and housing units with a child with a blood lead level above a Federal, state, or local blood lead threshold. Because, in general, only lower income households are eligible to receive Federal housing assistance, the occupants of housing subject to the LSHR (and thus benefitting from the proposed regulation) are considered an overburdened community. Additional details on any identified disproportionate impacts to communities with environmental justice concerns are contained in Unit IX.J. of this preamble and Section 8.6 of the economic impact analysis.

5. Children's Environmental Health.

Consistent with Executive Order 13045, EPA evaluated the health and safety effects of this action on children. Children are disproportionately impacted by lead exposure. Children can have greater exposures than adults because they crawl on floors and often put their hands and other objects (that can have lead from dust on them) into their mouths and are more susceptible than adults to adverse health effects due to their rapid anatomical growth and physiological differences in lead uptake and metabolism. This rule protects children from these disproportionate environmental health risks.

This action is subject to EPA's Policy on Children's Health (*https://www.epa.gov/children/childrens-health-policy-and-plan*) because the rule has considerations for human health and early life exposures. Accordingly, we have evaluated the environmental health or safety effects of dust-lead exposure on children. The results of this evaluation are contained in the EA and the TSD, where the health impacts of lead exposure on children are discussed more fully

(Refs. 14 and 16). The documents referenced above are available in the public docket for this action.

The primary purpose of this rule is to reduce exposure to dust-lead hazards in target housing where children reside and in child-occupied facilities. EPA's analysis indicates that there will be approximately 217,432 to 436,642 children under age six per year affected by the rule (Ref. 14). Proposing GTZ for the DLHS is a more protective approach, supported by the modeled results from the TSD and that the current state of the science does not support identifying a threshold of dust-lead exposure below which there would be no adverse human health effects. Additionally, the proposed DLCL of 3/20/25 $\mu g/ft^2$ for floors, window sills and troughs respectively, is the lowest option under consideration and according to the TSD it is estimated to be the most protective of children's IQ when compared to the other options evaluated for this proposed rulemaking.

6. Effects on State, Local, and Tribal Governments.

EPA has concluded that this action has federalism implications because it imposes substantial direct compliance costs on public housing authorities that state or local governments may be obligated to offset. These compliance costs result from application of EPA's standards in HUD's LSHR. While some HUD funding for LBP projects exists, the Federal Government may not provide the funds necessary to pay the entirety of the costs. These costs to public housing authorities – estimated at $143 million for the primary option – cover additional lead hazard reduction activities, cleaning, and dust-lead testing to ensure that public housing units are in compliance with the LSHR. EPA also estimates annual compliance costs of approximately $904 thousand to public school districts that operate a child-occupied facility built before 1978. Additionally, states that have authorized LBP Activities programs must demonstrate that they have DLHS and DLCL at least as protective as the levels at 40 CFR 745.65 and 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 DLHS and DLCL they can relinquish their authorization. In the absence of a state authorization, EPA will administer these requirements. EPA provides a preliminary federalism summary impact statement, which is found in Unit IX.E.

Additionally, this action contains a Federal mandate under the Unfunded Mandates Reform Act (UMRA), 2 U.S.C. 1531-1538, that may result in expenditures of $100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. Accordingly, EPA has prepared a written statement as required under section 202 of UMRA, which is summarized in Unit IX.D. and included in the public docket (Ref. 17). This action is not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that exceed the inflation-adjusted cost significance threshold or uniquely affect small governments.

This action would not have substantial direct effects (as specified in Executive Order 13175) on one or more federally recognized Indian Tribes. This action neither creates an obligation for Tribes to administer LBP Activities programs nor alters EPA's authority to administer these programs. However, through a live consultation on this rulemaking the Agency will solicit input from Tribal officials from the four Indian Tribes currently with authorized programs during the public comment period. EPA will ensure that the consultation materials are accessible to Tribal officials so that they may view it later as they consider submitting feedback during the public comment period. The consultation will also be open to any Tribal officials who would like to participate. If a Tribal official is interested in attending the consultation on behalf of an Indian Tribe, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

Additionally, this rule would not have any significant or unique effects on small governments. See Unit IX. for more information on the Executive Orders.

II. Background

A. Health Effects of Lead

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. 4, 5, and 8). Ingestion of lead-contaminated dust is a major contributor to BLLs in children, particularly those who reside in homes built prior to 1978 (Refs. 17 and 18). Throughout early childhood, floor dust contamination is a source of lead exposure with the potential to affect children's BLLs (Ref. 20). Infants, toddlers, and young children are more highly exposed to lead through dust on floors and other surfaces at home and in child-care facilities than older children and adults because they crawl on floors and often put their hands and other objects that can have lead from dust on them into their mouths. This is the main pathway of childhood exposure to lead (Ref. 4).

Lead exposure in young children can cause neurocognitive decrements, such as reduction in intelligence as measured by IQ. Depending on the exposure and other factors, the effect may persist into adolescence and adulthood (Refs. 4, 8 and 20). In children, lead exposure can also cause adverse developmental, neurobehavioral, hematological, and immunological effects, as well as sensory effects such as hearing loss (Refs. 4, 5, and 8). In adults, lead exposure can cause adverse cardiovascular, hematological, renal, neurocognitive, neurobehavioral, immunological, and reproductive effects (Refs. 4, 5, and 8). Lead is also classified as "reasonably anticipated to be a human carcinogen by the National Toxicology Program (NTP) (Ref. 21) and the EPA has concluded that lead exposure has a "likely causal relationship" with carcinogenesis (Ref. 4). In addition to the harmful effects experienced by the mother, lead can be transferred to the fetus

during pregnancy and there is evidence that suggests adverse effects on the developing fetus including inhibited fetal growth (Refs. 4 and 5). Given young children's disproportionate exposure to dust-lead in target housing, this rulemaking principally considers their exposure and associated adverse health effects.

The best available science informs EPA's understanding of the relationships between exposures to dust-lead, BLLs, and adverse human health effects. These relationships are summarized in the Integrated Science Assessment (ISA) for Lead, finalized in June 2013 (known as the 2013 Lead ISA) (Ref. 4), and the Agency for Toxic Substances and Disease Registry (ATSDR) Toxicological Profile for Lead, which was released by the Department of Health and Human Services in August 2020 ("ATSDR Tox Profile for Lead") (Ref. 8). The 2013 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. 4). The 2013 Lead ISA, as well as NIEHS' 2012 National Toxicology Program (NTP) monograph on lead, summarize the scientific evidence regarding potential health effects associated with low-level lead exposure and acknowledge uncertainties in the data (Refs. 4 and 5). Based on the epidemiological studies and the evidence available at that time, the EPA stated in the 2013 ISA that harmful effects on children's cognition as measured by IQ were observed in groups with mean BLLs as low as 2 μg/dL, and further that "A threshold for cognitive function decrements is not discernable from the available evidence (i.e., examination of early childhood blood Pb or concurrent blood Pb in the range of < 1 to 10 μg/dL)." (Ref. 4). Additionally, the Federal Lead Action Plan, which was written by the President's Task Force on Environmental Health Risks and Safety Risks to Children, consisting of 17 Federal departments and offices, states that "Lead exposure to children can result from multiple sources and can cause irreversible and life-long health effects. No safe blood lead level in children has been identified." (Refs. 9 and 22).

For further information regarding lead and its health effects, see the TSD for this rulemaking and the 2013 ISA for lead (Refs. 4 and 16).

B. Federal Actions to Reduce Lead Exposures

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"), codified primarily at 42 U.S.C. 4822 and 4851 *et seq.* (Ref. 1), was a Federal response to the national crisis of childhood lead exposure and assigned responsibilities to Federal agencies with the overall goal of developing a "national strategy to build the infrastructure necessary to eliminate lead-based paint hazards in all housing as expeditiously as possible" (42 U.S.C. 4851(a)(1)). Subtitle B of Title X (106 Stat. 3912 through 3924), addressing lead exposure reduction, added Title IV to TSCA (codified at 15 U.S.C. 2681 *et seq*.) (Ref. 23).

Since the establishment of Title X, EPA and HUD have promulgated both joint and separate regulatory actions in an effort to eliminate LBP hazards. Those actions include requirements for disclosure of known LBP or any known LBP hazards (Ref. 7), training and certification requirements for contractors performing LBP activities (Ref. 24), the establishment of standards that identify lead-based paint hazards and post-abatement clearance levels (*i.e.,* the DLHS and DLCL) (Refs. 2, 3 and 6), regulations covering renovation or remodeling activities (Refs. 25, 26 and 27), provisions for interested states, territories, and Tribes to apply for and receive authorization to administer their own LBP Activities and renovation, repair and painting (RRP) programs, and requirements to control LBP and LBP hazards in federally-assisted target housing (Ref. 28). Additional description of and background on Federal actions to reduce lead exposure to can be found in the 2021 DLCL rulemaking (Ref. 3).

In addition, EPA has developed a Lead Strategy to lay out an all-of-EPA plan to strengthen public health protections and address legacy lead contamination for communities with

the greatest exposures and promote environmental justice (*https://www.epa.gov/lead/final-strategy-reduce-lead-exposures-and-disparities-us-communities*). EPA plans to continue its work to equally protect people of all races, ethnic groups, income levels, disabilities, and life stages, including young children and pregnant women, who are the most vulnerable to the toxic effects of lead. The proposed actions in this notice are part of those efforts, as dust-lead from lead-based paint remains one of the leading causes of lead exposure in the United States (Ref. 10).

C. Applicability and Uses of DLHS and DLCL

The DLHS and DLCL reconsidered in this regulation support EPA's lead-based paint (LBP) activities program (*i.e.,* inspections, risk assessments, and abatements) and disclosure program, both of which apply to target housing (*i.e.,* most pre-1978 housing) and COFs (pre-1978 non-residential properties where under the current regulation, children 6 years of age or under spend a significant amount of time such as daycare centers and kindergartens) (codified at 40 CFR part 745, subpart L). The statutory definition of target housing was amended by Congress in 2017, and EPA is planning to make the necessary conforming regulatory changes, including changing the age to under six years of age, within this rulemaking; see Unit IV.F.1. for more information. Apart from COFs, no other public or commercial buildings are covered by this proposal.

The DLHS and DLCL are incorporated into requirements for risk assessment and post-abatement work. When conducted, LBP activities must be performed by a certified individual or firm (40 CFR 745.220) in accordance with the work practices outlined in the 1996 LBP Activities Rule (40 CFR 745.227). EPA administers the LBP activities program only where states (including the District of Columbia and the Commonwealth of Puerto Rico), territories, or Tribes are not authorized by EPA to operate their own lead abatement programs (see 40 CFR part 745, Subpart Q). Currently the states in which the LBP program is administered by EPA are

Alaska, Arizona, Florida, Idaho, Montana, Nevada, New Mexico, New York, South Carolina, South Dakota, and Wyoming. In addition, EPA administers the LBP program in the territories of American Samoa, Guam, Northern Marianas, and the U.S. Virgin Islands, as well as most Tribal Lands. All other states have EPA-authorized LBP programs. Additionally, the Cherokee Nation, Upper Sioux Community, Lower Sioux Indian Community, and the Bois Forte Band of Chippewa have EPA-authorized LBP programs.

To administer the disclosure program, EPA and HUD jointly developed regulations (known as the Disclosure Rule under section 1018 of Title X (42 U.S.C. 4852d)) requiring a seller or lessor of most pre-1978 housing to disclose the presence of any known LBP and/or LBP hazards, such as soil-lead hazards or dust-lead hazards, to the purchaser or lessee (24 CFR part 35, subpart A; 40 CFR part 745, subpart F). Under these regulations, the seller or lessor also must provide the purchaser or lessee any available records or reports "pertaining to" LBP and/or LBP hazards (40 CFR 745.107(a)(4); 24 CFR 35.88(a)(4)). Leases of target housing are exempt from disclosure requirements in limited circumstances, such as where the housing has been found to be LBP free by a certified inspector (24 CFR 35.82; 40 CFR 745.101). For more information on how the DLHS and DLCL revisions impact various EPA and HUD programs, see Unit V.A. and Unit V.B.

1. Dust-lead hazard standards.

The DLHS support and implement major provisions of TSCA Title IV and provide the basis for risk assessors to determine whether dust-lead hazards are present during a risk assessment or a lead hazard screen. A risk assessment may be required by the LSHR where dust wipe testing occurs to comply with the LSHR (*e.g.,* for certain properties receiving Federal assistance) or by other law or regulation where dust-lead testing occurs in response to the discovery of a child with a BLL that exceeds a Federal, state, or local threshold. Additional

information on the LSHR and the subparts which require risk evaluation is discussed in the EA (Ref. 14). 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, which includes both a visual assessment and a collection of environmental samples. The environmental samples include, among other things, dust wipe samples (taken using documented methodologies as defined in 40 CFR 745.227(a)(3)) from floors and window sills. Those samples are required to be analyzed by a laboratory that is recognized under NLLAP, which is an EPA program that defines the minimum requirements and abilities that laboratories must meet to attain EPA recognition as an accredited testing laboratory (the standards for the program are laid out in the Laboratory Quality System Requirements) (Ref. 29). A risk assessor compares the results of the dust wipe samples to the current DLHS. If the dust-lead loadings from the samples are at or above the applicable DLHS, then a dust-lead hazard is present (40 CFR 745.227(d)).

Ultimately, the risk assessor prepares a risk assessment report for the property owner or manager, which lists any LBP hazards (including a dust-lead hazard) that were found and includes any recommendations for next steps, such as acceptable options for controlling the hazards via interim controls and/or abatement. These options are intended to allow the property owner to make an informed decision about what actions to take to protect the health of current and future residents. Under EPA's rule, a risk assessment/risk assessment report does not compel or require action; rather it simply provides property owners with recommendations as appropriate (40 CFR 745.227(d)).

A lead hazard screen also includes a visual inspection and collection of environmental samples, although it is not as comprehensive as a risk assessment or conducted as often. A lead hazard screen may be used to determine if a full risk assessment is necessary. During a lead

hazard screen, a risk assessor checks for deteriorated LBP and collects two composite dust samples (in residential dwellings), one from floors and one from window sills (more composite dust samples are required in multi-family dwellings or COFs). Samples are taken using documented methodologies. The risk assessor prepares a lead hazard screen report but is not required to include determinations about the LBP hazards or recommendations for interim controls and/or abatement but could include information on whether a follow-up risk assessment is warranted (40 CFR 745.227(c)).

Both risk assessments and lead hazard screens can only be performed by risk assessors certified according to the procedures in 40 CFR 745.226.

2. Dust-lead clearance levels.

The DLCL are incorporated into the post-abatement work practices outlined in the LBP Activities Rule and represent "the amount of lead in dust on a surface following completion of an abatement activity" (40 CFR 745.227*,* 745.223) (Ref. 24). 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). Abatement and/or interim controls could be recommended in a risk assessment report to inform the property owner about potential future action(s) they could take. 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. An NLLAP-recognized laboratory must analyze the dust wipe samples and a risk assessor or inspector must compare the results from window sills, floors, and window troughs to the appropriate DLCL.

Every post-abatement sample must test below the DLCL in order to fulfill the post-abatement work practices of the LBP Activities Rule. If a single sample is equal to or greater than the corresponding DLCL, then the abatement fails clearance and the components represented by the failing sample must be recleaned and retested (40 CFR 745.227(e)(8)). After all dust wipe samples show dust-lead loadings below the DLCL, an abatement report is prepared (in accordance with the requirements in 40 CFR 745.227(e)(10)), 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 for no fewer than three years (40 CFR 745.227(i)).

D. Limitations of DLHS and DLCL

The DLHS are intended to identify dust-lead hazards during risk assessments, while the DLCL are part of post-abatement work practices, ensuring that clearance is achieved. Both regulatory values have several key limitations. Since the DLHS and DLCL were established and revised for the purposes of Title X and TSCA Title IV only, they do not apply to housing and COFs built during or after 1978, nor do they apply to pre-1978 housing that does not meet the definition of target housing (40 CFR 745.61 and 745.223). If one chooses to apply the DLHS or the DLCL to situations beyond the scope of Title X and TSCA Title IV, care must be taken to ensure that the action taken in such settings is appropriate, and that the action is adequate to provide any necessary protection for children or other individuals exposed.

These standards cannot be used to identify that housing is free from all risks from

exposure to lead including but not limited to dust-lead, soil-lead, or lead in drinking water, as risks are dependent on many factors. For instance, the physical condition of a property that contains LBP may change over time, resulting in an increase in risk. Plus, EPA's DLHS do not require the owners of properties covered by this proposal to evaluate their properties for the presence of dust-lead hazards, nor to take action if dust-lead hazards are identified (although these standards can be incorporated into certain requirements mandated by state, Tribal and local governments, as well as other Federal agencies). Additionally, consistent with the 2021 Court Opinion which instructed EPA to consider only health factors when setting the DLHS and affirmed that EPA could consider other factors (*i.e.,* reliability, effectiveness, and safety) when setting the DLCL, EPA is proposing that the DLCL would be greater than the DLHS based on its consideration of other factors (*e.g.,* laboratory capabilities/capacity, and achievability after an abatement). As a result, and given the change in the definition of abatement discussed in Unit IV.D. of this preamble, there may be dust-lead left behind that meets the definition of an LBP hazard after an abatement is considered complete, due to dust-lead levels that are reportable but are less than the proposed DLCL. Also, as has been the case historically, achieving the DLCL after an abatement does not mean that the home is free from all exposure to lead, including from other media such as soil-lead or lead in drinking water. EPA will continue coordinating with other Federal agencies to encourage best practices for owners and occupants of post-abatement properties to conduct ongoing maintenance that will help to continue to lower dust-lead levels, as well as work collectively as an Agency to reduce overall lead exposure through all pathways.

E. Litigation Overview

As previously discussed, EPA revised the DLHS to 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills in a final rule in July 2019 (Ref. 2). Later that same year, multiple organizations, including 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, petitioned the U.S. Court of Appeals for the Ninth Circuit to review the 2019 DLHS Rule (Ref. 30).

In response to the Petition for Review, on May 14, 2021, the Court remanded the 2019 DLHS Rule without vacatur and directed EPA to revisit it in conjunction with a reconsideration of the DLCL (Ref. 11). In its opinion accompanying the remand, the Court instructed EPA to consider only health factors when setting the DLHS and affirmed that EPA could continue to consider non-health factors when setting the DLCL. Specifically, the 2021 Court Opinion held that EPA's 2019 DLHS Rule "looked to other factors, including feasibility and efficacy," when setting the DLHS, instead of "set[ting] the hazard standards at the point at which the level [of] dust-lead creates hazards to human health" *A Cmty. Voice*, 997 F.3d at 989 and 990. The Court also held that "TSCA [Title] IV gives the EPA latitude to consider 'reliability, effectiveness, and safety'" when promulgating regulations "[w]ith respect to implementation, including abatement," thus enabling consideration of practicability when setting the DLCL. *Id.* at 995. The Court explained that "[t]his is in line with the overall statutory scheme that differentiates between identification of hazards and implementation of remedial measures." *Id.* The Court also explained elsewhere in the 2021 Court Opinion that, if an agency relies on uncertainty for regulatory action or inaction, the agency must "provide reasons why uncertainty justifies their actions" *Id.* at 993. Consistent with the 2021 Court Opinion, EPA is proposing to revise the DLHS in this rulemaking based only on health considerations.

In addition, the Court held that EPA violated TSCA Title IV by leaving the soil-lead hazard standards (SLHS) at the values set in 2001, reasoning that EPA had an ongoing duty to update the standards. The SLHS identify lead-contaminated soil at target housing and pre-1978

COFs that would result in adverse human health effects. Soils that contain lead at levels determined to be hazardous to human health are considered contaminated. Lead inspectors, risk assessors, and abatement professionals use the SLHS to determine if soil-lead hazards are present and to inform options for reducing risk. Due to resource considerations and to act as expeditiously as possible to revise the DLHS and DLCL, EPA will address the SLHS in a separate rulemaking. (For more background on resource constraints under TSCA, please see Congressional testimony from EPA leadership (Refs. 31 and 32)). EPA listed this SLHS rulemaking in the Spring 2023 Unified Agenda of Regulatory and Deregulatory Actions under RIN 2070-AL12 as a long-term action, indicating the Agency's commitment to meet the statutory requirement of addressing the SLHS revision but indicating that the Agency does not expect to propose this action in the next 12 months (Ref. 33). EPA has however, initiated work on the SLHS rulemaking and, as this rulemaking on the DLHS and DLCL progresses and as resources allow, EPA intends to work further on the technical analysis for SLHS in preparation for the SLHS rulemaking. The Agency also intends to build off of the technical analysis utilized for this rulemaking for the SLHS rulemaking, mirroring where possible so as to reduce resource constraints and considerations.

The Court also held that, to be consistent with its health-only interpretation of an LBP hazard (*i.e.,* soil, dust), the definition of LBP must "encompass all levels of lead in paint that lead to adverse human health effects." *A Cmty. Voice*, 997 F.3d at 992. The Court stated that "EPA ha[d] not explained why uncertainty justifies its decision to leave the definition of lead-paint as-is." *Id.* at 993. The Court also noted that much knowledge has been gained since Congress adopted the 1992 definition and that the U.S. Consumer Product Safety Commission (CPSC) has adopted a regulation that bans the production of paint with lead content of over 0.009 percent by weight. The CPSC standard, however, applies to *new* paint while TSCA is concerned with the

hazards posed by *existing* paint in pre-1978 structures and different information and considerations are relevant in that context. The definition of LBP (1.0 milligrams per square centimeter or more than 0.5 percent by weight) is incorporated throughout the LBP regulations, and application of this definition is central to how the LBP program functions. In the 2019 DLHS Rule, EPA discussed the Agency's need for more information to establish a statistically valid causal relationship between concentrations of lead at low levels in paint and dust lead loadings that cause lead exposure. Additionally, information is still needed to quantify the direct ingestion of paint through consumption of paint chips or through teething on painted surfaces. Finally, it is important to understand how capabilities among various LBP testing technologies would be affected under a possible revision to the definition, such as field portable X-ray fluorescent devices which are the primary tools for lead inspections and risk assessments. They are calibrated to the current definition of LBP, and so EPA needs to fully understand the repercussions such a revision to the definition may have on these portable field technologies to ensure the technological feasibility.

EPA plans to sponsor a technical workshop to obtain additional information needed to address data gaps related to the definition of LBP that were outlined in the 2019 DLHS Rule. In preparation for the LBP technical workshop, the Agency performed a literature review for sources relevant to the definition of LBP, consulted other Federal agencies, and refreshed materials done for the 2019 rulemaking. With this information the data gaps have been refined to add further specificity, which allows for a more targeted scope for both continued investigation and for the technical workshop. The more specific data gaps that EPA continues to investigate include empirical data on the relationship between low levels of lead in paint and dust-lead, as well as data on the common exposure scenarios that may inform this relationship (for example, dust-lead generation during a renovation scenario versus slowly deteriorating paint). Currently

the available empirical data and modeling approaches for estimating the relationship between lead content in on-the-wall paint and lead in related environmental media, including dust, are applicable at or above the current LBP definition. EPA believes that to use the available empirical data and modeling approaches to estimate dust-lead loadings at low levels of lead in paint (particularly levels that are lower than the current definition by an order of magnitude or more) will introduce significant uncertainty to any estimations. Data and models applicable to lower levels of lead in paint are needed to develop an approach to estimate dust-lead from low levels of lead in paint, which will allow EPA to estimate incremental blood lead changes and associated health effect changes that may occur due to low levels of lead in paint. For the ingestion exposure pathway, EPA is exploring possible modeling solutions as well as seeking quantitative measures of ingestion and exposure (such as data on duration and frequency of consumption, and common paint chip characteristics). Studies on this subject have documented this behavior as a risk factor for exposure to lead from LBP, however the studies have not provided quantitative estimates of paint ingestion, which are needed to quantify exposure. Lastly, EPA continues to investigate constraints to the field measurement options for low levels of lead in paint. Different technologies have different limitations in accuracy, processing time, detection limits, accessibility, and destructiveness among other factors. These practical considerations are important to consider in understanding how a change in the definition may affect the ability of the regulated community to use certain technologies, potentially impacting the residents of target housing and occupants of COFs. On top of these data gaps, EPA is exploring the relationship between the two different units used in the current definition (milligram per square centimeter and percent by weight) to inform whether and how to develop a conversion between the two. The search for relevant information to develop the conversion and exploration of the uncertainty involved with such a conversion is underway. EPA intends the technical workshop to explore

these issues and position the Agency to reconsider the definition of LBP in light of the most current scientific information. EPA will collaborate with HUD on the technical workshop regarding these lead-based paint definition data needs.

Similar to the SLHS rulemaking, due to resource considerations and EPA's interest in acting as expeditiously as possible to revise the DLHS and DLCL and to hold the aforementioned LBP technical workshop, EPA will address the definition of lead-based paint in a separate rulemaking. EPA has listed this rulemaking on the definition of LBP in the Spring 2023 Unified Agenda of Regulatory and Deregulatory Actions under RIN 2070-AL11 as a long-term action, indicating the Agency's commitment to meet the statutory requirement of addressing the definition of LBP revision but that the Agency does not expect to propose this action in the next 12 months (Ref. 33).

Rulemakings such as those necessary for revisions to SLHS and the definition of LBP are complex, highly resource-intensive activities that usually occur as part of options development and decision-making. A rulemaking's development generally entails scientific, economic, legal, and other technical analyses. For many rulemakings, this includes research and data gathering, which itself can sometimes necessitate exercising other information collection tools and following appropriate procedural requirements (*e.g.,* Paperwork Reduction Act). To develop a rulemaking, EPA also often consults with governments and key stakeholders. Federal law may require such consultations based on anticipated regulatory impacts (*e.g.,* the Unfunded Mandates Reform Act and the Regulatory Flexibility Act). Additionally, various executive orders may also require the Agency to engage in such consultations.

A rulemaking package often requires the development of complex supporting documents including an EA and a TSD, similar to those included alongside this reconsideration rulemaking (Refs. 14 and 16). A complete TSD includes several components which may require internal and

external stakeholder dialogue and scientific peer review, including model and input data revisions, health and exposure metrics of interest, environmental fate and exposure mechanisms for either soil or the definition of LBP, characterization of uncertainties in modeling, and literature reviews (which have not been done for soil since before the 2001 LBP Rule was finalized). If existing models and analytical methods are insufficient to conduct the analysis to support the rulemaking, then they must be developed as part of the technical work done in support of the rulemaking effort. Developing new models can take a considerable length of time and novel analyses may require peer-review, further extending the rulemaking timeline. The magnitude and effort of an SLHS TSD would mirror previous DLHS and DLCL TSDs; see the technical documents prepared in support of the 2019 DLHS Final Rule, the 2021 DLCL Final Rule, or this reconsideration rulemaking (Refs. 16, 19, and 34).

An EA includes various components such as a description of the need for Federal regulation; a profile of affected industries and populations; an overview of existing Federal, state and local regulations; a specification of the baseline state of the world and estimate of the number of events affected by the regulation; thorough analysis on the consequences of regulatory policy being considered and how regulated entities will respond; quantification and monetization of the regulation's costs, benefits, and net benefits; a description of unquantified or qualitative benefit descriptions; and an assessment of uncertainty surrounding estimates. An EA also includes various additional analyses related to statutory compliance and Executive orders, including but not limited to RFA/SBREFA (Small Business Impacts), UMRA (Unfunded State, Local, or Tribal Mandates), PRA (Paperwork Reduction), Executive Order 12898 (Environmental Justice), Executive Order 13045 (Protection of Children), Executive Order 13132 (Federalism), Executive Order 13175 (Coordination with Tribal Governments), and Executive Order 13211 (Energy Effects). A rulemaking also involves preparing *Federal Register*

documents to present, generally, the preamble to and regulatory text of the proposed and final rule. Such published documents reflect the culmination of the development and review of the complex supporting documents and the resulting decision-making, which includes internal steps at the Agency to reach office wide agreement, as well as external to the Agency, such as holding potential public consultations, completing interagency review and convening a Small Business Advocacy Review (SBAR) Panel as necessary. These processes can also take many months or years. The proposed and final rules also present statutory and Executive Order review analyses. The Agency may also need to publish *Federal Register* documents to extend or reopen public comment periods – or even to announce new public comment periods related to a Notice of Data Availability or a supplemental Notice of Proposed Rulemaking – should new information become available, or the Agency determine that it needs to alter its proposal before taking final action.

The current rulemaking on the DLHS and DLCL is one more step toward complete implementation of TSCA Title IV. Given existing resource constraints and the additional complications for the SLHS and the definition of LBP discussed earlier in this section, EPA does not believe that either the SLHS or the definition of LBP could have been reconsidered on this current rulemaking's timeline. Instead, EPA will reconsider the SLHS and the definition of LBP as important next steps. Courts "have recognized that, under the 'pragmatic' one-step-at-a-time doctrine, 'agencies have great discretion to treat a problem partially' and 'regulat[e] in a piecemeal fashion.'" *Transportation Div. of the Int'l Ass'n of Sheet Metal, Air, Rail & Transportation Workers v. Fed. R.R. Admin.*, 10 F.4th 869, 875 (D.C. Cir. 2021) (quoting *Ctr. for Biological Diversity v. EPA*, 722 F.3d 401, 409-10 (D.C. Cir. 2013)); *cf. Massachusetts v. EPA*, 549 U.S. 497, 524 (2007) (recognizing that "[a]gencies, like legislatures, do not generally resolve massive problems in one fell regulatory swoop"). EPA intends to conduct rulemakings

on the SLHS and the definition of LBP, as identified in the Spring 2023 Unified Agenda of Regulatory and Deregulatory Actions, to address the issues identified by the Ninth Circuit in its May 2021 opinion (Refs. 11 and 33).

III. Technical Analyses

In its evaluation of options for reconsidering the DLHS and DLCL, EPA estimated children's BLL and associated IQ decrements. Estimated BLL and IQ decrements provide the means to quantify the effects that long-term exposure to the analyzed dust-lead loading levels can have on young children. The TSD (Ref. 16) and EA (Ref. 14) accompanying this proposed rulemaking estimated the expected impacts of the candidate DLHS and DLCL options on BLLs and associated IQ decrements of exposed children in target housing. See Unit IV. on the approaches for developing the options for DLHS and DLCL.

The TSD uses both mechanistic and empirical models to predict the possible BLLs of children in target housing exposed to homogenous candidate values for dust-lead levels (*e.g.,* candidate options for the DLHS) and characterizes the probabilistic variability due to biological response and variation in other sources of lead exposure at each possible candidate dust-lead level. The first approach used mechanistic modeling that includes use of age-specific ingestion rates, activity patterns, and background exposures. The second approach used empirical data that includes co-reported dust-lead and BLL measurements in the homes of children; these dust-lead and BLL data are used to develop an empirical relationship to estimate BLLs for each candidate dust-lead level. Both approaches (mechanistic and empirical) are compared to increase our confidence in the estimates of the relationship between dust-lead loadings and BLL (Section 6.3 of the TSD). The various components of the model and input parameters used in this rulemaking have been the subject of multiple Science Advisory Board Reviews, workshops and publications in the peer reviewed literature focused on dust-lead (Refs. 18, 35, 36, 37, 38, and 39).

Specifically, the mechanistic blood lead modeling for this rulemaking reflects the application of an extensively peer-reviewed model by EPA (the Stochastic Human Exposure and Dose Simulation – Integrated Exposure Uptake Biokinetic model coded in R, referred to as R-SHEDS-IEUBK) using updated data sources and tailored to the dust-lead target housing scenario, described in depth in Appendix E of the TSD.

Detailed discussion of the limitations and uncertainties in blood lead modeling at the low BLL and exposure levels considered for this rulemaking can be found in Section 8 of the TSD (Ref. 16). In brief, IEUBK, as a standalone biokinetic model, was evaluated for performance in groups for which the geometric mean BLL is as low as 2.3 µg/dL. Some of the groups at the lowest levels of dust lead exposure modeled for this rulemaking had mean estimated BLL lower than this value (between 0.81 and 1.12 µg/dL depending upon age), which are outside the range for which the underlying biokinetic model (IEUBK) was evaluated. In order to address this concern, EPA conducted an evaluation of the R-SHEDS-IEUBK model used in this analysis with a dataset for which the geometric mean BLL in children aged 1 to 2 years old is 1.09 µg/dL. This evaluation found that the R-SHEDS-IEUBK model had good agreement with the reference dataset at low percentiles, as well as at the median and at the 95th percentile. See Table 8-2 and Appendix D in the TSD (Ref. 16).

In contrast to the TSD, which estimates the health risk and exposure associated with dust-lead loading candidates for a hypothetical subpopulation of children in target housing without consideration to how many children are actually affected by the rule, the EA estimates benefits that accrue to only the subpopulation which would be impacted by the DLHS and DLCL revisions. Rather than assuming all households living in target housing are impacted by the regulatory change, the EA instead estimates benefits solely for instances when dust-lead levels would be tested. These instances of dust wipe testing are henceforth referred to as “triggering

events." For the subpopulation of children who are affected by these events, the EA estimates quantified benefits from avoided IQ losses. The EA uses real world data to characterize (1) variability in the housing stock that is affected, (2) how surface-by-surface dust-lead loadings change due to the DLHS/DLCL, (3) the number of children living in affected housing units, and (4) resultant changes in BLLs and IQ that are expected. In modeling the relationships between dust-lead loadings and BLL/IQ, the EA presents results based on both the empirical and mechanistic approaches laid out in the TSD. EPA considered several methods to impute the relationship between BLL and IQ below the lowest BLLs observed in the underlying empirical data, and a range of IQ loss results based on the methods considered are presented in the EA (see TSD section 5 and EA section 6.4). The IQ loss estimates presented in Unit IV. and in Section 7 of the TSD result from a linearization method, which resulted in the most conservative estimates of IQ loss.

Both the TSD and the EA present probabilistic distributions of estimated change in BLL or IQ decrement for young children up to the age of six. However, these distributions represent subpopulations of exposed children characterized in differing ways. The TSD presents the expected response for a hypothetical exposure, accounting for varying sources of background exposure (*e.g.,* food, soil, water) and biological variability. The EA estimates expected results from triggering events, recognizing exposure to the hypothetical conditions in the TSD are rare as dust-lead levels across target housing are generally quite low and existing abatements/interim controls typically overshoot the clearance levels considerably. Thus, the distributions of BLLs and IQ decrements presented in the TSD represent the impact of children's exposures to hypothetical dust-lead levels while the EA estimates distributions of BLLs and IQ decrements across all children living in housing that would be directly impacted by this proposed rule.

The analyses that EPA developed and presented in the TSD and EA for this rule were

specifically designed to estimate BLLs and associated effects on IQ that might accrue to the subpopulation, *i.e.,* children living in 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 purposes. As such, the approach and modeling parameters chosen for this rulemaking should not necessarily be construed as appropriate for, or consistent with, those of other EPA programs.

IV. Proposed Rule

As explained in Unit II.E., the 2021 Court Opinion of the U.S. Court of Appeals for the Ninth Circuit held that EPA must reconsider the DLHS in conjunction with the DLCL (Ref. 11). Accordingly, EPA is proposing to change the DLHS from 10 µg/ft^2 and 100 µg/ft^2 for floors and window sills to a non-numeric value called GTZ or any reportable level of dust-lead analyzed by an NLLAP-recognized laboratory. Lowering the DLHS (independent of the DLCL revisions) provides the regulatory benefit of additional disclosure of LBP hazards in target housing and COFs. This results in an estimated increase in individuals who are aware of the presence of dust-lead and the various actions that can be taken to minimize dust-lead hazards and take actions to protect themselves from exposure. See Unit IV.A.1. for additional information describing the proposed DLHS of "any reportable level." EPA is also proposing to revise the DLCL from 10 µg/ft^2, 100 µg/ft^2 and 400 µg/ft^2 for floors, window sills, and troughs to 3 µg/ft^2, 20 µg/ft^2, and 25 µg/ft^2, and requesting comment on an alternative DLCL option of 5 µg/ft^2, 40 µg/ft^2, and 100 µg/ft^2.

A. Dust-Lead Hazard Standards Approach

In the 2001 LBP Hazards Rule EPA discussed the dilemma the Agency faced when establishing a dust-lead hazard, especially the challenges associated with choosing "which [BLLs] are truly hazardous" and how to interpret the statutory criteria from TSCA Section 401

(*i.e.,* "would result in adverse human health effects" (15 U.S.C. 2681(10)) given the uncertainties that existed (Ref. 6). As a result, EPA took a pragmatic approach to setting the DLHS and focused on the potential for risk reduction, cost-benefit balancing and other relevant factors, establishing the standards at 40 µg/ft^2 and 250 µg/ft^2 for floors and sills, respectively. As an aside, at that time the Agency did not establish a DLHS for troughs as it found that window sills and troughs were highly correlated and concluded that testing both surfaces would not improve a risk assessor's ability to characterize risk. Building off the precedent established in 2001, the 2019 DLHS Rule "evaluated the relationship between dust-lead levels and children's health, and . . . the application of those standards in lead risk reduction programs." In addition, when establishing the 2019 DLHS, EPA also assessed laboratory capabilities, resources for addressing LBP hazards and consistency across the Federal Government (Ref. 2). At that time EPA reasonably believed it had the discretion to set the DLHS based on both risk reduction and whether the standards were achievable, especially given the existing programs in place to reduce LBP hazards and revised the DLHS to 10 µg/ft^2 and 100 µg/ft^2 for floors and sills, respectively (Ref. 2).

Ultimately, the 2021 Court Opinion, which is discussed in Unit II.E., led EPA to undertake a major shift in its approach to residential LBP hazard control and the LBP activities program because the Opinion found that EPA did not have the authority, when setting the DLHS, to consider non-health factors (*e.g.,* laboratory capabilities, resources for addressing LBP hazards, consistency across the Federal Government, or cost-benefit balancing). Consistent with the 2021 Court Opinion, EPA is proposing to revise the DLHS in this rulemaking based only on health considerations. EPA intends health-only considerations in this DLHS context to refer to the effects of lead on health after exposure to dust-lead loadings, considering the statutory definition's focus on "any condition that causes exposure to lead from lead-contaminated dust . .

. that would result in adverse human health effects" (15 U.S.C. 2681(10)). These health-only considerations do not include broader public health concerns (such as health trade-offs and policy impacts on public housing).

1. Rationale for selecting the proposed DLHS.

EPA is proposing a non-numeric DLHS that is any reportable level of dust-lead for floors and window sills as analyzed by an NLLAP-recognized laboratory. Proposing a DLHS for floors and window sills only, is consistent with current practice and regulatory history which has not included a hazard standard specifically for troughs.

"Reportable level" is not defined in EPA's 40 CFR 745 or EPA's current guidance for NLLAP-recognized laboratories, titled Laboratory Quality System Requirements (or LQSR 3.0). EPA is proposing to define "reportable level" in the regulations to mean the lowest analyte concentration (or amount) that does not contain a "less than" qualifier and that is reported with confidence for a specific method by an NLLAP-recognized laboratory. In other words, EPA interprets "any reportable level" of dust-lead to be any level greater than or equal to the lowest value a laboratory can reliably report to a client or the regulated community (*i.e.,* any reportable level of dust-lead in a laboratory sample result report that does not contain a "less than" ("<") qualifier).

Under the LQSR, an NLLAP-recognized laboratory must demonstrate it can achieve a quantitation limit equal to or less than 50 % of the lowest action level for dust wipe samples (more discussion on the "action level" is found in Unit IV.A.1.c). In addition, a report of zero concentration is not permitted and laboratories must establish a method of limiting the lower reported values to a positive finite lead level that is appropriate for the technology being used. Measured lead levels below this positive finite value must be reported with a qualifier "less than" ("<") this positive finite value (Ref. 29).

Based on these current minimum standards for NLLAP-recognized laboratories and previous laboratory stakeholder input, EPA expects that the lowest reportable level will be equivalent to the laboratory's quantitation limit in some cases, but could be lower depending on laboratory capabilities. Ultimately, the proposed DLHS of "any reportable level" is not dependent on the DLCL or quantitation limit, but rather is based on the capabilities of individual laboratories. EPA is requesting comment on the appropriateness of this interpretation and of the proposed definition of "reportable level."

EPA refers to this non-numeric DLHS approach as GTZ. Given the statutory language in TSCA Section 401 that defines what a "LBP hazard" is (*i.e.,* as conditions of LBP and lead-contaminated dust and soil that "would result in adverse human health effects"), EPA believes that it cannot set the DLHS at zero because zero does not identify a level of exposure to dust-lead loadings that would cause adverse health effects. Rather EPA believes the proposed standard of "any reportable level" is an appropriate DLHS based on dust-lead exposure related health factors only, and in accordance with the 2021 Court Opinion by taking into consideration the modeling data outlined in TSD and the current state of the science on lead exposure and children's BLL. The proposed GTZ approach represents a shift in the LBP activities program to a more inclusive and protective DLHS, compared to the current 2019 and 2021 levels. If finalized as proposed, the GTZ approach will be inclusive of any reportable level of dust-lead and will not distinguish between severe, less severe, or negligible risks.

As discussed further in Unit IV.A.2 *Other DLHS Options EPA Considered*, two other approaches were also considered for revising the DLHS, including a numeric standard based entirely on the modeling data laid out in the TSD (summarized in TSD Table 2-2), and an approach that would use the background dust-lead levels of housing built in or after 1978 (called post-1977 background). EPA seeks comment on its proposed and potential alternative

approaches to updating the DLHS.

a. *GTZ Rationale: Modeled discussion.*

The GTZ approach is primarily supported by the modeling results provided in the TSD and discussed further in Unit IV.A.3. In the TSD (which is introduced in Unit III) EPA estimated BLL and related changes in IQ (a measure of cognitive function) in young children. The results show that as dust-lead levels in housing decrease below the current standard (*i.e.,* 10 μg/ft^2 and 100 μg/ft^2 for floors and window sills), so do children's BLL and IQ decrement from lead exposure. When modeling GTZ, EPA used estimated dust-lead loadings ranging from 0.7 to 2.2 μg/ft^2 for floors and 0.8 to 4.4 μg/ft^2 for window sills. These are assumed values for a GTZ DLHS paired with the proposed or alternative DLCL, and account for the lower reporting thresholds that EPA estimates laboratories will realistically attain under this proposal. EPA collected information on real-world laboratory reporting limits from stakeholder outreach conversations as well as publicly available sources. GTZ values listed above are based on the average of reporting limits at laboratories that currently report numeric dust wipe loadings at levels 50% below the proposed DLCL options. For the details of these calculations, see Sections 4.1 and 2.4.6 of the EA (Ref. 14). EPA also used a hypothetical dust-lead loading value of zero. Details about how the TSD results are interpreted are described in Unit IV.A.2., and the modeled results themselves, which are supportive of the GTZ approach, are described in Unit IV.A.3.

b. *GTZ Rationale: No threshold has been identified.*

According to TSCA Title IV, the DLHS should identify the level of dust-lead exposure that "would result in adverse human health effects" (15 U.S.C. 2681(10)). GTZ is a more protective approach compared to the current regulatory landscape and all the options that were considered for this rulemaking (except post-77 background). GTZ also acknowledges that the current state of scientific evidence does not identify a BLL threshold below which there is no

association of adverse effects on children's cognition. Depending on the exposure and other factors, the effects on IQ associated with childhood lead exposure may persist into adolescence and adulthood (Refs. 4 and 8). EPA also favored such an approach for the DLHS under TSCA Title IV in part because a more protective approach to DLHS, such as GTZ, aligns with the Congressional purpose for disclosure elsewhere under Title X (notably, as implemented in the Lead Disclosure Rule) and because Congress used the word "hazard" in the "lead-based paint hazard" term, even though the definition uses more risk-like language by introducing consideration of the level of *exposure* that would result in adverse health effects.

EPA's 2013 Lead ISA stated that harmful effects on children's cognition as measured by IQ were observed in groups with mean BLLs as low as 2 μg/dL, and further that despite there being some uncertainty in epidemiological studies on lead exposure and BLLs (especially for older children and adults) that "A threshold for cognitive function decrements is not discernable from the available evidence (*i.e.,* examination of early childhood blood Pb or concurrent blood Pb in the range of < 1 to 10 μg/dL)." (Ref. 4)). This statement was based on a synthesis of the extensive literature examining the relationship between BLL and cognitive function, including a landmark pooled cohort study meta-analysis by Lanphear et al. (Refs. 40 and 41), the results of which have been confirmed by repeated re-analysis (Refs. 42 and 43). While the 2013 ISA went on to state that "the current evidence does not preclude the possibility of a threshold for neurodevelopmental effects in children existing with lower blood levels than those currently examined", the Federal Lead Action Plan articulated the U.S. Government position that "no safe blood lead level in children has been identified." (Ref. 9). Further, the analysis that supports this rule examined the 95th percentile of children's modeled BLLs and the associated IQ losses (Ref. 16), which for all options considered is at or above the group mean BLLs for which IQ loss is observed in the literature examined in the ISA (Ref. 4 and 16).

EPA understands the limitations of the epidemiological analyses, the lack of scientific studies evaluating low BLLs and acknowledges that a threshold could exist that is currently unidentified; but ultimately in its assessment of the available scientific research findings in the 2013 ISA for lead, the Agency observed that there is no evidence of a threshold below which there are no harmful health effects from lead exposure. EPA continues to acknowledge the aforementioned uncertainties and notes that science is constantly evolving and, as additional data become available (*e.g.,* exposure and health impacts), then EPA may undertake a new rulemaking to propose changing the standards in the future to reflect any new data or information about an acceptable threshold of effects on cognition in children.

Additionally, the Centers for Disease Control and Prevention (CDC) acknowledges that "[s]cientific evidence suggests that there is no known safe [BLL], because even small amounts of lead can be harmful to a child's developing brain" (Ref. 44). When the original DLHS and DLCL were proposed and finalized in 1998 and 2001 the CDC had set a "level of concern" for children's BLL at ≥ 10 µg/dL (Refs. 45 and 46). In 1991, when that level was established as a level that should prompt public health actions, the CDC concurrently recognized that a BLL of 10 µg/dL did not define a threshold for the harmful effects of lead (Ref. 45). One goal for the level was that "all lead poisoning prevention activities should be to reduce children's BLLs below 10 µg/dL" (Ref. 45). Accordingly, in the 1998 proposal EPA stated that, "[a]lthough the scientific community has not been able to identify a threshold of exposure below which adverse health effects do not occur, the evidence of health effects below 10 µg/dL is not sufficiently strong to warrant concern" (Ref. 47). In the final rule in 2001, EPA determined the lowest candidate DLHS by using a 1 to 5% probability of an individual child developing a BLL of 10 µg/dL (Ref. 6).

In the 2019 DLHS Rule, EPA recognized that "[a]lthough health risks to young children

decrease with decreasing dust-lead levels, no non-zero lead level, including background levels, can be shown to eliminate health risk entirely." At that time, EPA also recognized the CDC's 2012 decision to discontinue its use of a 10 µg/dL blood lead "level of concern" and to introduce a population-based blood lead reference value (BLRV) to identify children exposed to more lead than most other children in the United States (Ref. 48). The BLRV represents the 97.5th percentile of the U.S. population BLL distribution in children ages 1 to 5 from the National Health and Nutrition Examination Surveys (NHANES). This means that by definition 2.5 percent of children ages 1 to 5 in the NHANES survey have a BLL greater than the BLRV. This metric was established in part because "no safe blood lead level in children ha[d] been identified," (Ref. 48). In 2012 the BLRV was 5 µg/dL, based on young children's BLL in the 2007-2010 NHANES, and in 2021 it was lowered to 3.5 µg/dL based on the children's lower BLLs observed in the 2015-2018 NHANES (Ref. 46). The BLRV is not based on a health endpoint, but rather is a statistical point in the distribution of children's BLLs in the U.S. used as a screening tool to identify children who have higher levels of lead in their blood compared with most children.

Establishing a health-based only standard for dust-lead hazard, as well as clearance levels that consider other factors (*i.e.,* take into account reliability, effectiveness, and safety), is similar to EPA's implementation of some other programs governing lead exposure. For example, under the Safe Drinking Water Act (SDWA), EPA is required to establish a maximum contaminant level goal (MCLG) at a level at which, in the Administrator's judgement, "no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety." Section 1412(b)(4). EPA established a health-based MCLG of zero for lead in drinking water. National Primary Drinking Water Regulations include either an enforceable maximum contaminant level (MCL) or treatment technique requirements, EPA can set a

treatment technique requirement in lieu of an MCL if "it is not economically or technologically feasible to ascertain the level of the contaminant." SDWA Section 1412(b)(7)(A). In addition to the MCLG, EPA established treatment technique requirements for lead taking into account several factors (56 FR 26460). Unlike many other drinking water contaminants, lead is generally not present in source water but enters drinking water from corrosion of plumbing materials that contain lead including lead service lines and premise plumbing. Occurrence of lead in drinking water is variable within a system and across systems due to factors such as amount of lead in any individual site's plumbing, physical and chemical characteristics of the water, and consumer use patterns. Additionally, sources of lead can be beyond the control of the water system to replace, such as premise plumbing. Water systems can adjust or add treatment to control the corrosivity of the water to reduce lead leaching from lead pipes and premise plumbing. EPA is required to consider technical feasibility and costs when establishing the treatment technique, which is analogous to EPA's development of the clearance levels that also include non-health-based factors. Under EPA's treatment technique rule for lead in drinking water, EPA established a non-health-based action level which, if exceeded, requires water systems to take actions to reduce elevated levels of lead in drinking water.

Because of the 2021 Court Opinion remanding the DLHS for reconsideration based only on health factors, the results of the analysis in the TSD, and the lack of a discernible threshold in the evidence for the association of blood lead with harmful effects on cognition in young children, EPA proposes to change the DLHS to any reportable level of lead analyzed by an NLLAP-recognized laboratory.

c. *LQSR action level.*

Given that GTZ is a non-numeric value, if finalized as proposed, the DLCL, rather than the DLHS, would become the "action level" as described in the Laboratory Quality System

Requirements (LQSR 3.0), as well as for when a risk assessor would recommend an abatement (see Unit IV.D. for more information on EPA's proposed change to the definition of abatement). According to the current LQSR, NLLAP-recognized laboratories that analyze dust wipe samples for lead must show that they can achieve a quantitation limit "equal to or less than . . . 50% of the lowest action level [*i.e.,* regulatory limit] for dust wipe samples" (Ref. 29). The quantitation limit must also be "at least 2 times but no greater than 10 times the method detection limit" (Ref. 29). Therefore, due to the non-numeric nature of the proposed DLHS of "any reportable level," these current testing requirements will rely on the numerical DLCL to establish the quantitation limit that any laboratory (that wishes to maintain or obtain NLLAP recognition) must be able to demonstrate. Note however, that the proposed DLHS of "any reportable level" is still considered distinct from the DLCL and the quantitation limit.

2. Other DLHS approaches EPA considered.

EPA considered two other approaches for revising the DLHS: a numeric standard based on the probability of exceedance of one or more IQ or BLL metrics as determined by the Agency, and an approach that would use the background dust-lead levels of housing built in 1978 and beyond as the DLHS (known as "post-1977 background"). The three approaches (*i.e.,* GTZ, numeric standard, and post-1977 background) take different analytical paths to revising the DLHS based only on health considerations. EPA is proposing the GTZ approach, given the discussion laid out in Unit IV.A.1. but welcomes comment on the other two approaches outlined in both the preamble and in the TSD (Ref. 16).

a. *Numeric standard approach.*

In addition to the GTZ approach, EPA also explored a "numeric standard" approach, meaning that the Agency would propose a numerical DLHS with a rationale based solely on the interpretation of the TSD results. To do so, the Agency would need to establish a health or

exposure metric of interest (*i.e.,* target BLL or IQ change) that would be acceptably protective of human health. Estimated BLL and IQ decrements in children exposed to hypothetical dust-lead loading values are included in the TSD for every DLHS candidate considered for all three approaches (*i.e.,* GTZ, numeric standard and post-1977 background), as well as the primary and alternative DLCL options. These values are estimated to help EPA analyze the impacts of this proposed rulemaking on the health (*i.e.,* IQ decrement) and dust-lead exposure of the subpopulation in question (*i.e.,* young children in pre-1978 buildings and COFs) and to inform a costs and benefits analysis in the EA.

In 2001 and 2019, EPA expressed the challenges of meeting the statutory criterion for defining an LBP hazard (15 U.S.C. 2681(10)) because it requires EPA to choose a cutoff for when unacceptable risk exists. EPA noted in 2001, even if the science and environmental-lead prevalence data were perfect, there would likely be no agreement on the level, or certainty, of risk that is envisioned in the phrase "would result in adverse human health effects." Thus, EPA explained that it "would not be appropriate to base a [LBP] hazard standard on any specific probability of exceeding any specific [BLL]." (Refs. 2 and 6). EPA continues to agree with the challenges highlighted in 2001 and 2019.

When choosing health or exposure metrics to evaluate the DLHS approaches based on the TSD results, the Agency has considered three factors: (1) the CDC's BLRV (which is a not a health-based end point but rather is a statistical measure of relative exposure), (2) responsiveness to feedback received previously from various scientific bodies, and (3) Agency precedent. The TSD considers BLL and IQ changes in two ways: relative to aggregate/total lead exposure (which includes exposure from other media: soil, diet, water, and air in addition to dust) and relative to incremental/dust-only lead exposure (Ref. 16). For example, in 2001 the lowest DLHS candidate was identified by using a 1 to 5% probability of an individual child developing a BLL

of 10 µg/dL (Ref. 6), which represented total BLL, inclusive of exposure to lead through other media.

In the TSD analyses for this proposal, EPA compared BLL in young children, with an emphasis on 2-year-old children because this is the age of greatest modeled exposure, from aggregate or total exposure from all media (*i.e.,* dust, soil, diet, water, and air) to the CDC BLRV of 3.5 µg/dL. This BLL value is not-health based and does not represent a toxicity threshold (and is subject to change over time, since the CDC BLRV changes as the BLLs in the population change); however, CDC explains that it can still be used as a tool to "1) help determine whether medical or environmental follow-up actions should be initiated for an individual child and 2) prioritize communities with the most need for primary prevention of exposure and evaluate the effectiveness of prevention efforts" (Ref. 46). Importantly, even at zero dust-lead, children are already estimated to have a 5.7% probability of exceeding the BLRV given the impact of background lead exposures from other media (*e.g.,* soil, diet, water, and air) (Ref. 16).

Table 1 – Percent Exceedance Values for Zero, Age: 2 yr old (30 months)

			Probability			
Approach	**Floor (µg/ft²)**	**Sill (µg/ft²)**	**Total BLL > 3.5 µg/dL**	**Total BLL > 5 µg/dL**	**Dust Only BLL > 1 µg/dL**	**Dust Only BLL > 2.5 µg/dL**
Zero[1]	0	0	5.7%	2.2%	0.0%	0.0%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

In 2011, EPA's Scientific Advisory Board (SAB) and in 2012 the Children's Health Protection Advisory Committee (CHPAC) both expressed support for an incremental BLL approach that focuses on dust-lead exposure only. In 2011 SAB reviewed EPA's *Approach for Developing Lead Dust Hazard Standards for Residences (November 2010 Draft)* and *Approach for Developing Lead Dust Hazard Standards for Public and Commercial Buildings (November 2010 Draft)* and provided feedback that there are several key advantages to the incremental

approach (*e.g.,* reducing uncertainty from estimating exposures from other media) and provided that a change in BLL "of 1 or 2 µg/dL at the 90th percentile" could be an example of a target risk level. Similarly, CHPAC expressed support for using an incremental approach and preferred levels such that an adverse change in BLL is "no greater than 1 or 2.5 µg/dL" (Ref. 49).

As a result, EPA also estimated what dust-lead levels (considering only the dust-lead component in the multi-media exposure modeling) would result in incremental BLL change ranging between 1 and 2.5 µg/dL based on exposure assumptions described in the TSD (Ref. 16).

For this reconsideration rulemaking the Agency considered the estimated total/aggregate IQ change (*i.e.,* the estimated total or aggregate IQ change from modeled BLL including all modeled sources of lead exposure) at age six and compared it to a threshold of 1 to 2 points. IQ changes due to background exposures to lead in other media (*e.g.,* soil, diet, water, and air) are estimated to already have a 48.7% probability to exceed 2 points for children in target housing without also considering additional dust-lead exposure (Ref. 16).

Table 2 – Percent Exceedance Values for Zero, Age: 6 yr old (72 months)

			Probability			
Approach	**Floor (µg/ft²)**	**Sill (µg/ft²)**	**Total IQ > 1pt**	**Total IQ > 2pt**	**Dust Only IQ > 1pt**	**Dust Only IQ > 2pt**
Zero[1]	0	0	88.9%	48.7%	0.0%	0.0%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

In addition to total/aggregate IQ change, EPA determined BLLs that were estimated to result in an incremental loss of 1 to 2 IQ points from exposure to only dust-lead (*i.e.,* exclusive of lead in other media such as soil, diet, water, and air). This metric is explicitly health-based, in that it is an estimated health effect. There is EPA precedence for using the metric of an incremental change in IQ with a range of values of 1 to 2 points to inform national standards decisions. This includes the 2008 and 2016 decisions on the primary national ambient air quality

standard (NAAQS) for lead, which was informed by consideration of air-related IQ decrement estimates based on an evidence-based framework, with a focus on the at-risk subpopulation of children living near sources who are likely to be most highly exposed (Ref. 50). In their review of various technical documents supporting both the 2008 and 2016 NAAQS reviews, the Clean Air Scientific Advisory Committee (CASAC) supported using an incremental 1 to 2 point IQ decrement approach for consideration during development of the air standard (Refs. 50 and 51).

As reported in the TSD, EPA evaluated several numeric DLHS candidates that the Agency thought were appropriate given the health and exposure metrics of interest, and the uncertainty of the model at low loading values. The numeric DLHS candidates were 1/10 $\mu g/ft^2$ (*i.e.,* 1 $\mu g/ft^2$ for floors and 10 $\mu g/ft^2$ for sills), 2/20 $\mu g/ft^2$, 3/30 $\mu g/ft^2$, and 5/40 $\mu g/ft^2$ and those values were compared to the specified BLL and IQ metrics to estimate the probability of exceeding the BLL or IQ targets. For example, a 2-year-old living in pre-1978 housing exposed to 3 $\mu g/ft^2$ on floors and 30 $\mu g/ft^2$ on window sills would have a 4.8% probability of exceeding, for example, 5 total µg/dL BLL. Under this numeric standard approach, EPA would plan to use the threshold of 5% probability of exceedance for a child from the sub-population of interest (*i.e.*, young children living in pre-1978 housing and COFs). This is similar to the 1 to 5% probability that was used in 2001 for the lowest DLHS candidate (Ref. 6).

Due to the aforementioned complexities with identifying a cutoff of risk or specific IQ/BLL metrics of interest that would be acceptable for purposes of setting the DLHS, as well as the reasons for favoring GTZ, EPA is not proposing the numeric standard approach for the DLHS as the Agency's preferred option. For specific discussion on the modeled numeric DLHS candidates and IQ/BLL metrics, see Unit IV.A.3. EPA welcomes comment on this numeric standard approach including the IQ/BLL metrics under consideration (*i.e.,* the target values of interest) and the use of a 5% probability of exceedance.

b. *Post-1977 background approach.*

EPA also considered an approach to revise the DLHS that would align target housing dust-lead levels with dust-lead levels in housing built after lead-based paint was banned. This approach would result in lowering the DLHS to the dust-lead background levels of housing built after 1977 (known as "post-1977 background"), which are presumably not from LBP. In 1978, the CPSC banned lead in paint and similar surface-coating materials for consumer use in excess of 0.06% and revised the level in 2009 to 0.009% following the Consumer Product Safety Improvement Act of 2008 (Pub. L. 110-314). As a result of CPSC's 1978 lead paint ban, the focus of EPA's LBP activities program is target housing which includes most pre-1978 housing and COFs.

Post-1977 background dust-lead values were calculated from a weighted geometric mean of the dust-lead loadings from the American Healthy Homes Survey II and were found to be 0.2 $\mu g/ft^2$ for floors and 0.8 $\mu g/ft^2$ for window sills (Refs. 14 and 52). Setting the DLHS at the post-1977 background dust-lead levels would allow EPA to focus on dust-lead hazards above what is expected in housing without LBP (*i.e.,* after CPSC established a maximum level of lead in paint for consumer products, including home paints). Establishing DLHS for target housing and COFs in this way, using post-1977 background dust-lead levels, would address disparities in the dust-lead levels that children in target housing may be exposed to and the corresponding disparate health risks. This approach would also align with the focus of Title X on lead hazards in housing constructed before 1978. Using this approach, DLHS would be established at 0.2 $\mu g/ft^2$ for floors and 0.8 $\mu g/ft^2$ for window sills as the dust-lead levels that would result in adverse human health effects. However, there are questions about whether the post-1977 background approach would as directly address the 2021 Court Opinion as the GTZ approach. Due to those concerns and the reasons for favoring GTZ, EPA is not proposing the post-1977 background approach for the

DLHS as the Agency's preferred option.

As statistical points in a distribution of environmental data, the calculation of the average background value is highly influenced by the way in which data/measurements below the analytical detection limit are treated. Further discussion on deriving these candidates can be found in the TSD Section 2.3. The TSD models the health and exposure outcomes based on these candidate DLHS of 0.2 μg/ft^2 for floors and 0.8 μg/ft^2 for window sills, as described in Unit IV.A.3. EPA welcomes comment on this background approach, and its appropriateness given the description above, 2021 Court Opinion and the statutory authority.

3. Modeled results for all three DLHS approaches.

The TSD that accompanies this proposal evaluated the DLHS candidates of all three approaches (*i.e.,* GTZ, numeric standard, and post-1977 background). Estimates for BLLs of children exposed to the DLHS dust-lead loadings were evaluated for children at each age up to age six, including age two (generally, age two is the age of greatest modeled exposure), and lead-related reduction in IQ at age six was estimated from the lifetime average BLL (average of BLLs across the period prior to age six). This approach is consistent with the study from which the BLL concentration-IQ response function was drawn. This study related IQ quantified at about six years of age to each child's lifetime average BLLs (based on blood Pb measurements taken from six months up to age of the IQ test (Refs. 40 and 41). In the following discussion, both the model results for two-year BLL and the estimates of IQ change at six-years, are represented, referring to them as the results for "young children" for brevity. EPA considered numerous dust-lead loadings, including: 0.7/0.8 μg/ft^2, (*i.e.,* 0.7 μg/ft^2 for floors and 0.8 μg/ft^2 for window sills) which is the GTZ option partnered with the primary DLCL option (3/20/25 μg/ft^2 for floors, window sills, and window troughs respectively) and 2.2/4.4 μg/ft^2, which is the GTZ partnered with the alternative DLCL option (5/40/100 μg/ft^2). Other modeled dust-lead loadings are 0.2/0.8

μg/ft^2, which is the post-1977 background dust-lead level, 1/10 μg/ft^2, 2/20 μg/ft^2, 3/30 μg/ft^2, 5/40 μg/ft^2, and 10/100 μg/ft^2, which is the 2019 DLHS. Zero was also provided for comparison purposes with the DLHS candidates and is not itself a candidate value. More information on the TSD and the health/exposure metrics (*i.e.,* IQ and BLL decrements) that were analyzed can be found in Unit III. and Unit IV.A.2.a.

DLHS candidates associated with GTZ, post-1977 background, and the numeric standard (1/10 μg/ft^2) approaches are associated with the lowest BLLs when compared to the other numeric DLHS candidates (2/20 μg/ft^2, 3/30 μg/ft^2 and 5/40 μg/ft^2 and the current DLHS of 10/100 μg/ft^2 for floors and window sills). The TSD modeling results for young children exposed to dust-lead associated with the loading candidates from the GTZ approach (which range from 0.7 to 2.2 μg/ft^2 for floors and 0.8 to 4.4 μg/ft^2 for window sills depending on which DLCL it is coupled with, see Unit IV.A.1.a. for more information) show that young children would have a 0.0 to 10.6% probability of exceeding an incremental BLL of 1 to 2.5 μg/dL (Tables 7-2 and 7-3 in the TSD). However, the results for GTZ partnered with the primary DLCL option (0.7/0.8 μg/ft^2), and post-1977 background (0.2/0.8 μg/ft^2) are the only two DLHS candidates that keep both the percentage of exceedance of incremental BLL of 1 to 2.5 μg/dL below 5% probability (which is the threshold of interest EPA identified).

When comparing the three DLHS approaches to total BLL, the modeling includes exposure from other media such as soil, diet, water, and air. Importantly, even at zero dust-lead, children would still have a 5.7% probability of exceeding the BLRV given the impact of these other exposures. Thus, none of the considered DLHS candidates resulted in less than 5% probability of exposed children's BLL exceeding the CDC BLRV. However, the TSD modeling results did show that for young children exposed to dust-lead loadings using the GTZ approach, the post-1977 background approach or the numeric DLHS candidate of 1/10 μg/ft^2 would have approximately a

7.3 to 9.1% probability of exceeding a total BLL of 3.5 µg/dL, the CDC's BLRV. This is lower than the 10.3 to 13.9% probability when exposed to other numeric DLHS candidates (2/20 µg/ft^2, 3/30 µg/ft^2 and 5/40 µg/ft^2 for floors and window sills) and the 18.0% probability when exposed to the current DLHS of 10 µg/ft^2 for floors and 100 µg/ft^2 for window sills. Therefore, while no DLHS option results in a less than 5.7% probability of exposed children's BLL exceeding the CDC BLRV given their likely exposures to other sources of lead, the options with the lowest levels (GTZ, post-1977 background, and 1/10 µg/ft^2) result in exposed children experiencing about a two to three times less likelihood of exceeding the CDC BLRV compared to the current DLHS.

Table 3 – Percent Exceedance Values for DLHS Candidates, Age: 2 yr old (30 months)

			Probability			
Approach	**Floor (µg/ft²)**	**Sill (µg/ft²)**	**Total BLL > 3.5 µg/dL**	**Total BLL > 5 µg/dL**	**Dust Only BLL > 1 µg/dL**	**Dust Only BLL > 2.5 µg/dL**
Zero[1]	0	0	5.7%	2.2%	0.0%	0.0%
Post-1977 Background	0.2	0.8	7.3%	2.8%	1.0%	0.0%
GTZ With 3/20 DLCL	0.7	0.8	8.2%	3.0%	3.7%	0.1%
Numeric	1	10	9.1%	3.3%	6.6%	0.5%
GTZ With 5/40 DLCL	2.2	4.4	10.1%	3.9%	10.6%	1.0%
Numeric	2	20	10.3%	4.1%	12.5%	1.2%
Numeric	3	30	11.8%	4.8%	17.2%	2.0%
Numeric	5	40	13.9%	5.5%	23.0%	3.2%
Current Standard	10	100	18.0%	7.5%	36.7%	6.5%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

DLHS candidates associated with GTZ and post-1977 background are also estimated to be associated with the lowest IQ decrements when compared to the other DLHS candidates (GTZ partnered with the alternative DLCL, 1/10 µg/ft^2, 2/20 µg/ft^2, 3/30 µg/ft^2 and 5/40 µg/ft^2, and the current DLHS of 10/100 µg/ft^2 for floors and window sills). GTZ partnered with the

primary DLCL option (0.7/0.8 μg/ft^2), and post-1977 background (0.2/0.8 μg/ft^2) are the only two DLHS candidates estimated to have a 0.6 to 2.5% probability of exceeding 2 points of incremental IQ loss from dust-exposure, keeping the percentage of exceedance of 2 points of IQ loss below 5% probability.

Table 4 – Percent Exceedance Values for DLHS Candidates, Age: 6 yr old (72 months)

			Probability			
Approach	**Floor (μg/ft²)**	**Sill (μg/ft²)**	**Total IQ > 1pt**	**Total IQ > 2pt**	**Dust Only IQ > 1pt**	**Dust Only IQ > 2pt**
Zero[1]	0	0	88.9%	48.7%	0.0%	0.0%
Post-1977 Background	0.2	0.8	94.7%	63.1%	6.2%	0.6%
GTZ With 3/20 DLCL	0.7	0.8	96.4%	70.4%	18.5%	2.5%
Numeric	1	10	97.0%	74.5%	30.2%	5.2%
GTZ With 5/40 DLCL	2.2	4.4	97.7%	78.5%	40.7%	9.0%
Numeric	2	20	97.9%	80.0%	44.6%	11.0%
Numeric	3	30	98.5%	82.3%	53.6%	16.0%
Numeric	5	40	98.8%	85.1%	62.7%	22.4%
Current Standard	10	100	99.4%	90.3%	75.8%	37.9%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

B. Dust-Lead Clearance Levels Approach

TSCA Title IV granted EPA the authority to regulate LBP activities, and to take into account reliability, effectiveness, and safety (15 U.S.C. 2682(a)(1)) when setting the DLCL. While considering those three criteria, the 2001 LBP Hazards Rule modified the work practice standards to include DLCL, which "are used to evaluate the effectiveness of cleaning following an abatement" (Ref. 6). In both the 2001 LBP Hazards Rule and the 2021 DLCL Rule, the DLCL were finalized as the same value as the DLHS for floors and window sills. When originally established, EPA considered the DLCL in the broader context of Title X, and selected DLCL that were compatible with a "workable framework for lead-based paint hazard evaluation and

reduction." EPA chose DLCL that were consistent with the DLHS in part to ensure they were "as easy as possible to understand and implement" (Ref. 47). At that time EPA established the DLCL and the DLHS at 40 μg/ft^2 and 250 μg/ft^2 for floors and window sills, with a separate DLCL of 400 μg/ft^2 for troughs.

In 2021 the DLCL set by EPA continued to mirror the DLHS as it had done historically, as the Agency explained that it wanted to update the DLCL to achievable levels that would demonstrate elimination of dust-lead hazards under the 2019 DLHS of 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills. The 2021 updates to the DLCL restored consistency between the DLCL and DLHS, which had been lowered in 2019 without a corresponding amendment to the DLCL. Previous public comments received on the 2018 DLHS proposal and 2020 DLCL proposal favored lowering the DLCL to be consistent with the DLHS (Refs. 53 and 54). As a result, in 2021 EPA finalized DLCL of 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills (the same levels as the DLHS), and "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" (Ref. 3).

The 2021 Court Opinion affirmed that "TSCA [Title] IV gives the EPA latitude to consider 'reliability, effectiveness, and safety'" when promulgating regulations "[w]ith respect to implementation, including abatement." *A Cmty. Voice*, 997 F.3d at 995 (Ref. 11). This would include the DLCL as they represent part of post-abatement work practices. The Court continued by emphasizing that this gives EPA more discretion when setting the DLCL because they are relevant to the implementation of remedial measures, rather than the identification of a hazard (*i.e.,* DLHS). The Court analogized this dichotomy to other environmental statutory schemes (see also Unit IV.A.1.b. for EPA's discussion of the SDWA). The Court also held that the DLCL and DLHS are directly related and must be reconsidered together. Yet the Court recognized the

difference in statutory authority and considerations (see Unit IV.A. for more information on DLHS).

In accordance with the 2021 Court Opinion, EPA is proposing to revise the DLCL in the same proceeding as the reconsideration of the 2019 DLHS, and given the Court's direction for how to revise the DLHS and DLCL, EPA is proposing clearance levels that are decoupled from the DLHS (see Unit I.B and C. for more background on decoupling). EPA evaluated the 2021 DLCL in accordance with the statute and is proposing to revise the DLCL from 10 $\mu g/ft^2$, 100 $\mu g/ft^2$ and 400 $\mu g/ft^2$ for floors, window sills, and troughs, respectively, to 3 $\mu g/ft^2$, 20 $\mu g/ft^2$, and 25 $\mu g/ft^2$. EPA is proposing to revise the DLCL in order to reduce exposure to dust-lead beyond the 2021 levels. Additionally, New York City (NYC) has lowered their clearance levels since the 2021 DLCL final rule, which shows that levels below EPA's 2021 DLCL are achievable. Discussion on NYC's clearance levels can be found in Unit IV.B.2.d. Accordingly, EPA is also requesting comment on an alternative DLCL of 5 $\mu g/ft^2$, 40 $\mu g/ft^2$, and 100 $\mu g/ft^2$, as well as whether another DLCL is appropriate given reliability, effectiveness and safety and why, see Unit VII.

1. Selecting the proposed DLCL.

EPA is proposing to revise the DLCL given the statutory criteria of reliability, effectiveness, and safety, based on consideration of HUD's Lead Hazard Control Clearance Survey (LHCCS), the potential for risk reduction by lowering exposure to dust-lead, and an evaluation of laboratory capabilities and capacity.

a. *Lead Hazard Control Clearance Survey.*

EPA collaborated with HUD to develop the 2015 LHCCS to examine whether HUD's Office of Lead Hazard Control and Healthy Homes (OLHCHH) Lead Hazard Control (LHC) grantees could achieve DLCL below the standards at that time (40 $\mu g/ft^2$, 250 $\mu g/ft^2$ and 400

μg/ft^2 for floors, window sills and troughs, respectively). LHC work performed by the grantees must be conducted by LBP certified individuals. Since most of the LHC grantees use commercial firms in their area, HUD OLHCHH believes that the grantees are conducting a large percentage of these activities and are therefore representative of the regulated community.

At that time, 98 LHC grantees completed the survey, giving HUD information from housing units in which lead hazard control activities took place from 2010 through 2012, for a total dataset of 1,552 housing units including 7,211 floor samples and 4,893 window sill samples (Ref. 55). The data were analyzed to determine the percentage of samples cleared at or below specific values. Numerical modeling was performed to estimate loadings that fell below laboratory detection limits. For more information on how that analysis was conducted please see Appendix D of the EA (Ref. 14). Since the 2015 LHCCS report was published, to the Agency's knowledge, there has not been any data or source of information of this magnitude in terms of DLCL samples alongside the details of the clearance process, including the number of tests performed (with results) and the type of additional work or cleaning performed. EPA found this 2015 LHCCS report still relevant and recent enough to provide meaningful input to inform this reconsideration rulemaking.

In terms of the primary DLCL option EPA is proposing, 64% of the 2010 to 2012 samples showed dust-lead levels at or below 3 μg/ft^2 for floors, 64% were at or below 20 μg/ft^2 for window sills, and 64% were at or below 25 μg/ft^2 for window troughs. As a result, approximately 64% of samples from the LHCCS data had dust-lead levels at or below the primary DLCL option of 3 μg/ft^2 for floors, 20 μg/ft^2 for window sills and 25 μg/ft^2 for troughs, which EPA believes is achievable, especially since the survey respondents were only required to achieve clearance below the 2001 DLCL at that time (40/250/400 μg/ft^2 for floors, window sills and troughs, respectively). It is possible that the percentage of samples achieving clearance may

be even higher today, due to the 2021 revision of the DLCL to 10/100 μg/ft^2, meaning clearance has had to be achieved at these lower levels or below, since that time. Given lead-hazard control work has been subject to the current DLCL of 10/100 μg/ft^2 for some time, EPA is requesting comment from the regulated community regarding their ability to clear to 3/20/25 μg/ft^2 after various lead hazard control activities and given any additional cleaning necessary to make sure the dust-lead levels fall below the DLCL. See Unit IV.B.2.a. for more information on the LHCCS results for the alternative DLCL of 5/40/100 μg/ft^2 for floors, window sills and troughs, respectively.

b. *Primary DLCL modeling results.*

EPA must understand the estimated health impacts of dust-lead exposure when selecting a DLCL that is reliable, effective, and safe, and in order to inform the EA. The TSD that accompanies this proposal includes evaluation of the 2021 DLCL (10/100 μg/ft^2 for floors and window sills), and the primary DLCL (3/20 μg/ft^2 for floors/window sills) and alternative DLCL (5/40 μg/ft^2 for floors/window sills) options. The unique dust-lead contribution to exposure from window troughs cannot be distinguished from window sills given the strong correlation between dust-lead loadings on the two surface types, the lack of data on access to window troughs versus window sills by children, and the paired impacts in window sills and window troughs from intervention studies addressing lead paint in window trim and casings. Further discussion on exposure to window troughs can be found in the TSD in Appendix C. As a result, exposure to window trough dust-lead and resultant benefits from a lowered DLCL for troughs is not calculated separately for this rulemaking.

The TSD also describes modeling of dust-lead exposures at the specific DLCL options for window sills and floors only and estimates of both BLLs that were evaluated for children at each age up to age six, including age two (generally, this is the age of greatest modeled

exposure), and lead-related reduction in IQ at age six was estimated from the lifetime average BLL (average of BLLs across the period prior to age six). More information on estimated potential impacts from dust-lead exposures analyzed in the TSD, can be found in Unit III. *Technical Analyses* and Unit IV.A.2.a. *Modeled Approach.*

Compared to the alternative DLCL option, the primary option (3/20/25 μg/ft^2 for floors, window sills and troughs) is expected to be more health protective in that it results in the least amount of dust-lead left on a surface after the completion of an abatement. The modeling results provided in the TSD show that young children in pre-1978 housing exposed to dust-lead loadings of 3 μg/ft^2 for floors and 20 μg/ft^2 for sills would have a 11.3% probability of exceeding a total BLL of 3.5 μg/dL (CDC's BLRV). This is lower than the 18.0% probability when exposed to the current DLCL of 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills and the 13.9% probability when exposed to the alternative DLCL. Total BLL includes exposure from other media such as soil, diet, water, and air; even at zero dust-lead, children would still have a 5.7% probability of exceeding the CDC's BLRV from these other sources. When considering dust-lead exposure only, the primary option for DLCL (3/20/25 μg/ft^2), is estimated to result in 1.6 to 16.0% probability of young children's BLL exceeding 1 to 2.5 μg/dL, compared to 3.2 to 23.0% probability for the alternative DLCL (5/40/100 μg/ft^2). The primary DLCL is also estimated to have a 14.6% probability of exceeding 2 IQ points decrement from dust exposure, while the alternative DLCL is estimated to result in a 22.4% probability of exceeding 2 IQ points decrement from dust exposure. Ultimately, the primary DLCL option is expected to result in a higher reduction of dust-lead exposure than the alternative DLCL.

Table 5 – Percent Exceedance Values for DLHS Candidates, Age: 2 yr old (30 months)

			Probability			
Approach	**Floor (μg/ft²)**	**Sill (μg/ft²)**	**Total BLL > 3.5**	**Total BLL > 5 μg/dL**	**Dust Only BLL > 1**	**Dust Only BLL > 2.5**

			µg/dL		µg/dL	µg/dL
Zero[1]	0	0	5.7%	2.2%	0.0%	0.0%
3/20 DLCL	3	20	11.3%	4.5%	16.0%	1.6%
5/40 DLCL	5	40	13.9%	5.5%	23.0%	3.2%
Current Standard	10	100	18.0%	7.5%	36.7%	6.5%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

Table 6 – Percent Exceedance Values for DLHS Candidates, Age: 6 yr old (72 months)

			Probability			
Approach	**Floor (µg/ft²)**	**Sill (µg/ft²)**	**Total IQ > 1pt**	**Total IQ > 2pt**	**Dust Only IQ > 1pt**	**Dust Only IQ > 2pt**
Zero[1]	0	0	88.9%	48.7%	0.0%	0.0%
3/20 DLCL	3	20	98.2%	81.8%	51.4%	14.6%
5/40 DLCL	5	40	98.8%	85.1%	62.7%	22.4%
Current Standard	10	100	99.4%	90.3%	75.8%	37.9%

[1] The exceedance values for zero dust-lead are provided for comparison with the DLHS candidates; it is not a candidate value.

c. *Laboratory capabilities for primary DLCL.*

To better understand current laboratory capabilities for specific equipment types, and the impact that the primary and alternative DLCL options, especially given that a non-numeric DLHS would shift the LQSR "action level" to the DLCL, EPA spoke with nine NLLAP-recognized laboratories about their dust wipe testing programs (Refs. 56, 57, 58, 59, 60, 61, 62, 63 and 64). EPA was interested in information from laboratories who had high dust wipe testing capacity and laboratories that had both a flame atomic absorption spectroscopy (FAAS) and the more sensitive laboratory instruments such as inductively coupled plasma atomic emission spectroscopy (ICP-AES) or an inductively coupled plasma mass spectroscopy (ICP-MS). The Agency wanted additional background on ICP instruments and their use for dust wipe testing in general. Among the laboratories EPA spoke to, six were accredited to use FAAS, five were accredited to use ICP-AES, and two were accredited to use ICP-MS to analyze dust wipe samples for lead. Eight of the nine laboratories provide commercial testing services, four of

which are the largest U.S. lead laboratories by dust wipe test volume.

The information received from stakeholder outreach indicates that laboratories using ICP-AES equipment for dust wipe testing have a reporting limit of ≤3 µg/wipe. The five laboratories with ICP-AES capabilities have current reporting limits ranging from 0.5 µg/wipe to 3 µg/wipe. EPA believes that laboratories with more up-to-date instruments and optimized methods should be able to satisfy the LQSR dust wipe recommendations and the regulatory limit of the primary DLCL option of 3/20/25 µg/ft^2 and the quantitation limit of equal to or less than 50% of that level (*i.e.,* 1.5/10/12.5 µg/ft^2). If finalized as proposed, EPA believes that ICP-AES would likely become the instrument standard for dust wipe testing for lead at the NLLAP laboratories, as other technologies were not reported to consistently meet the quantitation limit described above. For more information on the on how the alternative DLCL compares or the impact it could have on NLLAP-recognized laboratories, see Unit IV.B.2.c.

FAAS has been the most popular choice for lead dust wipe testing because it has a lower purchase price and operating cost, is fast and easy to use, and was sensitive enough for the 2019 and 2021 rules' DLHS and DLCL of 10 µg/ft^2 on floors and 100 µg/ft^2 on window sills. As shown in the table below, Table 2-9 of the EA, over two-thirds of laboratories recognized under the NLLAP for lead dust wipe testing currently use FAAS, and over half of these NLLAP laboratories rely solely on FAAS (Ref. 14). EPA seeks information on whether and the extent to which labs that do not have any or have only limited ICP capabilities would adopt ICP technology for dust wipe testing if it were to effectively become the standard for dust wipe testing for lead. In addition, EPA requests comment on the timing, benefits, and challenges associated with ICP adoption.

Table 7 – Analytical Equipment Used for Lead Dust Wipe Testing by Laboratories Recognized Under NLLAP Program

Equipment	Total Number of Laboratories Accredited	Commercial Laboratories Accredited
FAAS	56	54
ICP-AES	27	19
ICP-MS	5	1
FAAS and ICP-AES	10	10
FAAS and ICP-MS	2	2
ICP-AES and ICP-MS	1	1
Total	**101**	**87**

Sources: Methods described in accreditation certificates for NLLAP laboratories, and descriptions on laboratory web sites.

Several concerns about switching to ICP instruments were raised by laboratories, such as, a reduction in the throughput rate, need for additional equipment and staff due to the complexity of the machines (compared to FAAS), higher prices, delayed turnaround, and concerns over maintaining the current sample volume and ultimately whether to continue keeping dust wipe testing for lead in their portfolio/revisiting their business model. Based on the outreach conducted, laboratories indicated that the throughput rate on ICP-AES machines is roughly seven to 12 times slower than FAAS throughput. One major laboratory EPA spoke to estimated that they would have to purchase three to six new instruments, hire several highly qualified technicians, and run the laboratory on shifts over 24 hours to meet current demand for dust wipe tests conducted solely by ICP. This shift in instrumentation is estimated to increase both cost per sample as well as turnaround time. Laboratories mentioned that for clearance a substantial portion of their dust wipe testing clients request same-day or next-day turnaround on samples so that residents can quickly reoccupy their homes. Several laboratories doubted the technical feasibility of providing same-day or next-day turnarounds at sufficient volume should they switch to ICP technology thereby, potentially delaying homeowners from quickly reoccupying their homes and renters from quickly beginning occupancy or from quickly reoccupying their rental housing. Dust wipe testing by ICP-AES is also estimated to be about 125% more

expensive per sample than testing by FAAS, and laboratories expressed concerned that less overall dust wipe testing will occur because state and local municipalities often have a fixed budget for their housing and health programs. See the EA for more specific information on the breakdown of the cost estimates of dust wipe testing. EPA also seeks information on the potential geographic impacts of the proposal on laboratory testing for lead dust wipes.

Finally, EPA found that several high-volume laboratories forecast that dust wipe test volumes will continue to grow over the next decade (Refs. 60 and 61). First, a growing proportion of laboratories' dust wipe testing business comes from landlords who need to comply with municipal housing regulations set by states or localities. Laboratories expect similar regulations to be enacted in the coming years, increasing demand for dust wipe testing for clearance (Ref. 61). Second, in recent years laboratories have received an increased volume of test samples generated by disaster recovery programs. When there is a natural disaster (such as a major flood) that requires clean-up and re-construction of pre-1978 housing, laboratories can receive an unexpected spike in dust wipe tests. Laboratories pointed out that the increasing rate of disaster-related demand spikes may overwhelm their capacity if only ICP can be used for dust wipe testing. If finalized as proposed, this rulemaking will also likely increase the amount of dust wipe testing required given the proposed regulatory levels. EPA seeks comment on the extent to which laboratories would be able to accommodate increased or emergency demand for dust wipe testing if this proposal is finalized.

The Agency is proposing 3/20/25 $\mu g/ft^2$ as the primary DLCL option due to the potential for risk reduction as discussed in Unit IV.B.1.b. Given information gathered via EPA's outreach to laboratories, EPA is concerned that setting clearance levels too low may deter participation in lead-hazard control programs and activities that require dust wipe testing or cause a market failure that does not allow the current volume of testing to continue. As a result, EPA is

requesting comment on the reliability, effectiveness, and safety of the primary DLCL of 3/20/25 $\mu g/ft^2$ for floors, window sills, and troughs, including specifically the impact on laboratory capability as well as the accuracy of the information presented. See Unit VII. *Request for Comments* for more information.

2. Alternative DLCL.

EPA is requesting comment on an alternative option to revise the DLCL for floors, window sills, and troughs from 10 $\mu g/ft^2$, 100 $\mu g/ft^2$ and 400 $\mu g/ft^2$, respectively to 5 $\mu g/ft^2$, 40 $\mu g/ft^2$, and 100 $\mu g/ft^2$, respectively. EPA chose 5/40/100 $\mu g/ft^2$ as the alternate DLCL based on consideration of HUD's LHCCS, potential for risk reduction, an evaluation of laboratory capabilities as well as high confidence that these standards can be successfully implemented, as shown by the use of these clearance levels currently in NYC. Another consideration supporting the alternative DLCL option is to avoid potentially spreading the resources for LBP hazard mitigation so broadly that they may be diverted from scenarios that present the greatest risk. EPA notes that the EA indicates that the alternative DLCL option is estimated to have positive net benefits. See EA, Table ES-11.

a. *Lead Hazard Control Clearance Survey.*

The LHCCS indicates that 73% of samples from 2010 to 2012 showed dust-lead levels at or below 5 $\mu g/ft^2$ for floors, 89% were at or below 40 $\mu g/ft^2$ for window sills, and 94% were at or below 100 $\mu g/ft^2$ for window troughs. As such, overall more than 72% of samples had dust-lead levels at or below the alternative DLCL option of 5/40/100 $\mu g/ft^2$ for floors, window sills and window troughs. This is compared to 64% of samples clearing at or below the primary DLCL option of 3/20/25 $\mu g/ft^2$. As a result, EPA has high confidence that the alternative DLCL option is achievable, while considering reliability and effectiveness. EPA is requesting comment on whether the LHCCS data support the reliability and effectiveness of the alternative DLCL

option, and whether the regulated community can clear to 5/40/100 μg/ft^2 after various lead hazard control activities and specialized cleaning.

b. *Alternative DLCL modeling results.*

The alternative (5/40/100 μg/ft^2 for floors, window sills and troughs) represents a 50% or more reduction of dust-lead left on a surface following the completion of an abatement, when compared to the current DLCL (10/100/400 μg/ft^2). This alternative DLCL option would be beneficial to maintaining lower children's BLLs and protecting against associated health outcomes such as decreased IQ. The modeling results provided in the TSD show that young children in pre-1978 housing exposed to dust-lead loadings of 5 μg/ft^2 for floors and 40 μg/ft^2 for window sills would have an estimated 13.9% probability of exceeding a total BLL of 3.5 μg/dL (CDC's BLRV); this is compared to the primary DLCL option (3/20/25 μg/ft^2) which would result in a 11.3% probability of exceedance (a difference of 2.6% between the primary and alternative DLCL options). Ultimately, both options are lower than the 18.0% probability of exceedance of the BLRV when exposed to the current DLCL of 10 μg/ft^2 for floors and 100 μg/ft^2 on window sills.

When considering dust-lead exposure only, young children in pre-1978 housing exposed to the alternative DLCL would have a 3.2 to 23.0% probability of exceeding a BLL of 1 to 2.5 μg/dL based on the modeled results, compared to 1.6 to 16.0% probability for the primary DLCL (3/20/25 μg/ft^2). The alternative DLCL is also estimated to have a 22.4% probability of exceeding 2 points of IQ loss. As with total BLL, this is a considerable reduction from the 37.9% chance of exceeding 2 points of IQ loss for young children living in target housing who are exposed the current DLCL, but still higher than the primary DLCL estimate of 14.6%. EPA must understand the impact on health effects when selecting a DLCL that is reliable, effective, and safe, and to inform the EA. Overall, the modeling within the TSD indicated that the alternative

DLCL (5/40/100 μg/ft^2 for floors, window sills and troughs) represents a reduction in risk from the current clearance levels of 10/100/400 μg/ft^2, but that risk is still higher than the estimated results for the primary DLCL. For a table representation of these modeling results, please see Unit IV.B.1.b. (Tables 5 and 6).

c. *Laboratory capabilities for alternative DLCL.*

EPA spoke with nine NLLAP-recognized laboratories about their dust wipe testing programs. For additional details about the laboratory outreach see Unit IV.B.1.c. *Laboratory Capabilities* and the EA (Ref. 14). Based on EPA's laboratory outreach, EPA has increased confidence relative to the proposed DLCL (*i.e.,* 3/20/25 μg/ft^2), that laboratories can numerically quantify dust-lead levels of 5 μg/wipe with FAAS technology and attain a quantitation limit of equal to or less than 50% of that level (*i.e.,* 2.5/20/50 μg/ft^2). Three major laboratories EPA spoke with already report at this level with FAAS, and the remaining three laboratories using FAAS that EPA talked to expressed no concern about attaining this level in the future if they ask their customers to wipe 2 ft^2 instead of 1 ft^2 (Refs. 57, 60 and 64). EPA is requesting comment on whether the alternative DLCL option (*i.e.,* 5/40/100 μg/ft^2 for floors, window sills and troughs) would allow NLLAP-recognized laboratories to continue using FAAS technology, if it would mitigate any unintended reductions in dust wipe capacity (due to throughput time, cost, labor, etc.) and avoid any negative impacts on other programs that require specific testing using ICP-AES or FAAS.

Should EPA finalize the DLCL at 5/40/100 μg/ft^2 and given no changes to the LQSR, EPA's laboratory outreach suggests that a handful of smaller laboratories with dated FAAS equipment may elect to discontinue their dust wipe programs for lead. Due to the expected continuing participation of other smaller as well as large-volume laboratories, EPA believes that these limited discontinuations are unlikely to impact the nationwide availability or market

pricing of tests (see the EA for a breakdown of cost estimates). Additionally, EPA does not foresee any concerns reporting to 40 µg/ft^2 on window sill or 100 µg/ft^2 on troughs (even with the small surface areas) if laboratories successfully attain a regulatory limit of 5 µg/ft^2.

EPA also received feedback that the alternative DLCL option (5/40/100 µg/ft^2) could better mitigate any negative impacts on other programs that require specific testing using ICP-AES or FAAS equipment. Laboratories currently use their ICP-AES machines for a variety of purposes. Most notably, this equipment is regularly used for the characterization of metals in hazardous waste and measuring lead in drinking water. Under the primary DLCL option 3/20/25 µg/ft^2, laboratories would face a significant increase in demand for use of their ICP machines, which could result in substantial downstream effects on the availability and price of testing for other lead and non-lead programs. Additionally, some laboratories mentioned they might eliminate use of their FAAS machines to streamline laboratory functionality. This may have downstream effects on testing for lead in soil, paint chips, and air; laboratories currently test these matrices by FAAS with some frequency. If laboratories decide maintaining FAAS is no longer viable for their primary line of business (dust wipes), all lead matrices could be added to ICP queue, which would worsen availability issues and increase prices.

The Agency is requesting comment on whether reliability, effectiveness and safety support the DLCL alternative option of 5/40/100 µg/ft^2. EPA is interested in setting a DLCL that has a high potential for risk reduction; however, the Agency also wants to finalize an option that is achievable and encourages (not deters) participation in lead-hazard control programs and activities that require dust wipe testing. As a result, EPA is requesting comment on the alternative DLCL option of 5/40/100 µg/ft^2 for floors, window sills, and troughs (compared to the primary DLCL option), the impact that level could have on laboratories, and the accuracy of the information presented. See Unit VII. *Request for Comments* for more details.

d. *New York City.*

Between 2019 and 2021 NYC Department of Health and Mental Hygiene lowered their lead dust clearance and lead dust hazard risk assessment testing standards twice. NYC lowered their standards for floors, window sills and window wells (*i.e.,* troughs), respectively, from 40 $\mu g/ft^2$, 250 $\mu g/ft^2$, and 400 $\mu g/ft^2$ to 10 $\mu g/ft^2$, 50 $\mu g/ft^2$, and 100 $\mu g/ft^2$ in 2019 (effective June 12, 2019) and again to 5 $\mu g/ft^2$, 40 $\mu g/ft^2$, 100 $\mu g/ft^2$ in 2021 (effective June 1, 2021) (Refs. 65 and 66). The Agency spoke to the New York City Department of Health and Mental Hygiene and received feedback that although there was a transitionary period that lasted several months and had various challenges, overall, the regulated community was able to adjust and comply with the new lower standards (Ref. 67). Based on NYC's experience, EPA believes that the alternative DLCL option (*i.e.,* 5 $\mu g/ft^2$, 40 $\mu g/ft^2$, 100 $\mu g/ft^2$ for floors, window sills and window troughs) can be considered effective and reliable.

C. Cross Reference with HUD Regulations

EPA is proposing to modify 40 CFR 745.227(h) to clarify that the proposed DLCL would differ from the DLHS, that the Agency does not intend to compel clearance down to the DLHS, and to alleviate potential regulatory confusion surrounding clearance. HUD's LSHR's clearance regulations at 24 CFR 35.1340(d), which apply to both abatement and non-abatement activities, currently refer to 24 CFR 35.1320(b)(2), which in turn cross-references EPA's regulations at 40 CFR 745.227(h), which currently discusses EPA's DLHS but not EPA's DLCL. See Unit III.A.3.f the 2019 DLHS Rule for additional background on this topic (Ref. 2). As explained earlier in this preamble, prompted by analysis conducted following the 2021 Court Opinion, EPA is proposing a DLHS that is no longer the same value as the DLCL. As a result, EPA is proposing to clarify the language at 40 CFR 745.227(h), so it is clear, including when referenced by the LSHR, that EPA does not intend to compel clearance to the DLHS, whether in federally

assisted housing or not.

D. Definition of Abatement

EPA is proposing to amend the definition of abatement in EPA's LBP activities regulations and thus modify the trigger for when EPA recommends an abatement. This change is intended to align with the proposed decoupling of the DLHS and DLCL and to focus impacted entity resources (*e.g.,* HUD, city, state) on the situations that present the most risk. TSCA Section 401(1) defines an abatement as "any set of measures designed to permanently eliminate lead-based paint hazards . . ." and includes "the removal of lead-based paint and lead-contaminated dust, the permanent containment or encapsulation of lead-based paint . . . and all preparation, cleanup, disposal, and postabatement clearance testing activities associated with such measures." EPA included a definition of abatement, which closely resembles the statutory language, within the LBP activities regulations at 40 CFR 745.223. An abatement under the LBP activities regulations is described as "any measure or set of measures designed to permanently eliminate lead-based paint hazards" and specifically includes "projects resulting in permanent elimination of lead-based paint hazards . . ."

The 2021 Court Opinion stated that "TSCA [Title] IV gives the EPA latitude to consider 'reliability, effectiveness, and safety'" when promulgating regulations "[w]ith respect to implementation, including abatement" (Ref. 11). Hence, in considering revising the DLCL, EPA must and has considered whether reliability, effectiveness and safety support changing the regulatory definition of abatement. Given that under this statutory scheme EPA only intends to compel post-abatement clearance to the proposed DLCL, the Agency is proposing to change the regulatory definition of abatement so that the recommendation for action applies when dust-lead loadings are at or above the DLCL (which continues to incorporate non-health-based factors such as reliability), rather than at or above the DLHS as has been the case historically (but

which, going forward in accordance with the 2021 Court Opinion, can no longer incorporate non-health-based factors such as reliability). This is deemed necessary due to the decoupling of the DLHS from the DLCL, and EPA's desire to avoid situations where abatements are designed to eliminate dust-lead levels to the DLHS and are unable to do so in a reliable and effective manner. Otherwise, EPA would be recommending an abatement if dust-lead levels are between the DLHS and the DLCL, even though such an abatement would only need to pass clearance below the DLCL. Also, where an abatement is conducted, a cyclical pattern could result, where an abatement successfully passes clearance below the DLCL but an abatement is still recommended by EPA if dust-lead levels are at or above the DLHS. Thus, EPA is proposing to change the regulatory definition to require that abatements eliminate dust-lead hazards to below the DLCL to ensure that successful abatements can be considered complete. Relatedly, as explained in Unit IV.E, EPA is proposing amendments to the abatement report to help protect from exposure even after the abatement is complete.

An additional benefit to modifying the trigger for when EPA recommends an abatement is that it allows the regulated community to focus resources on situations that present more risk. As discussed in the 2001 and 2019 final rules, an important concern for EPA is having the resources for LBP hazard mitigation distributed so broadly that they may be diverted from situations that present the greatest risk. As a result, EPA is proposing to change the regulatory definition of abatement to permanently eliminate dust-lead hazards to below the DLCL and requesting public comment on this proposal. EPA believes that this proposed amendment to the regulatory definition appropriately applies the statutory definition in the context of this rule, where the statute requires EPA to consider reliability, effectiveness, and safety for purposes of EPA's TSCA section 402 DLCL regulations. Furthermore, the statutory definition of abatement in TSCA section 401 states that the set of measures covered by the term are to be "in accordance

with the standards established by the Administrator" under TSCA Title IV, which refers to the "standards for performing [LBP] activities" as what EPA's TSCA section 402 regulations shall contain. Note that nothing in this rulemaking changes the fact that owners of properties covered by the LBP Activities Rule are not compelled to evaluate their properties for the presence of dust-lead hazards, nor compelled by EPA to take action (such as an abatement) if dust-lead hazards are identified at or above the DLCL, although HUD and some state or local governments may require action.

E. Abatement Report

As explained in Units IV.A. and B., EPA is proposing to lower the current DLHS to any reportable level analyzed by an NLLAP-recognized laboratory, and the DLCL to 3 μg/ft^2, 20 μg/ft^2, and 25 μg/ft^2 for floors, window sills and troughs, respectively. The DLHS identify when pre-1978 housing or a COF has a dust-lead hazard present. If finalized as proposed, it is likely that once a project passes clearance and the abatement can be considered complete, there could still be dust-lead hazards present due to the DLHS being any reportable level. The Agency realizes the challenge this creates for the regulated community and to keep dust-lead levels down and mitigate exposure, EPA is proposing to amend the requirements for what needs to be included in an abatement report.

After the completion of an abatement, a report is required to be developed by a certified supervisor or project designer. The list of what needs to be included in the abatement report is described at 40 CFR 745.227(e)(10), and consists of elements such as the start and completion dates of the abatement, information about the risk assessor or inspector conducting the sampling, any clearance testing and soil analyses, etc. EPA is proposing to modify 40 CFR 745.227(e)(10) to include a requirement to add specific language into each abatement report, when dust-lead levels are between the DLHS and the DLCL. That language refers the public to a useful

reference titled *"Protect Your Family From Lead in Your Home"* and acknowledges that LBP hazards (particularly dust-lead hazards) could remain after an abatement. The goal of including this language in an abatement report is to ensure that occupants are provided information and tools available to them to minimize dust-lead hazards and take actions to protect themselves from exposure even after the abatement is complete.

The certified firm (or individual who prepared the report) must keep the abatement reports for at least 3 years and must provide a copy to the individual or entity who "contracted for its services" (40 CFR 745.227(i)). EPA is requesting comment on the proposed language to be added to the abatement report.

F. Other Amendments

In order to conform the regulations to a statutory change, make several other amendments to improve efficiency of the program and make several regulatory text corrections, EPA is proposing to amend 40 CFR part 745, subparts E (Residential Property Renovation), F (Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property), and L (Lead-Based Paint Activities).

1. Definition of target housing.

EPA is proposing to update the definition of target housing in 40 CFR 745.103 and 40 CFR 745.223 to align with the statutory changes made in 2017, and to make conforming edits to language in 40 CFR 745.223 and 40 CFR 745.227. Target housing defines which housing is subject to EPA's LBP rules. Within section 237(a) through (c) of Title II of Division K of the Consolidated Appropriations Act, 2017 (Pub. L. 115-31, 131 Stat. 788 and 789), Congress amended HUD and EPA's statutory definitions of target housing to include 0-bedroom dwellings if a child less than 6 years of age resides or is expected to reside in such housing (42 U.S.C. 4822(e); 42 U.S.C. 4851(b)(27); 15 U.S.C. 2681(17)). The proposed change to the definition of

target housing in 40 CFR 745.103 and 40 CFR 745.223 would conform to the statutory language by defining target housing as any housing constructed prior to 1978, except housing for older adults or persons with disabilities or any 0-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing). For consistency, EPA is also proposing to revise the definition of living area in 40 CFR 745.223 to change the age from 6 and under to less than 6 years of age. Similarly, language describing the age of children in 40 CFR 745.227(c)(2)(i), (c)(2)(iv), (c)(2)(v), (d)(3), (d)(5), and (d)(6)(ii) would be updated from 6 years of age and under to under age 6 to conform to the statutory language as amended.

2. Definition of child-occupied facility (COF) and living areas.

EPA is proposing to revise the definition of COF in 40 CFR 745.223 and related regulatory language in 40 CFR 745.227 to establish consistency throughout the LBP regulations. The LBP Activities regulations define COFs as buildings or portions of buildings, constructed prior to 1978, in which the same child regularly visits on at least two different days within any given week, with their visits lasting at least 3 hours with combined visits of at least 6 hours, and combined annual visits lasting at least 60 hours. COFs may include, but are not limited to, day-care centers, preschools and kindergarten classrooms. Living areas define any area of a residential dwelling used by one or more children which include, but are not limited to, living rooms, kitchen areas, dens, play rooms, and children's bedrooms. Currently, the definition of COF at 40 CFR 745.223 identifies children impacted by the LBP Activities regulations as age 6 and under, while the definition of COF in the RRP regulations at 40 CFR 745.83 identifies children impacted by the RRP regulations as under 6 years of age. In order to establish consistency in age throughout the LBP regulations, including with the definition of target housing and the RRP regulations' definition of COF, EPA is proposing to change the language in the definition of COF in 40 CFR 745.223 to less than 6 years of age. Language describing the

age of children in 40 CFR 745.227(d)(7) would also be updated from 6 years of age and under to under age 6 to conform.

3. Electronic submissions.

EPA is proposing to require submissions for application payments, applications, and notices to be done electronically. Under this proposal, this rule would specifically define "electronic" in 40 CFR 745.83 and 40 CFR 745.223 to mean "the submission of an application, payment, or notice using the Agency's Central Data Exchange (CDX), or a successor platform." In 2016, the U.S. Treasury Department changed their process so that paper checks would no longer be allowed for payment of fees associated with RRP or abatement programs. Since that time, applications that require payment, such as individual and firm certifications as well as training provider accreditation applications, have been submitted electronically via CDX. Therefore, EPA is proposing to amend 40 CFR 745.89 (a)(1), 40 CFR 745.92(c)(2), and 40 CFR 745.238(e)(2) to conform to the 2016 U.S. Treasury Department process and require payments to be made only electronically via CDX or a successor platform.

Currently there's no specific submission method defining how to submit applications in EPA's LBP regulations. This ambiguity allows for the potential of written applications to be submitted which requires time consuming activities such as data entry and accrues administrative costs. Therefore, EPA is proposing to amend 40 CFR 745.89 (a)(1), (b)(1), (b)(1)(i), and (c)(1); 40 CFR 745.225(b)(1), (e)(5), (f)(2), and (j)(2); 40 CFR 745.226(a), (e), (f), and (h)(1)(iii); 40 CFR 745.227(e)(4)(vii) and 40 CFR 745.238(d), and (e) to reflect the proposed requirement of submitting applications electronically via CDX or a successor platform. This will add further clarification and uniformity to this process.

Additionally, EPA is proposing to require that abatement and training notifications be submitted electronically via CDX or a successor platform. Requiring electronic submissions and

eliminating fax submissions would remove the need for fax machine maintenance and would also reduce phone service costs. Therefore, EPA is proposing to amend 40 CFR 745.225(c)(13)(vi) and (14)(iii) to require submission of abatement and training notifications to occur electronically via CDX or a successor platform.

4. Disclosure Rule warning statement.

EPA is proposing to update the Disclosure Rule's Lead Warning Statement in 40 CFR 745.113(b)(1) to address a drafting error. Both the preamble of the Disclosure Rule (required by Section 1018 of Title X), and the relevant public sample form include the following language: "Before renting pre-1978 housing, lessors must disclose the presence of known lead-based paint and/or lead-based paint hazards in the dwelling," which is consistent with EPA and HUD's adaptation to leasing contracts of the statutory language in Section 1018 (Ref. 7). However, the Lead Warning Statement in 40 CFR 745.113(b)(1) does not include the word "known." To conform this regulatory text with the statutory and preamble language, EPA is proposing to amend the Lead Warning Statement to include the word "known" when discussing lessors disclosing the presence of LBP and/or LBP hazards in the dwelling.

5. Disclosure Rule reference.

EPA is proposing to amend the Disclosure Rule at 40 CFR 745.113(a)(4) and 40 CFR 745.113(b)(4) to include the correct lead hazard information pamphlet reference, 15 U.S.C. 2686. This reference further discusses the requirements for the lead hazard information pamphlet and is the basis for its statutory authority. The current reference of 15 U.S.C. 2696 does not exist and was a drafting error.

6. Definition of housing for the elderly.

EPA is proposing to add the definition of "housing for the elderly" to 40 CFR 745.223 in order to clarify the term "elderly" used in the definition of "target housing," also in 40 CFR

745.223. EPA already defines "housing for the elderly" in 40 CFR 745.103 as "retirement communities or similar types of housing reserved for households composed of one or more persons 62 years of age or more at the time of initial occupancy" under Subpart F, "Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property." The proposal to include the same definition in Subpart L, "Lead-Based Paint Activities" would add clarity and consistency throughout the LBP program.

7. Obsolete regulatory text.

EPA is proposing to revise and delete obsolete regulatory text where language is out of date or no longer applicable in 40 CFR 745.81(a)(4)(i) and (b); 40 CFR 745.90(a)(3), and (4); 40 CFR 745.225(i)(2); and 40 CFR 745.226(f)(5). For example, 40 CFR 745.81(b) currently reads: "Before December 22, 2008, renovators or firms performing renovations in State and Indian Tribal areas without an authorized program may provide owners and occupants with either of the following EPA pamphlets: *Protect Your Family From Lead in Your Home* or *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.* After that date, *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools* must be used exclusively." This information is outdated; therefore, EPA is proposing to update and consolidate this section to read: "After December 22, 2008, renovators or firms performing renovations in States and Indian Tribal areas without an authorized program must provide owners and occupants the following EPA pamphlet: *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools*."

8. Incorporation by reference.

EPA is also considering adding incorporations by reference for two voluntary consensus standards, each of which is already included in the definition of "wipe sample" at 40 CFR 745.63: American Society for Testing and Materials (ASTM) E1728 and ASTM E1792. EPA

intends to incorporate by reference the most recent version of each standard (*i.e.,* ASTM E1728-20 and ASTM E1792-20). Copies of these materials may be obtained from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428-2959, or by calling (877) 909-ASTM, or at *https://www.astm.org.* ASTM standards referenced in this rule are also available for public review in read-only format in the ASTM Reading Room at *https://www.astm.org/epa.htm* only for the duration of the public comment period. If you have a disability and the format of any material on an EPA web page interferes with your ability to access the information, please contact EPA's Rehabilitation Act Section 508 (29 U.S.C. 794d) Program at *https://www.epa.gov/accessibility/forms/contact-us-about-section-508-accessibility* or via email at *section508@epa.gov.* To enable us to respond in a manner most helpful to you, please indicate the nature of the accessibility issue, the web address of the requested material, your preferred format in which you want to receive the material (electronic format (ASCII, etc.), standard print, large print, etc.), and your contact information.

V. Implications of Proposed Rule for Existing HUD and EPA Programs

A. HUD Programs

1. Lead-Safe Housing Rule.

HUD has specific authority to control LBP and LBP hazards in certain federally owned and federally-assisted target housing (Ref. 28). HUD's regulations at 24 CFR 35.1320(b)(2) cross-reference EPA's regulations at 40 CFR 745.227(h), which currently discusses EPA's DLHS but not EPA's DLCL. Due to the current cross-reference, the HUD regulations have been read as requiring entities receiving government funding currently to conduct post-abatement clearance until the levels are below EPA's DLHS, which at the time this cross-reference was made, were the same values as EPA's DLCL. Due to the 2021 Court Opinion, EPA is now proposing approaches for these standards that would result in decoupling the DLHS and DLCL

as explained in Unit IV. EPA is proposing modifications to 40 CFR 745.227(h) to clarify that the Agency does not intend to compel clearance down to the DLHS and to alleviate potential regulatory confusion surrounding clearance (as discussed in Unit IV.C of this notice).

Other impacts of EPA's proposal could include a possible decrease in the number of landlords participating in certain HUD programs, as well as families potentially shifting from assisted housing to unassisted housing, which has been shown to be associated with a higher prevalence of LBP hazards (Refs. 68 and 69) and higher BLLs (Ref. 70). As discussed in Unit II.A., lead exposure, even in small amounts, can cause substantial and long-lasting health problems, particularly through its effects on children's development. Access to secure housing is also an important social determinant of health (Ref. 71). Research finds negative health effects resulting from three key mechanisms of housing insecurity: lack of housing affordability leading to stress and material deprivation (Refs. 72, 73, 74 and 75), lack of housing stability (Refs. 76, 77, 78, 79 and 80), and lack of safe and adequate housing (Refs. 81, 82, 83, 84 and 85). HUD's housing assistance programs play a critical role in helping nearly 5 million households (Ref. 86) avoid housing insecurity and its harmful effects on physical and mental health (Refs. 70, 87, 88, 89, and 90). Despite such Federal assistance, the nation faces a critical shortage of affordable rental housing affecting about 8 million very low-income households (Ref. 91). EPA considered the proposed changes to the DLHS and DLCL and the potential impacts on HUD's housing programs within the EA (see Section 10.2 for this discussion) (Ref. 14). Existing research on landlord participation in the Housing Choice Voucher program (Refs. 92, 93, 94 and 95) suggests that more stringent standards or uncertainty as to how to meet those standards could be a disincentive for private target housing providers to participate in HUD's rental assistance programs including the Housing Choice Voucher program (tenant-based rental assistance program) and the project-based assistance programs, which could in turn reduce access to

affordable and stable housing associated with a relatively lower prevalence of LBP hazards than unassisted housing. As a result, EPA is requesting information and comment on whether adoption of the proposed DLHS and DLCL or alternative regulatory options under consideration would lead to an increase in housing insecurity or lead exposures. If so, EPA is requesting comment on whether there would be any adverse health effects due to this potential increase in housing insecurity alongside the health benefits of reduced lead exposure, as well as whether there are changes that EPA could make to the rule that maintain landlord participation in rental assistance programs while achieving the objectives of the statute.

EPA expects relatively limited impacts on housing supply due to this rulemaking for some housing types subject to HUD's LSHR. Subpart F of the LSHR covers HUD-owned single family housing properties for sale that are sold under a HUD mortgage program. HUD (*i.e.* the Federal Government) would be responsible for all costs associated with compliance to a stricter DLHS/DLCL before selling the property. While modest delays may occur in closing on sale transactions for these properties, a reduction in housing supply covered under this subpart is unlikely. Subpart G of the LSHR covers multi-family housing where either HUD is the owner of a mortgage or the owner of a property receives mortgage insurance under a program run by HUD. Housing covered under this subpart of the LSHR has risk assessment, interim control, and LBP maintenance requirements, but private landlords for these properties directly seek out Federal funds, and even if some of the federally-provided money is spent complying with a stricter DLHS/DLCL to comply with the LSHR, participating grantees should typically have a positive net return. To ensure all potential impacts of the rule are considered, EPA is requesting comment on impacts to housing covered under these other LSHR subparts as well additional factors that should be considered as part of the EA.

2. Grantee programs.

On February 16, 2017, HUD 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 grants and their High Impact Neighborhoods and Highest Lead-Based Paint Abatement Needs grant categories) (Ref. 96). The guidance adopted dust-lead action levels of 10 μg/ft^2 for floors and 100 μg/ft^2 for window sills, respectively, for initiating lead hazard control activities under these grant programs, and lead clearance action levels of 10 μg/ft^2 for floors, and 100 μg/ft^2 for window sills and troughs, respectively, for clearing such lead hazard control activities. If the proposed changes to the DLCL discussed in Unit IV are finalized, LBPHC and LHRD grantees would be required by EPA's regulations to clear lead abatement projects to the updated DLCL of 3 μg/ft^2, 20 μg/ft^2, and 25 μg/ft^2 for floors, window sills, and troughs respectively. If EPA finalizes the proposed changes to the DLHS and DLCL, HUD has informed the Agency that it would likely issue new policy guidance on initiating lead hazard control activities and on clearing lead abatement projects under these grant programs, and that it would consider issuing new policy guidance on clearing interim control projects under these grant programs.

3. EPA-HUD Disclosure Rule.

Under the Disclosure Rule (Ref. 7), prospective sellers and lessors of target housing, which is most pre-1978 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. The records or reports pertaining to LBP and/or LBP

hazards include, among other things, results from risk assessments, regardless of whether the levels of dust-lead are above or below the dust-lead hazard standards, and from post-abatement dust wipe testing, above or below the clearance levels. Because disclosure is required in target housing regardless of whether dust levels are above or below the DLHS or DLCL, finalizing the GTZ approach for the dust-lead hazard standards and lowering the dust-lead clearance levels would not result in more disclosures; rather it would result in more disclosures indicating that a lead-based paint hazard is present (since the proposed GTZ is lower than the current DLHS from 2019). EPA is also proposing changes to the definition of "target housing" (40 CFR 745.223) which expands the universe of housing subject to the Disclosure Rule requirements. This is reflective of a change to the statutory definition (P.L. 115-37, Consolidated Appropriations Act, 2017, Division K, Title II, section 237(c)). This proposed conforming change to the regulatory definition of target housing to include 0-bedroom dwellings where a child resides may slightly increase the number of disclosures issued.

4. HUD Guidelines.

The HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (*https://www.hud.gov/program_offices/healthy_homes/lbp/hudguidelines*) were developed in 1995 under section 1017 of Title X. The Guidelines provide detailed, comprehensive, and 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. If EPA finalizes changes to the DLHS and DLCL as proposed, HUD has informed the Agency that it would likely revise Chapter 5 of the Guidelines on risk assessment and reevaluation, Chapter 12 on abatement, and Chapter 15 on clearance, and make conforming changes elsewhere as needed (Ref. 97).

B. EPA LBP Programs

1. LBP Activities Rule.

LBP activities include risk assessments, inspections, and abatements. If this rule is finalized as proposed, it will have impacts to LBP activities, including: the definition of abatement, what is considered a DLHS, the DLCL used to determine whether an abatement can be considered complete, and the definition of target housing.

As stated earlier in this preamble, EPA's risk assessment work practice standards provide the basis for risk assessors to determine whether LBP hazards are present in target housing and COFs. As part of a risk assessment, dust samples are taken from floors and window sills to determine if dust-lead levels exceed the DLHS. The results of the sampling, among other things, are documented in a risk assessment report which is required under the LBP Activities Rule (Ref. 24). In addition to the sampling results, the report must describe the location and severity of any dust-lead hazards found and describe interim controls or abatement measures needed to address the hazards.

Under this proposed rule, sampling results reporting any level of lead analyzed by an NLLAP-recognized laboratory will indicate that a dust-lead hazard is present on the surfaces tested. EPA expects that the proposed DLHS will result in more hazards being identified in a portion of target housing and COFs that undergo risk assessments. This proposed rule does not change any other risk assessment requirements; however, it does recommend changes to the definition of abatement, which is discussed in the following paragraph.

Abatements are currently defined as 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 dust wipe

testing activities associated with such measures. The proposed change to the definition of abatement would shift the recommendation for an abatement to when the dust-lead loadings are at or above the DLCL. Because the proposed DLCL are lower than the 2019 DLHS, more recommendations for abatement are expected. However, not every circumstance where dust-lead hazards are identified will result in an EPA recommendation for abatement, *i.e*., when dust-lead loadings are at or above the DLHS, but below the DLCL. Similarly, EPA recommends interim controls only in circumstances when dust-lead loadings are at or above the DLCL, rather than the DLHS, for the reasons explained above.

After LBP abatements are conducted, EPA's regulations require a certified inspector or risk assessor to conduct post-abatement dust wipe testing of the abated area. If the dust wipe sample results show dust-lead loadings equal to or exceeding the applicable DLCL, "the components represented by the failed sample shall be recleaned and retested." See 40 CFR part 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 DLCL. If this rule is finalized as proposed, inspectors and risk assessors would compare dust wipe sampling results for floors, window sills and troughs to the revised DLCL of 3 $\mu g/ft^2$, 20 $\mu g/ft^2$, and 25 $\mu g/ft^2$, respectively. Dust wipe sampling results at or above the DLCL would indicate that the components represented by the sample must be recleaned and retested.

Lastly, as described in Unit IV.F.1, this proposed rule conforms the regulatory definition of target housing with the statute to include any 0-bedroom dwellings constructed prior to 1978 if a child less than 6 years of age, resides or is expected to reside in such housing, which could increase the number of homes covered by this regulation. In addition, EPA is proposing regulatory changes to adjust the age requirements from 6 years of age and under, to under age 6 for the definition of target housing, COFs and living area, which could reduce the number of

homes and COFs covered by this regulation; see Units IV.F.1. and 2. For more information.

2. Previous LBP-Related Activities.

Since the DLHS do not compel specific EPA actions, revisions to the DLHS would not in and of themselves compel any actions under the LBP Activities Rule, retroactively or otherwise, but actions would be compelled under other laws or regulations, including HUD's LSHR and possibly those of some state, local, Tribal or territorial governments. Inspection reports and risk assessments describe conditions at a specific time. A report that indicates no presence of LBP and/or an LBP hazard should not imply the absence of those conditions in perpetuity. Additionally, the DLHS may be incorporated into requirements mandated by state, Federal, Tribal, and other programs that may require actions based on the revised DLHS. Those other authorities may want to consider guidance or other communications with their regulated communities, so those entities understand how to comply with the various programs that reference the DLHS.

The DLCL however, 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 proposed DLCL of 3 $\mu g/ft^2$ for floors, 20 $\mu g/ft^2$ for window sills, and 25 $\mu g/ft^2$ for troughs would not impose retroactive requirements on regulated entities that have previously performed post-abatement clearance. These updated DLCL would only apply to post-abatement clearance sampling and analysis conducted after the compliance date for that portion of the final rule (*i.e.,* one year after publication of the final rule).

In addition, this rulemaking does not impose retroactive requirements to regulated entities

that have previously complied with the Disclosure Rule. In accordance with 40 CFR 745.107, a seller or lessor generally must properly disclose any available records or reports pertaining to LBP and/or LBP hazards before the purchaser or lessee is obligated under any contract to purchase or lease target housing. The seller or lessor is not required to disclose reports or records that may be created in the future, after the close of that transaction. Additionally, any LBP-free certification that was issued by a certified inspector, and was issued before the effective date of this rulemaking, is still valid going forward and may continue to be used for exemption to the Disclosure Rule.

3. Renovation, Repair, and Painting Rule.

The proposed DLHS and DLCL would not trigger new requirements under the existing RRP Rule (40 CFR part 745, subpart E). The existing RRP work practices are required where LBP is present (or assumed to be present) and are not predicated by dust-lead loadings exceeding the DLHS. The existing RRP regulations do not require dust-lead sampling prior to or at the conclusion of a renovation and are not affected by a change to the DLHS or DLCL. Therefore, RRP regulations will not be directly affected by the proposed revisions to the DLHS or the DLCL.

The RRP Rule does require specific 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, for renovations of assisted target housing, EPA is not aware of other laws and regulations that require clearance testing using EPA's DLCL. EPA seeks information on this point and welcomes public comments.

4. Laboratory Quality System Requirements.

As discussed previously in Unit II.C., NLLAP is an EPA program under which an accrediting organization assesses whether a paint chip, dust, or soil testing laboratory meets minimum standards for laboratory analysis to attain EPA recognition as an accredited lead testing laboratory (*https://www.epa.gov/lead/national-lead-laboratory-accreditation-program-nllap*). Laboratories and other testing firms recognized under NLLAP follow the LQSR. This rulemaking does not modify the minimum standards outlined in the latest LQSR version 3.0. However, changes to the action level (*i.e.,* the proposed DLCL) would impact the quantitation limit that NLLAP-recognized laboratories would attain to participate in the NLLAP, as that must be equal to or less than 50% of the lowest action level for dust wipe samples per specific surface area (*i.e.,* floors, window sills, window troughs) (Ref. 29). If finalized as proposed, the lowest action level for dust wipe samples would be the DLCL of 3 μg/ft^2 for floors, 20 μg/ft^2 for window sills and 25 μg/ft^2 for troughs. As a result, the quantitation limit for NLLAP-recognized labs would be equal to or less than 1.5 μg/ft^2 for floors, 10 μg/ft^2 for window sills and 12.5 μg/ft^2 for troughs.

C. Authorized Programs

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 briefly described in Unit II.C.), as long as their programs are at least as protective of human health and the environment as 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 any new requirements

imposed by this rulemaking upon finalization 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 proposed 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 (40 CFR 745.325(e)).

VI. Proposed Effective and Compliance Dates

EPA is proposing that the final rule would become effective on the date that is 60 days after publication in the ***Federal Register***. The Agency is proposing an extended compliance date of one year for the DLHS, the DLCL, and the change to the abatement report requirements (40 CFR 745.65 definition "dust-lead hazard"; 40 CFR 227(h)(3)(i); 40 CFR 745.227(e)(8)(viii) and (10)(vii)). EPA seeks comment on the appropriate compliance date, including whether the compliance date should be six months, eighteen months, two years or another longer timeframe, as well as the justification for the change.

EPA has considered the impacts of the proposed DLHS and DLCL on NLLAP-recognized laboratories and is proposing a subsequent compliance date of one year after publication of the final rule in ***Federal Register*** for certain provisions under this rulemaking. The proposed compliance date is intended to provide a reasonable amount of time for NLLAP-recognized laboratories to take actions to meet the lower LQSR quantitation limit (50% of the lowest action level for dust wipe samples) so they can continue providing dust wipe testing services to the regulated community and in emergent situations by the compliance date for the revised standards.

To obtain a better understanding of laboratories' capability and capacity for dust wipe

testing, EPA conducted teleconferences with nine NLLAP-recognized laboratories (Refs. 56, 57, 58, 59, 60, 61, 62, 63 and 64). As explained in Unit IV.B., based on the information EPA received from this outreach, EPA believes that laboratories with more up to date ICP-AES instruments and optimized methods should be able to satisfy the LQSR dust wipe testing procedures and the regulatory limit of the primary DLCL option of 3 µg/ft^2 for floors, 20 µg/ft^2 for window sills and 25 µg/ft^2 for troughs (quantitation limit of 1.5 µg/ft^2 for floors, 10 µg/ft^2 for window sills and 12.5 µg/ft^2 for troughs). However, FAAS is the most ubiquitous equipment used, and EPA is estimating that accredited laboratories may buy new equipment to meet the lower LQSR limits. Based on the outreach performed, laboratories may need as little as six months but as much as 18 months to finance and obtain new equipment (such as ICP-AES), hire and train staff, and potentially receive new NLLAP accreditation (Refs. 56, 57 and 62). Two laboratories said it could take as much as two years to adjust to hypothetical regulatory changes such as the ones being proposed (Refs. 58 and 59).

EPA therefore believes that the proposed compliance date provides the needed flexibility for laboratories while ensuring that the revised DLHS and DLCL become effective in a timely manner. However, in consideration of the feedback received from NLLAP-recognized laboratories during the Agency's outreach efforts, EPA is requesting comment on the proposed compliance date, whether six-months is appropriate for the primary DLCL option (*i.e.,* 3/20/25 µg/ft^2) or if 12 months, 18 months, or some other amount of time is necessary, and why the extra time is needed.

Additionally, if the alternative DLCL is finalized (*i.e.,* 5/40/100 µg/ft^2), based on the laboratory outreach, EPA has increased confidence that laboratories can numerically quantify dust-lead levels of 5 µg/wipe and attain a quantitation limit of equal to or less than 50% of that level (*i.e.,* 2.5/20/50 µg/ft^2) with FAAS technology, especially if the area tested is doubled from

one square foot to two. EPA is also requesting comment on whether NLLAP-recognized laboratories would still need a six-month compliance date if the Agency finalized the alternative DLCL, or if 12-months, 18-months, or some other amount of time would be necessary to provide the flexibility that laboratories need in that scenario and why.

EPA is also proposing a six-month compliance date for the DLHS along with the DLCL and is interested in revising both standards at the same time to reduce any confusion and avoid any concerns within the regulated community that may be caused by staggering the DLHS and the DLCL compliance dates. EPA believes that since the DLHS are non-numeric which is different than they have been historically, and as the program is shifting to the DLCL becoming the "action level" for the LQSR, it is important to allow ample time for the regulated community to adapt to the revised DLHS and DLCL. Additionally, if the DLHS compliance date occurred before the DLCL compliance date, EPA is concerned it may trigger unnecessary confusion for laboratories. EPA is requesting comment on the appropriateness of the DLHS and the DLCL having the same compliance date.

VII. Request for Comments

A. Proposed Dust-Lead Hazard Standards

EPA is seeking input on its proposal to lower the DLHS to any reportable level of dust-lead analyzed by an NLLAP-recognized laboratory, and the two alternative approaches to revising the DLHS – the numeric standard approach and the post-1977 background approach. EPA is requesting feedback not only on all the approaches considered but also on all the DLHS options themselves outlined in the preamble and within the TSD. EPA is requesting comment on the appropriateness of EPA's interpretation of "any reportable level." EPA is also requesting comment on whether laboratories believe there are potential inconsistencies with the lowest reportable level within any one laboratory or across the industry, the extent of these

inconsistencies, and if laboratories foresee this causing any concern for their clients. EPA is also requesting comment on the effects of not setting the DLHS at a fixed numeric value, and whether any potential inconsistencies with individual laboratory reporting levels (when interpreting dust-lead results in relation to the hazard standards), would cause challenges for the regulated community or other stakeholders, *e.g.,* building owners or residents.

EPA is also seeking any information or data for a level of dust-lead exposure that would not result in adverse health effects, and any information on how much exposure in terms of BLL or change in IQ decrement would be the most scientifically appropriate to compare to the modeled results or as a rationale to set the DLHS, including the appropriate threshold of probability of exceedance for a child from the sub-population of interest.

B. Proposed Dust-Lead Clearance Levels and Alternatives

EPA is requesting comment on its proposal to lower the DLCL to 3 μg/ft^2 for floors, 20 μg/ft^2 for window sills, and 25 μg/ft^2 for troughs. EPA is requesting comment on NLLAP-recognized laboratories' ability to test to these clearance levels, especially given that, if finalized as proposed, the quantitation limit would be 50% of the DLCL (*i.e.,* 1.5/10/12.5 μg/ft^2) for laboratories that remain in NLLAP. EPA is also requesting comment on whether LBP professionals can clean/achieve clearance at these levels. EPA is also interested in feedback on whether the primary or alternative DLCL option is preferred and if they appropriately take into account reliability, effectiveness, and safety. Also, in some cases, window sills and troughs may have a small surface area, and therefore, EPA is requesting comment on the ability to collect a sufficient amount of dust-lead to meet all laboratories' quantitation limits with their existing analytical equipment or any other equipment that might be necessary for the DLCL primary and secondary options presented. EPA is also requesting comment on whether there is any data or information on whether window sills and window troughs should have the same clearance

values, and why or why not. EPA is interested in both feedback and justification for whether a higher trough value such as 100 μg/ft^2 or if another DLCL combination (for floors, window sills and window troughs) besides the primary and alternative options considered is appropriate given the statutory criteria of reliability, effectiveness, and safety. Lastly, EPA requests comment on whether or not the proposed DLCL would discourage initiation of elective dust-lead remediation altogether.

Additionally, EPA is seeking input on a phased approach of establishing the alternative, higher DLCL first (5/40/100 μg/ft^2) and then in a specific amount of time, *e.g.,* three years, lowering it to the primary DLCL value (3/20/25 μg/ft^2). This phased approach would give laboratories with FAAS equipment time to purchase the more sensitive equipment needed to achieve the lower levels, hire new employees, become accredited with the new equipment, etc. EPA requests feedback on whether this is an approach that should be considered and, if so, what would be an appropriate amount of time between the first and second lowering of the DLCL.

C. Other Amendments

EPA is seeking comment on whether the changes to the definition of abatement make it clear that abatements should only be recommended when the dust-lead loadings are at or above the DLCL, rather than at or above the DLHS as it has been historically. EPA is also interested in receiving feedback on its proposed changes to 40 CFR 745.227(h) (to alleviate potential regulatory confusion surrounding clearance); as well as the additional language being added to the abatement report requirements, including whether EPA should make similar modifications to the risk assessment report requirements to add specific language explaining that abatements should only be recommended when the dust-lead loadings are at or above DLCL. EPA is also requesting comment on the effectiveness of the proposed language in the abatement report requirements to educate the public on remaining dust-lead hazards, promote behavior change,

and point them to educational materials such as *Protect Your Family.* In those circumstances where the additional language would be added to abatement reports, EPA is also interested in feedback on whether the *Protect Your Family* materials themselves should be included alongside the abatement report and why *Protect Your Family* should be included. Separately, due to feedback received during the UMRA/federalism consultation: EPA is also interested in feedback on whether additional communication materials would be beneficial for public housing authorities to have access to in order to provide to residents living in homes with dust-lead hazards. If so, EPA is requesting information on what type of materials, for what DLHS and DLCL options, and for which type of stakeholder/end user (if there are any besides public housing authorities) would be helpful.

EPA is seeking comment on all other amendments including the conforming change to the definition of target housing to provide consistency with the statutory change to the definition, as well as the conforming edits to children's age (*i.e.,* under six) to provide consistency within the LBP regulations. EPA is requesting comment on how long after final rule publication the compliance date should be. EPA is proposing to establish a compliance date for the DLHS and DLCL that would occur on the date that is one year after the publication date of the final rule in the ***Federal Register.*** The Agency invites public comment on the adequacy of the proposed compliance date. EPA is also seeking feedback from states, territories, or Tribes that are authorized by EPA to operate their own LBP activities programs, on the impact of this proposed rule and if it will have substantial direct effects on the states, territories, or Tribes, on the relationship between the U.S. government and the states, territories, or Tribes, or on the distribution of power and responsibilities among the various levels of government or between the Federal Government and Indian Tribes, such as whether states, territories, or Tribes may relinquish their programs back to EPA.

D. Methods, Models and Data

EPA is also requesting comment on the methods, models and data used in the EA and the TSD that accompany this proposal. In particular, EPA requests comment on the EA's use of the lifetime IQ concentration-response function to calculate IQ loss for ages for young children, particularly at low exposure levels (see section 6.4 in the EA). Additionally, EPA solicits comment and peer reviewed information on evidence relevant to quantifying and monetizing the incremental contribution of blood lead concentrations to other health and/or behavioral endpoints, including adult cardiovascular mortality.

EPA is proposing to update its regulatory definition of target housing to conform to the 2017 revised statutory language (see Unit IV.F.1.). EPA estimates that there are 10,850 pre-1978 dwellings that would be affected because they have zero bedrooms and a child under the age of 6 resides in them. EPA's EA for this action (Ref. 14) estimates that the total annual cost (including complying with existing lead-based paint program requirements for disclosure for real estate transactions, disclosure for renovation activities, abatement, and the renovation, repair and painting rule) in newly defined target housing would be $0.2 million. EPA's analysis also estimates that the annual benefits of these requirements would be $3.7 million using a 3% discount rate and $0.8 million using a 7% discount rate. EPA requests comment on its estimate of the number of affected housing units, and on the methods and assumptions it used to estimate the costs and benefits resulting from aligning its regulatory definition with the revised statutory definition.

EPA is proposing to require submissions for applications, application payments, and abatement and training notifications notices for the lead paint program be made electronically, instead of through mail, fax, or hand delivery (see Unit IV.F.3.). Based on its EA for this action (Ref. 14), EPA expects that this automation would save firms switching to electronic reporting

an average of 5 hours per firm in labor, and that across all affected firms the change would result in total annual savings of approximately $20,000 using a 3% discount rate and $10,000 using a 7% discount rate. EPA solicits comment on the benefits and costs of requiring such electronic reporting.

Certain provisions of the HUD LSHR require lead hazard reduction activities when dust-lead levels exceed the DLHS. Given the nature of the proposed GTZ approach, in order to account for these activities in its EA (Ref. 14), EPA estimated what the reportable levels would be under the GTZ options, based on the analytical equipment that laboratories would likely use under these options. According to the LQSR, NLLAP-recognized laboratories must be able to demonstrate a quantitation limit less than or equal to half of the action level in order to maintain or obtain NLLAP recognition. Since the action level under the GTZ options would be the DLCL, the floor and window sill reporting levels estimated for analytical purposes for the GTZ options vary depending on the DLCL levels that the GTZ is paired with. Because some types of laboratory equipment have quantitation levels well below half of the DLCL options, EPA estimated the reporting limits for the mix of analytical instruments likely to be used under the GTZ options in order for the quantitation limits to be at least half of the DLCL. EPA solicits data on the distribution of quantitation limits for different types of analytical instruments in order to allow the Agency to refine its estimates of the reportable levels under the GTZ/DLCL options that the Agency is considering. EPA also requests data on the false positive and false negative rates for testing lead in dust using different types of analytical equipment (*e.g.,* FAAS, ICP-AES, and ICP-MS).

EPA requests data on costs for dust-lead testing that the Agency can use to refine its EA for the final rule. EPA also solicits information and comments related to any other data, assumptions, or methodology that EPA used to estimate the costs of the proposed rule, or on any

costs that EPA did not quantify. EPA also requests comment on potential changes to the proposed rule that would reduce impacts on small entities while being consistent with statutory requirements and still achieving the rule's objectives.

Also, due to feedback from the UMRA/federalism consultation EPA is interested in any comments that can provide information on COFs, particularly any information that could help inform an EA, such as data on the number and cost of abatements partnered with recent dust-lead loading results, how many children under six were present in the COF at the time, etc. Based on the information available to it at the time of the proposal, EPA was unable to quantify benefits to children visiting COFs that would be affected by this rule. Since the data EPA used were only associated with the abatements in states, territories and tribes where the Agency administers the lead-based paint activities program, EPA specifically requests data on COF abatements in the jurisdictions that are authorized to administer their own lead abatement programs. EPA also requests information on the typical practices of environmental investigations at child-occupied facilities, and whether or how these practices may differ by type of COF (*e.g.,* public school, private school, daycare center). EPA is interested in whether state/local requirements ever require routine dust wipe testing at COFs in the absence of a child with a blood lead level above a state or Federal action level, or how often COFs proactively have their dust-lead levels voluntarily tested. EPA would also welcome information on whether, in real-world practice, COFs always undergo dust wipe testing when a child who frequents the facility has a BLL above state or Federal action levels, or whether COFs are only tested if an investigation of the affected child's home reports no LBP, and if there are other circumstances that might lead to dust wipe testing at a COF.

Based on the information available to it at the time of the proposal, EPA was unable to quantify benefits to children visiting COFs that would be affected by this rule. EPA requests

information that would allow it to estimate such benefits for the final rule. EPA requests comment on data sources for parameterizing the R-SHEDS-IEUBK model used in the TSD and EA to estimate changes in blood lead levels for COFs (given that children's activity and exposure patterns may differ between housing and COFs, and the model is not calibrated or validated for predicting blood lead level changes in COFs), as well as how to avoid double-counting benefits between activities in target housing and COFs. EPA requests comment on sources of data including: children's activity patterns while attending COFs, physical parameters of COFs including area covered by different flooring material types, number and type of windows, and information on frequency of maintenance and cleaning. EPA also requests information on the range of baseline blood lead levels or lead exposures across the population of children that visit a COF where an abatement occurs.

EPA also requests information and data on the potential economic and health impacts to current residents and landlords of housing that is subsidized by tenant-based rental or project assistance programs run by HUD or USDA. EPA also requests comment on whether there are other types of assisted housing programs where there is a significant risk of landlords withdrawing from the program due to this rulemaking; specific factors that determine whether landlords would stop participating in Federal assistance programs; and estimates of the cost elasticity of landlord participation in such programs. EPA also welcomes comment and/or data that provides evidence for direct or indirect health impacts associated with relatively higher potential lead exposures in regard to housing insecurity attributable to housing quality standards (both generally and specific to lead-related standards).

EPA is requesting comment on research, studies, modeling, data, and any other information on the effects of the availability of target housing units for low-income families, including assisted target housing units, due to housing quality standards. Furthermore, EPA

requests comment on potential impacts to the non-federally-assisted rental housing market, particularly naturally-occurring low-income housing, due to housing quality standards, including quantitative evidence of housing instability or differential housing outcomes or lead exposures for families with young children that have resulted from local, state, or Federal lead paint regulations.

E. Other Requests for Comment

Finally, EPA is requesting comment on the impacts on NLLAP-recognized dust-lead laboratories, through considerations such as: added turnaround time for testing analysis (affecting re-occupancy, including temporary housing costs adding to overall project costs); added laboratory costs and the possibility of increasing project costs; and possible loss to NLLAP-recognized laboratories that cannot or do not want to make the investment and/or reduce their throughput at the proposed lower DLHS and DLCL. EPA is also interested in information about possible solutions for any unintended consequences of the lower DLHS and DLCL (which are consistent with the 2021 Court Opinion that instructed EPA to consider only health factors when setting the DLHS and affirmed that EPA could consider other factors *i.e.,* reliability, effectiveness, and safety, when setting the DLCL).

In addition to the areas which EPA has specifically requested comment, EPA requests comment on all other aspects of this proposed rule.

VIII. 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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11. U.S. Court of Appeals for the Ninth Circuit. A Community Voice v. EPA, No. 19-71930, Opinion. May 14, 2021. *https://cdn.ca9.uscourts.gov/datastore/opinions/2021/05/14/19-71930.pdf.*

12. Executive Order 13990. Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis. *Federal Register* (86 FR 7037, January 25, 2021). *https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01765.pdf.*

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14. EPA. Economic Analysis of the Proposed Reconsideration of the Dust-Lead Hazard Standards and Post-Abatement Clearance Levels. June 2023.

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IX. 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 Orders 12866: Regulatory Planning and Review and 14094: Modernizing Regulatory Review

This action is a "significant regulatory action" as defined under section 3(f)(1) of

Executive Order 12866 (58 FR 51735, October 4, 1993), as amended by Executive Order 14094 (88 FR 21879, April 11, 2023). Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Order 12866. Documentation of any changes made in response to the Executive Order 12866 review is available in the docket. The Agency prepared an analysis of the potential costs and benefits associated with this action, this analysis (Ref. 14), is available in the docket.

B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for review and approval to OMB under the PRA, 44 U.S.C. 3501 *et seq*. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR No. 2760.01 (Ref. 98). You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The ICR addresses the incremental changes to the existing reporting, notification, and recordkeeping programs that are currently approved under OMB Control Nos. 2070-0151 and 2070-0195. As approved under OMB Control No. 2070-0151 and pursuant to 24 CFR part 35, subpart A, and 40 CFR 745, subpart F, sellers and lessors of target housing must already provide purchasers or lessees any available records or reports "pertaining to" LBP and/or LBP hazards available to the seller or lessor. Accordingly, a seller or lessor must disclose any reports showing dust-lead levels, regardless of the value. A lower hazard standard may prompt a different response on the already required lead disclosure form, *i.e.,* that a lead-based paint hazard is present rather than not, which would occur when a dust-lead level is below the current standard but at or above a lower final standard. However, for existing target housing, this action would not result in additional disclosures because the lead disclosure form is required regardless of whether dust-lead is present at or below the hazard standard. Nevertheless, due to the change in target housing definition, EPA estimates an additional 967 disclosure events will occur annually,

which will affect 3,040 respondents at an average burden and cost of 0.08 hours and $4.37 per respondent, resulting in a total annual burden of 337 hours at a total annual cost of $13,272.

Next, as approved under OMB Control No. 2070-0195, the ICR addresses the information collection activities associated with the reporting and recordkeeping requirements for individuals, firms and state and local government entities conducting LBP activities or renovations of target housing and COFs; training providers; and states/territories/Tribes/Alaska Native villages. These information collection activities include the following:

• LBP activity firm pre-abatement reports and occupant protection plans, abatement activity notifications, post-abatement reports and recordkeeping;

• Applications for certification of individuals performing LBP activities, and related recordkeeping;

• LBP activities training provider accreditation applications, training notifications, and recordkeeping;

• LBP activity firm certification applications and recordkeeping;

• Distribution of pre-renovation lead hazard information pamphlet and post-renovation checklists documenting lead-safe work practices;

• RRP and LBP professionals classroom training time related to recordkeeping compliance;

• RRP training provider accreditation applications, training notifications, and recordkeeping;

• Private RRP firm and Government-employed RRP professional certification applications and recordkeeping; and

• Submission of related fees.

Incremental abatement notifications would be required when an abatement occurs due to

the revised DLHS/DLCL and does not occur in the baseline; EPA estimates that 1,618 to 2,404 such notifications will incur average annual paperwork-associated costs of $149. Additional LBP workers may need to be hired and subsequently trained and certified to accommodate the additional dust-lead remediation activities triggered by the revised DLHS/DLCL. EPA estimates that 2,237 to 3,971 respondents will incur average annual paperwork-associated costs of $432. Because the EA finds that the revised DLHS/DLCL would increase the number of new lead hazard reduction events by no more than 5 per firm per year, EPA assumes that existing LBP activity firms would cover this new work and new entrants are unlikely to emerge. As such, EPA does not estimate any paperwork costs associated with LBP activity firm certification. Similarly, the EA finds that there would be fewer than 1 incremental event per affected RRP firm and therefore EPA assumes no new RRP firms or employees will enter the market in response to the DLHS/DLCL revision. As such, EPA does not estimate any paperwork costs associated with RRP firm certification or RRP training.

The revisions to the definition of target housing will result in paperwork costs in two dimensions. First, abatement firms operating in newly defined target housing are expected to incur reporting and recordkeeping costs for those additional events. EPA estimates that 25 respondents will incur an average annual cost of $89.21 for these activities. Second, renovation service firms performing renovation activities in newly defined target housing are required to perform disclosure activities. This will result in recurring disclosure event, recordkeeping, and materials costs. EPA estimates that 1,977 respondents will incur an average annual cost of $14.73.

In addition, EPA currently receives approximately 90 percent of required notifications as well as applications for accreditation, certification, and re-certification from training providers, firms, and lead abatement individuals through EPA’s Central Data Exchange (CDX). The

paperwork activities, related burden and costs with CDX user registration for those who elect to exercise the electronic submission option established under the Agency's Cross-media Electronic Reporting Rule (CROMERR) (40 CFR 3) are described in an ICR approved under OMB Control No. 2025-0003. The amended information collection activities contained in this proposed rule are designed to assist the Agency in meeting its responsibility under TSCA to receive, process, and review reports, data, and other information. Accordingly, this proposed rule would require regulated parties to submit notifications and applications through CDX.

The ICR prepared for this proposed rule addresses the incremental burden changes related to the expected increase in the number of responses to the activities considered in the other existing ICRs, as well as the changing response obligation for the use of CDX from voluntary to mandatory.

Respondents/affected entities: Persons engaged in selling or leasing certain residential dwellings built before 1978; persons who are engaged in lead-based paint activities and/or perform renovations of target housing or child-occupied facilities for compensation, dust sampling, or dust testing; persons who perform lead-based paint inspections, lead hazard screens, risk assessments or abatements in target housing or child-occupied facilities; persons who provide training or operate a training program for individuals who perform any of these activities; state, territorial or Tribal agencies that administer lead-based paint activities and/or renovation programs. See also Unit I.A.

Respondent's obligation to respond: Mandatory (40 CFR part 745).

Estimated number of respondents: 8,897 to 11,417 (per year).

Frequency of response: On occasion.

Total estimated burden: 23,329 to 38,985 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: $1.3 million to $2.1 million (per year), includes no annualized capital or operation and maintenance costs.

Under the PRA, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for certain EPA's regulations in 40 CFR are listed in 40 CFR part 9, and on associated collection instruments.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs using the interface at *www.reginfo.gov/public/do/PRAMain*. Find this particular information collection by selecting "Currently under Review - Open for Public Comments" or by using the search function. EPA will respond to ICR-related comments in the context of the final rule.

C. 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 entities subject to the requirements of the revised DLHS and DLCL are small businesses that are landlords who may incur costs for lead hazard reduction measures in compliance with the HUD's LSHR; elementary and secondary schools or child day care services (who make incur costs associated with COFs); residential remodelers (who may incur costs associated with additional cleaning and sealing in houses undergoing rehabilitation or ongoing lead-based paint maintenance subject to the HUD LSHR); and abatement firms (who may also incur costs associated with additional cleaning and sealing under the LSHR). The Agency has determined that approximately 39,000 small businesses would be directly affected by the revised DLHS and DLCL, of which 87% to 91%

have cost impacts less than 1% of revenues, 9% to 12% have impacts between 1% and 3% of revenues, and 1% have impacts greater than 3% of revenues. The total estimated costs to small businesses are between $303.1 million and $414.4 million per year.

Additionally, the rule's other amendments may potentially affect four types of small entities: property owners that will incur recordkeeping and material costs for real estate disclosures in newly defined target housing; renovation firms that will incur renovation disclosure costs and lead-safe work practice costs in newly defined target housing; LBP activities firms that will incur reporting and recordkeeping costs for abatement activities in newly defined target housing; and EPA-certified training providers that may incur costs for submitting reports electronically. The Agency has determined that approximately 2,998 small businesses would be directly affected by the amendment to the target housing definition, of which 100% have cost impacts less than 1% of revenues. The Agency has determined that approximately 86 small businesses would be directly affected by the amendment to the electronic reporting requirement, of which 100% have cost impacts less than 1% of revenues. All details of the analysis of potential costs and benefits associated with this action are presented in EPA's EA, which is available in the docket (Ref. 14).

The EA estimates potential costs from the revised DLHS and DLCL for activities in two types of target housing and COFs – those subject to the HUD LSHR and those where a child with a blood lead level exceeding a Federal or state threshold lives. Importantly, the DLHS do not require the owners of properties covered by this proposed rule to evaluate their properties for the presence of dust-lead hazards, or to act if dust-lead hazards are identified. Although the DLHS and DLCL do not compel specific actions under the LBP Activities Rule to address identified LBP hazards, the DLHS and DLCL are directly incorporated by reference into certain requirements mandated by HUD in the housing subject to the LSHR. Aside from the HUD

regulations, and, perhaps some state or local regulations, the DLHS and DLCL do not impose new Federal requirements on small entities.

D. Unfunded Mandates Reform Act (UMRA)

This action contains a Federal mandate under UMRA, 2 U.S.C. 1531-1538, that may result in expenditures of $100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any one year. Accordingly, EPA has prepared the written statement required under section 202 of UMRA (Ref. 17). The statement is included in the docket for this action and is briefly summarized here.

1. Authorizing legislation.

This rulemaking is issued under the authority of TSCA sections 401, 402, 403, 404, and 406, 15 U.S.C. 2601 et seq., as amended 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) and section 237(c) of Title II of Division K of the Consolidated Appropriations Act, 2017 (Pub. L. 115-31, 131 Stat. 789), as well as sections 1004 and 1018 of Title X (42 U.S.C. 4851b, 4852d), as amended by section 237(b) of Title II of Division K of the Consolidated Appropriations Act, 2017.

2. Cost-benefit analysis.

The EA (Ref. 14) presents the costs of the rule as well as various regulatory options, and is summarized in Unit I.E. The rule is estimated to result in total compliance costs of $536 million to $784 million per year. Thus, the annual cost of the rule to the private sector (and State, local, and Tribal governments) in the aggregate exceeds the inflation-adjusted $100 million UMRA threshold.

This rule will reduce exposures to lead, resulting in benefits from avoided adverse health effects. For the subset of health effects where the results were quantified, the estimated

annualized benefits are $1.069 billion to $4.684 billion per year using a 3% discount rate and $231 million to $1.013 billion per year using a 7% discount rate. There are additional unquantified benefits due to other avoided health effects.

Net benefits are the difference between benefits and costs. The rule is estimated to result in quantified net benefits of $532 million to $3.899 billion per year using a 3% discount rate and -$302 million to $231 million per year using a 7% discount rate. EPA considers unquantified health benefits to be potentially important non-monetized impacts that contribute to the overall net benefits of this rule.

3. State, local, and Tribal government input.

EPA sought input from State and local government representatives early in the rulemaking process during the joint intergovernmental consultation initiated in November 2022 and will continue to engage these partners throughout the rulemaking process. EPA's experience in administering the existing LBP activities program under TSCA section 402 suggests that these governments will play a critical role in the successful implementation of the national program to reduce exposures to LBP hazards.

This action is not subject to the requirements of UMRA section 203 because it contains no regulatory requirements that exceed the inflation-adjusted cost significance threshold or uniquely affect small governments. Additionally, although EPA does not believe that this action would impose an unfunded mandate on Tribal governments or otherwise have substantial direct effects on one or more federally recognized Indian Tribes as specified in Executive Order 13175, the Agency is soliciting input from Tribal officials during the public comment period.

E. Executive Order 13132: Federalism

EPA has concluded that this action has federalism implications, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it imposes substantial direct compliance

costs on public housing authorities that state or local governments may be obligated to offset, and while some HUD funding for LBP projects exists, the Federal Government may not provide the funds necessary to pay the entirety of the costs. These costs to public housing authorities – estimated at $143 million for the primary option – cover additional lead hazard reduction activities, cleaning, and dust-lead testing to ensure that public housing units are in compliance with the LSHR. Public school districts that administer COFs are also estimated to have annual compliance costs of approximately $904 thousand. Additionally, states that have authorized LBP Activities programs must demonstrate that they have DLHS and DLCL at least as protective as the levels at 40 CFR 745.65 and 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 DLHS and DLCL they can relinquish their authorization. In the absence of a state authorization, EPA will administer these requirements.

EPA provides the following federalism summary impact statement. EPA consulted with state and local officials early in the process of developing the proposed action to permit them to have meaningful and timely input into its development. EPA invited the following national organizations representing state and local elected officials to a consultation meeting on November 10, 2022: National Governors' Association, National Conference of State Legislatures, U.S. Conference of Mayors, National League of Cities, Council of State Governments, International City/County Management Association, National Association of Counties, National Association of Towns and Townships, County Executives of America, and Environmental Council of the States. Additionally, the agency invited professional organizations that represent or have state and local government members, such as Public Housing Authorities Directors Association, Council of Large Public Housing Authorities, Association of State and Territorial Health Officials, American Public Works Association, and other groups to participate

in the meeting.

During the consultation EPA presented an overview on LBP terminology, authorized programs and background on the DLHS and the DLCL, including the relevant statutory authority and regulatory and litigation history. EPA also discussed potentially impacted entities, especially those relevant to the organizations present, as well as the three regulatory approaches for DLHS (*i.e.,* GTZ, numeric standard, and the post-1977 background) and what the Agency is considering while revising the DLCL. EPA concluded the consultation with a description of the preliminary costs and benefits, an update on target housing revisions, and a series of targeted questions for organizations' consideration.

Throughout the presentation several clarifying questions/comments were posed and responded to about the program requirements, triggers, and impacted entities. One commenter inquired whether cost estimates were included for COFs. EPA responded that the costs to COFs had not been considered; these costs are now included in the analysis. The Agency has also added a request for comment seeking additional data on COFs, see Unit VII.

Additionally, two commenters expressed concerns about having adequate funding for public housing authorities to meet their basic needs, such as electricity, and the inability to be proactive about issues such as lead, due to those same financial concerns. EPA appreciates those concerns being highlighted and will note that according to the 2021 Court Opinion the Agency cannot take into account non-health factors, such as costs, when revising the DLHS. However, the Agency can consider non-health factors when revising the DLCL. In this proposal EPA has a lower primary and higher alternative DLCL, which the Agency is requesting comment on. EPA has also spoken to nine NLLAP laboratories and has incorporated their feedback into the discussion surrounding DLCL within Unit IV.B. EPA is also requesting comment on a phased approach for the DLCL (*i.e.,* lowering the DLCL to the alternative and then the primary options),

and on whether this proposal will have impacts on tenants or landlords of public housing, including the potential to impact availability of federally assisted housing.

After the consultation was complete, EPA provided the organizations and officials an opportunity to provide follow-up comments in writing. The Agency received one comment from a non-profit organization whose members consist of over seventy large public housing authorities (Ref. 99). The commenter highlighted that a large portion of public housing properties are dated, resulting in many families and children who are living in dated housing units. They explained that public housing authorities have unmet financial needs and strongly encouraged the Agency to consider costs when revising the DLCL. The commenter expressed concerns about the lower DLCL resulting in a need to switch laboratory technology to ICP, which could require a larger surface area, increase turnaround time and an increase in costs. Feedback on all three DLHS approaches was also provided, notably that the post-1977 background approach would incur the highest costs and was "undesirable as currently presented" and the commenter emphasized the importance of communication materials and clear communication surrounding the GTZ approach.

The Agency appreciates the feedback provided to the EPA during the consultation process. Regarding concerns over the laboratories moving to ICP, EPA conducted laboratory outreach and included their feedback in this proposed rule. EPA is proposing the primary DLCL of 3/20/25 $\mu g/ft^2$ and is also proposing an alternative DLCL of 5/40/100 $\mu g/ft^2$ and requesting comment on both options. As mentioned above, EPA is also requesting comment on a phased approach to lowering the DLCL, as well as the proposal to extend the compliance date by one year and whether it should be shorter or longer to allow laboratories adequate time to adjust. Additionally, the Agency agrees that communication surrounding the GTZ approach may be an important element of this rulemaking and has added in an additional request for comment in Unit

VII.

F. 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), because it will not have substantial direct effects on Tribal governments, on the relationship between the Federal Government and the Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. Federally recognized Tribes that have authorized LBP Activities programs must demonstrate that they have DLHS and DLCL at least as protective as the levels at 40 CFR 745.65 and 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 DLHS and DLCL they can relinquish their authorization. In the absence of a Tribal authorization, EPA will administer these requirements. This action does not create an obligation for Tribes to administer LBP Activities programs or alter EPA's authority to administer these programs. For these reasons, Executive Order 13175 does not apply to this action. However, EPA still intends to hold a Tribal consultation on this rulemaking in order to solicit input from Tribal officials from the four Indian Tribes with authorized programs during the public comment period. This consultation will also be open to any Tribal officials who would like to participate. EPA will ensure that the consultation materials are accessible to Tribal officials so that they may view it later as they consider submitting feedback during the public comment period. If a Tribal official is interested in attending the consultation on behalf of an Indian Tribe, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

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

Executive Order 13045 (62 FR 19885, April 23, 1997) directs Federal agencies that

Federal health and safety standards must include an evaluation of the health and safety effects of the planned regulation on children. This action is subject to Executive Order 13045 because it is a significant regulatory action under section 3(f)(1) of Executive Order 12866, and EPA believes that the environmental health or safety risk addressed by this action has a disproportionate effect on children as they are more susceptible to the adverse health effects of lead due to their behavior and physiology. Accordingly, we have evaluated the environmental health or safety effects of dust-lead exposure on children.

The results of this evaluation are contained in Unit I.E. and in the EA and TSD, where the health impacts of lead exposure on children are discussed more fully (Refs. 14 and 16). The documents referenced above are available in the public docket for this action.

The proposed DLHS aligns with the current state of the science, which does not support identifying a threshold of dust-lead exposure below which there would be no adverse human health effects; while the proposed DLCL is more health protective than the alternative in that it results in the least amount of dust-lead left on a surface after the completion of an abatement. EPA is proposing to revise the DLCL given the statutory criteria of reliability, effectiveness, and safety. Furthermore, EPA's Policy on Children's Health also applies to this action. Discussion about how the Agency applied this policy is presented in Unit I.E.6.

H. 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.

I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

This action involves technical standards under NTTAA section 12(d), 15 U.S.C. 272

note. ASTM E1728 and ASTM E1792 are already cited in an existing regulatory definition of "wipe sample" at 40 CFR 745.63. EPA is proposing to formally incorporate the most current version of these standards (*i.e.,* ASTM E1728-20 and ASTM E1792-20). Additional information about these standards, including how to access them, is provided in Unit IV.F.8.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations (people of color and/or indigenous peoples) and low-income populations.

EPA believes that the human health or environmental conditions that exist prior to this action result in or have the potential to result in disproportionate and adverse human health or environmental effects on people of color, low-income populations and/or Indigenous peoples. See discussion in Section 8.6 of the EA concerning existing disproportionate impacts of lead pollution faced by children in low-income households and households of people of color and/or Indigenous peoples, and the measured extent to which this action particularly benefits the health of children in low-income households.

EPA believes that this action is likely to reduce existing disproportionate and adverse effects on communities with environmental justice concerns. For example, 49% of children who will benefit from the rule are members of households below the poverty line, compared to 17% of children nationally who live below the poverty line. An estimated 44% of total monetized benefits from this rule accrue to children living in a household below the poverty line. 22-27% of children who will benefit from the rule are non-Hispanic Black, compared to 12% of children

nationally who are non-Hispanic Black. An estimated 23% of total monetized benefits from this rule accrue to non-Hispanic Black children.

There is some uncertainty, however, regarding the environmental justice implications of this rule on HUD-assisted housing. If the rule inadvertently limits the availability of federally-assisted affordable housing, a subset of low-income individuals or families currently residing in assisted housing may face higher housing costs on the private market, disruptions caused by an involuntary loss of housing, and the potential for dust lead levels that exceed those in their baseline LSHR-regulated housing.

EPA additionally identified and addressed environmental justice concerns through public comment and collaboration with state, Tribal, and other co-regulatory bodies related to the EJ2020 action agenda and the development of the Lead Strategy. Through the agency-wide Lead Strategy, EPA has engaged with key stakeholders, communities, and organizations with vested interests in addressing lead exposures. Disparities in lead pollution are a national area of focus in the EJ2020 action agenda (Ref. 100), and this rulemaking's protective standards will deliver demonstrative progress on addressing childhood lead exposure and health disparities to members of overburdened communities.

The information supporting the Executive Order 12898 review is contained in the EA (Ref. 14) and Lead Strategy (Ref. 10), both of which are available in the docket.

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

Dated: Click or tap to enter eSignature date.

Michael S. Regan,

Administrator.

Therefore, for the reasons set forth in the preamble, it is proposed that 40 CFR chapter I be amended as follows:

PART 745—LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES

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 § 745.63 by adding in alphabetical order a definition for "reportable level." The addition reads as follows:

§ 745.63 Definitions.

* * * * *

Reportable level means the lowest analyte concentration (or amount) that does not contain a "less than" qualifier and that is reported with confidence for a specific method by a laboratory recognized by EPA under TSCA section 405(b).

* * * * *

3. Amend § 745.65 by revising paragraph (b) to read as follows:

§ 745.65 Lead-based paint hazards.

* * * * *

(b) *Dust-lead hazard.* Before [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], a dust-lead hazard is surface dust in a residential dwelling or child-occupied facility that contains a mass-per-area concentration of lead equal to or exceeding 10 μg/ft^2 for floors or 100 μg/ft^2 for interior window sills based on wipe samples. On or after [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], a dust-lead hazard is surface dust in a residential dwelling or child-occupied facility that contains a mass-per-area

concentration of any reportable level of lead for floors or for interior window sills based on wipe samples analyzed by an NLLAP-recognized laboratory.

* * * * *

4. Amend § 745.81 by:

a. Removing paragraph (a)(4)(i) and redesignating paragraph (a)(4)(ii) as paragraph (a)(4); and

b. Revising paragraph (b).

The revisions read as follows:

§ 745.81 Effective dates.

(a) * * *

(4) *Work practices.* * * *

* * * * *

(b) *Renovation-specific pamphlet.* On or after December 22, 2008, renovators or firms performing renovations in States and Indian Tribal areas without an authorized program must provide owners and occupants the following EPA pamphlet: *Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools.*

* * * * *

5. Amend § 745.83, by adding in alphabetical order a definition for “electronic.” The addition reads as follows:

§ 745.83 Definitions.

* * * * *

Electronic means the submission of an application, payment, or notification using the Agency’s Central Data Exchange (CDX), or successor platform.

* * * * *

6. Amend § 745.89 by revising paragraphs (a)(1), (b)(1), and (c)(1) to read as follows:

§ 745.89 Firm certification.

(a) * * *

(1) Firms that perform renovations for compensation must electronically apply to EPA for certification to perform renovations or dust sampling. To apply, a firm must submit to EPA a completed "Application for Firms," signed by an authorized agent of the firm, and pay electronically at least the correct amount of fees. If a firm pays more than the correct amount of fees, EPA will reimburse the firm for the excess amount.

* * * * *

(b) * * *

(1) *Timely and complete application.* To be re-certified, a firm must submit a complete electronic application for re-certification. A complete application for re-certification includes a completed "Application for Firms" which contains all of the information requested by the form and is signed by an authorized agent of the firm, noting on the form that it is submitted as a re-certification. A complete application must also include at least the correct amount of fees. If a firm pays more than the correct amount of fees, EPA will reimburse the firm for the excess amount.

(i) An application for re-certification is timely if it is electronically submitted 90 days or more before the date the firm's current certification expires. If the firm's application is complete and timely, the firm's current certification will remain in effect until its expiration date or until EPA has made a final decision to approve or disapprove the re-certification application, whichever is later.

* * * * *

(c) * * *

(1) To amend certification, a firm must electronically submit a completed "Application for Firms," signed by an authorized agent of the firm, noting on the form that it is submitted as an amendment and indicating the information that has changed. The firm must also pay at least the correct amount of fees.

* * * * *

7. Amend § 745.90 by revising paragraphs (a)(3) and (4) to read as follows:

§ 745.90 Renovator certification and dust sampling technician certification.

(a) * * *

(3) Individuals who have successfully completed an accredited lead-based paint inspector or risk assessor course before October 4, 2011, may take an accredited refresher dust sampling technician course in lieu of the initial training to become a certified dust sampling technician. Individuals who are currently certified as lead-based paint inspectors or risk assessors may act as certified dust sampling technicians without further training.

(4) To maintain renovator certification or dust sampling technician certification, an individual must complete a renovator or dust sampling technician refresher course accredited by EPA under § 745.225 or by a State or Tribal program that is authorized under subpart Q of this part within 5 years of the date the individual completed the initial course described in paragraph (a)(1) of this section. If the individual does not complete a refresher course within this time, the individual must re-take the initial course to become certified again. Individuals who take a renovator refresher course that does not include hands-on training will be certified for 3 years from the date they complete the training. Individuals who take a refresher training course that includes hands-on training will be certified for 5 years. Individuals who take the renovator refresher without hands-on training must, for their next refresher course, take a refresher course that includes hands-on training to maintain renovator certification.

* * * * *

8. Amend § 745.92 by revising paragraph (c)(2) to read as follows:

§ 745.92 Fees for the accreditation of renovation and dust sampling technician training and the certification of renovation firms.

* * * * *

(c) * * *

(2) Submit the application and a payment of $15 electronically in accordance with the instructions provided with the application package.

* * * * *

9. Amend § 745.103 by revising the definition for “target housing” to read as follows:

§ 745.103 Definitions.

* * * * *

Target housing means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities or any 0-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing).

* * * * *

10. Amend § 745.113 by revising paragraphs (a)(4), and (b)(1) and (4) to read as follows:

§ 745.113 Certification and acknowledgement of disclosure.

(a) * * *

(4) A statement by the purchaser affirming receipt of the information set out in paragraphs (a)(2) and (a)(3) of this section and the lead hazard information pamphlet required under 15 U.S.C. 2686.

* * * * *

(b) * * *

(1) A Lead Warning Statement with the following language:

Housing built before 1978 may contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Lead exposure is especially harmful to young children and pregnant women. Before renting pre-1978 housing, lessors must disclose the presence of known lead-based paint and/or lead-based paint hazards in the dwelling. Lessees must also receive a federally approved pamphlet on lead poisoning prevention.

* * * * *

(4) A statement by the lessee affirming receipt of the information set out in paragraphs (b)(2) and (b)(3) of this section and the lead hazard information pamphlet required under 15 U.S.C. 2686.

* * * * *

11. Amend § 745.223 by revising the definitions for “abatement”, “child-occupied facility”, “living area”, “target housing”, and by adding in alphabetical order a definition for “electronic” to read as follows:

§ 745.223 Definitions.

* * * * *

Abatement means any measure or set of measures designed to permanently eliminate lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels. Abatement includes, but is not limited to:

(1) The removal of paint and dust (in the case of dust-lead hazards to below the clearance levels), the permanent enclosure or encapsulation of lead-based paint, the replacement of painted surfaces or fixtures, or the removal or permanent covering of soil, when lead-based paint hazards are present in such paint, dust or soil; and

* * * * *

(3) * * *

(i) * * *

(A) Shall result in the permanent elimination of lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels; or

(B) Are designed to permanently eliminate lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels, and are described in paragraphs (1) and (2) of this definition.

(ii) Projects resulting in the permanent elimination of lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels, conducted by firms or individuals certified in accordance with § 745.226, unless such projects are covered by paragraph (4) of this definition;

(iii) Projects resulting in the permanent elimination of lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels, conducted by firms or individuals who, through their company name or promotional literature, represent, advertise, or hold themselves out to be in the business of performing lead-based paint activities as identified and defined by this section, unless such projects are covered by paragraph (4) of this definition; or

* * * * *

(4) Abatement does not include renovation, remodeling, landscaping or other activities, when such activities are not designed to permanently eliminate lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels, but, instead, are designed to repair, restore, or remodel a given structure or dwelling, even though these activities may incidentally result in a reduction or elimination of lead-based paint hazards. Furthermore, abatement does not include interim controls, operations and maintenance activities, or other measures and activities designed to temporarily, but not permanently, reduce lead-based paint hazards, in the case of dust-lead hazards to below the clearance levels.

* * * * *

Child-occupied facility means a building, or portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours and the combined weekly visit lasts at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may include, but are not limited to, day-care centers, preschools and kindergarten classrooms.

* * * * *

Electronic means the submission of an application, payment, or notification using the Agency’s Central Data Exchange (CDX), or successor platform.

* * * * *

Housing for the elderly means retirement communities or similar types of housing reserved for households composed of one or more persons 62 years of age or more at the time of initial occupancy.

* * * * *

Living area means any area of a residential dwelling used by one or more children under age 6 including, but not limited to, living rooms, kitchen areas, dens, play rooms, and children's bedrooms.

* * * * *

Target housing means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities or any 0-bedroom dwelling (unless any child who is less than 6 years of age resides or is expected to reside in such housing).

* * * * *

12. Amend § 745.225 by:

a. revising the introductory text in paragraphs (b)(1) and (e)(5);

b. Revising paragraphs (c)(13)(vi), (c)(14)(iii), (f)(2), and (j)(2);

c. Replacing the text in paragraph (i)(2)(ii) with "[Reserved];"

The revisions read as follows:

§ 745.225 Accreditation of training programs: target housing and child-occupied facilities.

* * * * *

(b) * * *

(1) A training program seeking accreditation shall submit an electronic application to EPA containing the following information:

* * * * *

(c) * * *

(13) * * *

(vi) Notification must be accomplished electronically. Instructions can be obtained online at *https://www.epa.gov/lead* or from the NLIC at 1-800-424-LEAD (5323). Hearing- or speech-impaired persons may reach the above telephone number through TTY by calling the toll-free Federal Communications Commission's Telecommunications Relay Service at 711.

* * * * *

(14) * * *

(iii) Notification must be accomplished electronically. Instructions can be obtained online at *https://www.epa.gov/lead* or from the NLIC at 1-800-424-LEAD (5323).

* * * * *

(e) * * *

(5) A training program seeking accreditation to offer refresher training courses only shall submit an electronic application to EPA containing the following information:

* * * * *

(f) * * *

(2) A training program seeking re-accreditation shall submit an electronic application to EPA no later than 180 days before its accreditation expires. If a training program does not submit its application for re-accreditation by that date, EPA cannot guarantee that the program will be re-accredited before the end of the accreditation period.

* * * * *

(i) * * *

(2) * * *

(ii) [Reserved]

* * * * *

(j) * * *

(2) To amend an accreditation, a training program must electronically submit a completed "Accreditation Application for Training Providers," signed by an authorized agent of the training provider, noting on the form that it is submitted as an amendment and indicating the information that has changed.

* * * * *

13. Amend § 745.226 by revising paragraphs (a)(1), (e)(1) introductory text, (e)(2), (f)(2) and (3), and (h)(1)(iii), and replacing the text in paragraph (f)(5) with "[Reserved]."

The revisions read as follows:

to read as follows:

§ 745.226 Certification of individuals and firms engaged in lead-based paint activities: target housing and child-occupied facilities.

(a) * * *

(1) * * *

(i) Submit to EPA an electronic application demonstrating that they meet the requirements established in paragraphs (b) or (c) of this section for the particular discipline for which certification is sought; or

(ii) Submit to EPA an electronic application attaching a valid lead-based paint activities certification (or equivalent) from a State or Tribal program that has been authorized by EPA pursuant to subpart Q of this part.

(2) [Reserved]

(3) Following the submission of an electronic application demonstrating that all the requirements of this section have been meet, EPA shall certify an applicant as an inspector, risk assessor, supervisor, project designer, or abatement worker, as appropriate.

* * * * *

(e) * * *

(1) To maintain certification in a particular discipline, a certified individual shall apply electronically to and be re-certified by EPA in that discipline by EPA either:

* * * * *

(2) An individual shall be re-certified if the individual successfully completes the appropriate accredited refresher training course and electronically submits a valid copy of the appropriate refresher course completion certificate.

* * * * *

(f) * * *

(2) A firm seeking certification shall electronically submit to EPA an application attesting that the firm shall only employ appropriately certified employees to conduct lead-based paint activities, and that the firm and its employees shall follow the work practice standards in §

745.227 for conducting lead-based paint activities.

(3) From the date of receiving the firm's electronic application requesting certification, EPA shall have 90 days to approve or disapprove the firm's request for certification. Within that time, EPA shall respond with either a certificate of approval or a letter describing the reasons for a disapproval.

(4) * * *

(5) [Reserved]

* * * * *

(h) * * *

(1) * * *

(iii) Misrepresented facts in its electronic application for certification to EPA.

* * * * *

14. Amend § 745.227 by revising paragraphs (c)(2)(i), (iv) and (v), (d)(3), (5), (6)(ii) and (7), (e)(4)(vii) and (8)(viii), and (h)(3), and by adding paragraph (e)(10)(vii) to read as follows:

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

* * * * *

(c) * * *

(2) * * *

(i) Background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children under age 6 shall be collected.

* * * * *

(iv) In residential dwellings, two composite dust samples shall be collected, one from the

floors and the other from the windows, in rooms, hallways or stairwells where one or more children, under age 6, are most likely to come in contact with dust.

(v) In multi-family dwellings and child-occupied facilities, in addition to the floor and window samples required in paragraph (c)(1)(iii) of this section, the risk assessor shall also collect composite dust samples from common areas where one or more children, under age 6, are most likely to come into contact with dust.

* * * * *

(d) * * *

(3) Background information regarding the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to one or more children under age 6 shall be collected.

* * * * *

(5) In residential dwellings, dust samples (either composite or single-surface samples) from the interior window sill(s) and floor shall be collected and analyzed for lead concentration in all living areas where one or more children, under age 6, are most likely to come into contact with dust.

(6) * * *

(ii) Other common areas in the building where the risk assessor determines that one or more children, under age 6, are likely to come into contact with dust.

(7) For child-occupied facilities, interior window sill and floor dust samples (either composite or single-surface samples) shall be collected and analyzed for lead concentration in each room, hallway or stairwell utilized by one or more children, under age 6, and in other common areas in the child-occupied facility where one or more children, under age 6, are likely to come into contact with dust.

* * * * *

(e) * * *

(4) * * *

(ii) Notification for lead-based paint abatement activities required in response to an elevated blood lead level (EBL) determination, or Federal, State, Tribal, or local emergency abatement order should be received by EPA as early as possible before, but must be received no later than, the start date of the lead-based paint abatement activities. Should the start date and/or location provided to EPA change, an updated notification must be received by EPA on or before the start date provided to EPA. Documentation showing evidence of an EBL determination or a copy of the Federal/State/Tribal/local emergency abatement order must be included in the notification to take advantage of this abbreviated notification period.

* * * * *

(vii) Notification must be accomplished electronically. Instructions can be obtained online at *https://www.epa.gov/lead*, or from the NLIC at 1-800-424-LEAD (5323).

* * * * *

(8) * * *

(viii) Before [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*]**,** the clearance levels for lead in dust are 10 μg/ft^2 for floors, 100 μg/ft^2 for interior window sills, and 400 μg/ft^2 for window troughs; on or after [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], the clearance levels for lead in dust are 3 μg/ft^2 for floors, 20 μg/ft^2 for interior window sills, and 25 μg/ft^2 for window troughs.

* * * * *

(10) * * *

(vii) On or after [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], when dust-lead clearance sampling results are below the dust-lead clearance levels and at or above the dust-lead hazard standards, a dust-lead hazard statement with the following language must be included:

> Although the completed abatement project achieved dust-lead levels below clearance, some dust-lead hazards remain because any reportable level of dust-lead is considered a dust-lead hazard. In order for abatement work to be considered complete, dust-lead levels must be below clearance levels, which are established based on reliability, effectiveness and safety. To continue to reduce lead exposure from dust, the EPA pamphlet entitled *Protect Your Family From Lead in Your Home* includes recommendations such as: using a vacuum with a high-efficiency particulate air (HEPA) filter on furniture and other items returned to the work area and regularly cleaning hard surfaces with a damp cloth or sponge and a general all-purpose cleaner. For more information on how to continue to reduce lead exposure see *Protect Your Family From Lead in Your Home*.

* * * * *

(h) * * *

(3) Dust-lead hazards and dust-lead clearance levels are identified for residential dwellings and child-occupied facilities as follows:

(i) Before [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], a dust lead-hazard is present in a residential dwelling on floors and interior window sills when the weighted arithmetic mean lead loading for all single surface or composite samples of floors and interior window sills are equal to or greater than 10 $\mu g/ft^2$ for floors and 100 $\mu g/ft^2$ for interior window sills, respectively; for projects where clearance sampling is required or otherwise performed, levels of lead in dust must be below 10 $\mu g/ft^2$ for floors, 100 $\mu g/ft^2$ for interior window sills, and 400 $\mu g/ft^2$ for window troughs for purposes of clearance; on or after [DATE 12 MONTHS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*], a dust lead-hazard is present in a residential dwelling on floors and interior window sills when the lead loading for any

single surface or composite sample of floors and interior window sills is equal to or greater than any reportable level of dust-lead for floors and for interior window sills; for projects where clearance sampling is required or otherwise performed, levels of lead in dust must be below 3 $\mu g/ft^2$ for floors, 20 $\mu g/ft^2$ for interior window sills, and 25 $\mu g/ft^2$ for window troughs for purposes of clearance;

(ii) A dust lead-hazard is present on floors or interior window sills in an unsampled residential dwelling in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled residential unit on the property (and, for projects where clearance sampling is required or otherwise performed, levels of lead in dust must be below the applicable value from subparagraph (i) for purposes of clearance); and

(iii) A dust lead-hazard is present on floors or interior window sills in an unsampled common area in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled common area in the same common area group on the property (and, for projects where clearance sampling is required or otherwise performed, levels of lead in dust must be below the applicable value from subparagraph (i) for purposes of clearance).

* * * * *

15. Amend § 745.238 by revising paragraphs (d)(1) and (2), and (e)(1) introductory text and (2) to read as follows:

§ 745.238 Fees for accreditation and certification of lead-based paint activities.

* * * * *

(d) * * *

(1) *Certification and re-certification.*

(i) *Individuals.* Submit a completed application electronically (titled "Application for

Individuals to Conduct Lead-based Paint Activities"), the materials described at § 745.226, and the application fee(s) described in paragraph (c) of this section.

(ii) *Firms.* Submit a completed application electronically (titled "Application for Firms"), the materials described at § 745.226, and the application fee(s) described in paragraph (c) of this section.

(2) *Accreditation and re-accreditation.* Submit a completed application electronically (titled "Accreditation Application for Training Programs"), the materials described at § 745.225, and the application fee described in paragraph (c) of this section.

(3) [Removed]

* * * * *

(e) * * *

(1) Parties seeking identification card or certificate replacement shall electronically complete the applicable portions of the appropriate application in accordance with the instructions provided. The appropriate applications are:

* * * * *

(2) Submit application and payment electronically in the amount specified in paragraph (c)(3) of this section in accordance with the instructions.

* * * * *

16. Amend § 745.325 by revising paragraph (d)(3)(ii) to read as follows:

§ 745.325 Lead-based paint activities: State and Tribal program requirements.

* * * * *

(d) * * *

(3) * * *

(ii) Abatements permanently eliminate lead-based paint hazards, in the case of dust-lead

hazards to below the clearance levels, and are conducted in a way that does not increase the hazards of lead-based paint to the occupants of the dwelling or child-occupied facility.

* * * * *