UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, and ANDREW R. WHEELER, Administrator, United States Environmental Protection Agency,

Respondents.

No. 19-_____

PETITION FOR REVIEW

Pursuant to the Toxic Substances Control Act, 15 U.S.C. § 2618, Rule 15 of the Federal Rules of Appellate Procedure, and the Administrative Procedure Act, 5 U.S.C. §§ 701-706, Petitioners 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 hereby petition this Court

for review of the order of Respondent Andrew R. Wheeler, the Administrator of Respondent U.S. Environmental Protection Agency, promulgating the final rule entitled "Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint," which is published at 84 Fed. Reg. 32,632 (July 9, 2019) (to be codified at 40 C.F.R. pt. 745), which was "issued" for purposes of judicial review on July 23, 2019. *See* 40 C.F.R. § 23.5; 15 U.S.C. § 2618(a)(2) (citing 28 U.S.C. § 2112). A copy of the challenged rule is attached as Exhibit A.

Dated: August 1, 2019

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CORPORATE DISCLOSURE STATEMENT

Petitioners 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 are nonprofit organizations. None have any parent companies, subsidiaries, or affiliates that have issued shares to the public in the United States or abroad.

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Exhibit A

EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the Federal agency decides not to use available and applicable voluntary consensus standards. This authorization does not involve technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

10. 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) establishes Federal executive policy on environmental justice. Its main provision 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 and low-income populations in the United States. The EPA has determined that this final authorization will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations. This final authorization does not affect the level of protection provided to human health or the environment because this document authorizes pre-existing State rules which are equivalent to and no less stringent than existing Federal requirements.

11. The Congressional Review Act, 5 U.S.C. 801–808

The Congressional Review Act, 5 U.S.C. 801–808, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this document and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 271

Environmental protection, Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indians-lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements.

Authority

This final action is issued under the authority of sections 1006, 2002(a), 3006, and 3024 of the Solid Waste Disposal Act, as amended, 42 U.S.C. 6905, 6912(a), 6926, and 6939g.

Dated: June 13, 2019.

Michelle Pirzadeh,

Deputy Regional Administrator, EPA Region 10.

[FR Doc. 2019–14019 Filed 7–8–19; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA–HQ–OPPT–2018–0166; FRL–9995–49]

RIN 2070–AJ82

Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Addressing childhood lead exposure is a priority for EPA. As part of EPA's efforts to reduce childhood lead exposure, EPA evaluated the current dust-lead hazard standards (DLHS) and the definition of lead-based paint (LBP). Based on this evaluation, this final rule revises the DLHS from 40 μg/ft² and 250 μg/ft² to 10 μg/ft² and 100 μg/ft² on floors and window sills, respectively. EPA is also finalizing its proposal to make no change to the definition of LBP because insufficient information exists to support such a change at this time.

DATES: This final rule is effective January 6, 2020.

ADDRESSES: The docket for this action, identified by docket identification (ID) number EPA–HQ–OPPT–2018–0166, is available at *http://www.regulations.gov* or at the Office of Pollution Prevention and Toxics Docket (OPPT Docket), Environmental Protection Agency Docket Center (EPA/DC), West William Jefferson Clinton Bldg., Rm. 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the OPPT Docket is (202) 566–0280. Please review the visitor instructions and additional information about the docket available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* John Yowell, National Program Chemicals Division, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001; telephone number: 202–564–1213; email address: *yowell.john@epa.gov.*

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 LBP activities in accordance with 40 CFR 745.227, if you operate a training program required to be accredited under 40 CFR 745.225, if you are a firm or individual who must be certified to conduct LBP activities in accordance with 40 CFR 745.226, or if you conduct rehabilitations in accordance with 24 CFR part 35. You may also be affected by this action if you operate a laboratory that is recognized by EPA's National Lead Laboratory Accreditation Program (NLLAP) in accordance with 40 CFR 745.90, 745.223, 745.227, 745.327. You may also be affected by this action, in accordance with 40 CFR 745.107 and 24 CFR 35.88, as the seller or lessor of target housing, which is most pre-1978 housing. See 40 CFR 745.103 and 24 CFR 35.86. For further information regarding the authorization status of states, territories, and tribes, contact the National Lead Information Center at 1–800–424–LEAD (5323). 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.
- 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).
- Property owners, and property owners that receive assistance through federal housing programs (NAICS code 531110, 531311).

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

EPA is finalizing this rule under sections 401, 402, 403, and 404 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). 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 (15 U.S.C. 2681), LBP hazards are defined as conditions of LBP and lead-contaminated dust and soil that "would result in adverse human health effects," 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. . . ." As defined in TSCA section 401 (15 U.S.C. 2681(9)), LBP means paint or other surface coatings that contain lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight or (1) in the case of paint or other surface coatings on target housing, such lower level as may be established by HUD, as defined in 42 U.S.C. 4822(c), or (2) in the case of any other paint or surface coatings, such other level as may be established by EPA.

The amendments to the regulations on LBP activities are promulgated pursuant to TSCA section 402 (15 U.S.C 2682). The amendments to the regulations on the authorization of state and tribal Programs are finalized pursuant to TSCA section 404 (15 U.S.C. 2684).

This final rule is being issued in compliance with the December 27, 2017 decision ("Opinion") of the Ninth Circuit Court of Appeals, and the subsequent March 26, 2018 order that directed the EPA "to issue a proposed rule within ninety (90) days from the filed date of this order," and to "promulgate the final rule within one year after the promulgation of the proposed rule" (Refs. 2 and 3).

C. What action is the Agency taking?

EPA established DLHS of 40 μg/ft² for floors and 250 μg/ft² for window sills in a final rule entitled, "Identification of Dangerous Levels of Lead," also known as the 2001 LBP Hazards Rule (Ref. 4). On July 2, 2018, EPA proposed to amend the DLHS and to make no change to the definition of LBP (Ref. 5). EPA is finalizing its proposal to lower the DLHS set by the LBP Hazards Rule from 40 μg/ft² to 10 μg/ft² for floors, and from 250 μg/ft² to 100 μg/ft² for window sills.

EPA and HUD adopted the statutory definition of LBP in a joint final rule entitled, "Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing," also known as the Disclosure Rule (Ref. 6). EPA is finalizing its proposal to make no change to the current definition of LBP because, as further explained in Unit III.B, insufficient information exists to support such a change at this time.

D. Why is the Agency taking this action?

Reducing childhood lead exposure is an EPA priority, and EPA continues to collaborate with our federal partners to reduce lead exposures and to explore ways to strengthen our relationships and partnerships with states, tribes, and localities. In December 2018, the President's Task Force on Environmental Health Risks and Safety Risks to Children released the *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts (Lead Action Plan)* (Ref. 7) which will 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. The Lead Action Plan will help federal agencies work strategically and collaboratively to reduce exposure to lead and improve children's health. This final rule is a component of EPA's prioritizing the important issue of childhood lead exposure because dust is a significant exposure route for young children because of their mouthing behavior and proximity to the floor.

In the 2001 LBP Hazards Rule under TSCA section 403, EPA modeled the health implications of various dust-lead loadings and analyzed those values against issues of practicality to determine the appropriate standards, in accordance with the statute. At that time, the Centers for Disease Control and Prevention (CDC) identified a test result of 10 μg/dL of lead in blood or higher in children as a "level of concern". Based on the available science at the time, EPA explained that health effects at blood lead levels (BLLs) lower than 10 μg/dL were "less well substantiated." Further, the Agency acknowledged that the standards were "based on the best science available to the Agency," and if new data were to become available, EPA would "consider changing the standards to reflect these data." (Ref. 4)

New data have become available since the 2001 LBP Hazards Rule that indicates that health risks exist at lower BLLs than previously recognized. The CDC now considers that no safe BLL in children has been identified (Ref. 8), is no longer using the term "level of concern," and is instead using the blood lead reference value (BLRV) to identify children who have been exposed to lead and who should undergo case management (especially assessment of sources of lead in their environment and follow up BLL testing) (Ref. 8). The BLRV is based on the 97.5th percentile of the U.S. population distribution of BLLs in children ages 1–5 from the 2007–2008 and 2009–2010 National Health and Nutrition Examination Surveys (Ref. 9).

Current best available science, which, as indicated above, has evolved considerably since 2001, informs EPA's understanding of the relationship between exposures to dust-lead loadings, blood lead levels, and risk of adverse human health effects. This is summarized in the Integrated Science Assessment for Lead, ("Lead ISA") (Ref. 10), which EPA released in June 2013, and the National Toxicology Program (NTP) Monograph on Health Effects of Low-Level Lead, which was released by the Department of Health and Human Services in June 2012 (Ref. 11). The Lead ISA is a synthesis and evaluation

of scientific information on the health and environmental effects of lead, including health effects of BLLs lower than 10 µg/dL. These effects include cognitive function decrements in children (Ref. 10).

The NTP, in 2012, completed an evaluation of existing scientific literature to summarize the scientific evidence regarding potential health effects associated with low-level lead exposure as indicated by BLLs less than 10 µg/dL. The evaluation specifically focused on the life stage (childhood, adulthood) associated with these potential health effects, as well as on epidemiological evidence at BLLs less than 10 µg/dL, because health effects at higher BLLs are well-established. The NTP concluded that there is sufficient evidence for risk of adverse health effects in children and adults at BLLs less than 10 µg/dL, and less than 5 µg/dL as well. In children, there is sufficient evidence that BLLs less than 5 µg/dL are associated with increased diagnoses of attention-related behavioral problems, greater incidence of problem behaviors, and decreased cognitive performance. There is limited evidence that BLLs less than 5 µg/dL are associated with delayed puberty and decreased kidney function in children 12 years of age and older. Additionally, the NTP concluded that there is sufficient evidence that BLLs less than 10 µg/dL are associated with delayed puberty, decreased hearing, and reduced post-natal growth (Ref. 11).

Furthermore, the Children's Health Protection Advisory Committee (CHPAC), a Federal Advisory Committee for EPA, has recommended "that EPA, in coordination with HUD, make strengthening the Lead-Based Paint Hazards Standards for paint, dust, and soil one of its highest priorities in the efforts to reduce children's blood lead levels." (Refs. 12 and 13).

Based on EPA's evaluation of the best available science, the Agency's careful review of public comments received on the proposal, as well as consideration of the potential for risk reduction, including whether such actions are achievable, EPA is finalizing its proposal to revise the DLHS to 10 µg/ft² for floors and 100 µg/ft² for window sills. This final action is informed by the achievability of these standards in relation to their application in lead risk reduction programs, whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government.

EPA did not propose to change post-abatement clearance levels in 40 CFR part 745, subpart L. In this regard, EPA believes it has reasonably focused this rulemaking on the DLHS and the definition of LBP, which are the two actions EPA agreed to undertake in response to the 2009 citizen petition. They were also the two actions expressly addressed in the Ninth Circuit Court of Appeals Opinion discussed above. Nonetheless, while this final rule does not address clearance levels, EPA appreciates the points raised by commenters about the relationship between the DLHS and clearance levels and EPA has initiated action on this issue under a separate rulemaking, entitled "Review of Post-Abatement Clearance Levels for Dust-lead" (RIN 2070–AK50), as noted in the Spring 2019 Unified Agenda of Regulatory and Deregulatory Actions. The Spring 2019 Unified Agenda also presents EPA's anticipated publication timelines for the rulemaking that will address the clearance levels.

To update the dust-lead clearance levels, EPA must take a number of steps including health, exposure, and economic analyses. An analysis estimating the health implications of possible revisions of applicable dust-lead clearance levels will be conducted, taking into account factors such as the locations where clearance samples are collected for each of the various candidate clearance levels under consideration. An economic analysis of candidate dust-lead clearance levels will be conducted for purposes of evaluating the potential costs and benefits of possible revisions to the clearance levels. EPA's economic analysis will involve establishing a baseline lead hazard profile for facilities affected by the rule based on knowledge of any applicable existing rules and standards and levels of compliance with those rules and standards. Candidate clearance levels will then need to be analyzed with reference to this baseline. For this purpose, economic modeling will be performed to link each candidate clearance level to the associated scenario of health endpoints and their associated aggregated "benefit" valuations for the whole affected population. On the cost side, using assumptions about the scope of interventions, scenarios will be developed to measure aggregate costs of compliance for each candidate clearance level. In addition, the economic analysis is required in order to comply with the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), the Unfunded Mandates Reform Act (UMRA) (2 U.S.C. 1531–1538), and the Congressional Review Act (CRA) (5 U.S.C. 801 *et seq.*).

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. The analysis estimates incremental costs and benefits for two categories of events: (1) Where dust-lead testing occurs to comply with HUD's Lead-Safe Housing Rule and (2) where dust-lead testing occurs in response to testing that detects an elevated blood lead level in a child. The following is a brief outline of the estimated incremental impacts of this rulemaking.

- *Benefits.* This rule would reduce exposure to lead, resulting in benefits from avoided adverse health effects. For the subset of adverse health effects where the results were quantified, the estimated annualized benefits are $268 million to $2.3 billion per year using a 3% discount rate, and $58 million to $509 million using a 7% discount rate. These benefits calculations are highly sensitive to the discount rate used and to the range in the estimated number of lead hazard reduction events triggered by the blood lead levels in children who have had their blood lead levels tested. With respect to the latter, the wide range is driven by uncertainty about specifics of state and local regulations and about the blood lead levels at which action might be taken. There are additional unquantified benefits due to other avoided adverse health effects in children, including attention-related behavioral problems, greater incidence of problem behaviors, decreased cognitive performance, reduced post-natal growth, delayed puberty and decreased kidney function (Ref. 11).
- *Costs.* This rule is estimated to result in costs of $32 million to $117 million per year using either a 3% or 7% discount rate. The cost calculations are highly sensitive to the range in the estimated number of lead hazard reduction events triggered by children with elevated blood lead levels.
- *Small entity impacts.* This rule would impact approximately 15,400 small businesses of which 96% have cost impacts less than 1% of revenues, 4% have impacts between 1% and 3%, and less than 1% have impacts greater than 3% of revenues.
- *Environmental Justice and Protection of Children.* This rule would increase the level of environmental protection for all affected populations without having any disproportionately

high and adverse human health or environmental effects on any population, including any minority or low-income population or children.

• *Effects on State, local, and Tribal governments.* The rule would not have any significant or unique effects on small governments, or federalism or tribal implications.

F. Children's Environmental Health

Lead exposure has the potential to impact individuals of all ages, but it is especially harmful to young children (Refs. 15, 16 and 17). Exposure to lead is associated with increased risk of a number of adverse health effects in children, including decreased cognitive performance, greater incidence of problem behaviors, and increased diagnoses of attention-related behavioral problems (Ref. 11). Furthermore, floor dust in homes and child-care facilities is a significant route of exposure for children given their mouthing behavior and proximity to the floor. Therefore, the environmental health or safety risk addressed by this action may have a disproportionate effect on children (Ref. 18).

Consistent with the Agency's Policy on Evaluating Health Risks to Children, EPA has evaluated the health effects in children of decreased lead exposure. EPA prepared a Technical Support Document (TSD) for this rulemaking which models the risk of adverse health effects associated with dust-lead exposures at 19 potential candidate standards for dust-lead levels (Ref. 18). It is important to note that the model and input parameters have been the subject of multiple Science Advisory Board Reviews, workshops and publications in the peer reviewed literature. The TSD shows that health risks to young children decrease with decreasing dust-lead levels but that no non-zero lead level, including background levels, can be shown to eliminate health risk entirely.

Therefore, EPA considered additional factors beyond health effects when selecting a new standard, including achievability of the standards in lead risk reduction programs, whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government. Additional information on EPA's evaluation can be found in Unit III.A.2 of this preamble. On the basis of all these factors (including health effects), EPA is finalizing its proposal to lower the DLHS set by the LBP Hazards Rule to 10 μg/ft² for floors and 100 μg/ft² for window sills.

II. Background

A. Health Effects

Lead exposure has the potential to impact individuals of all ages, but it is especially harmful to young children (Refs. 15, 16 and 17). Ingestion of lead-contaminated soil and dust is a major contributor to BLLs in children, particularly those who reside in homes built prior to 1978 (Refs. 19 and 20). Infants and young children can be more highly exposed to lead through floor dust at home and in child-care facilities because they often put their hands and other objects that can have lead from dust or soil on them into their mouths (Ref. 17). As mentioned elsewhere in this final rule, data evaluated by the NTP demonstrates that there is sufficient evidence to conclude that there are adverse health effects associated with low-level lead exposure; there is sufficient evidence that, in children, BLLs less than 5 μg/dL are associated with increased diagnoses of attention-related behavioral problems, greater incidence of problem behaviors, and decreased cognitive performance (Ref. 11). For further information about health effects and lead exposure, see the Lead ISA (Ref. 10).

B. Federal Actions To Reduce Lead Exposures

In 1992, Congress enacted Title X of the Housing and Community Development Act (also known as the Residential Lead-Based Paint Hazard Reduction Act of 1992 or Title X) (Ref. 1) in an effort to eliminate LBP hazards. Section 1018 of Title X required EPA and HUD to promulgate joint regulations for disclosure of any known LBP or any known LBP hazards in target housing offered for sale or lease (known as the Disclosure Rule) (Ref. 6). ("Target housing" is defined in section 401(17) of TSCA, 15 U.S.C. 2681(17)). On March 6, 1996, the Disclosure Rule was codified at 40 CFR part 745, subpart F, and requires information disclosure activities before a purchaser or lessee is obligated under a contract to purchase or lease target housing. Title X amended TSCA to add a new subchapter entitled "Title IV—Lead Exposure Reduction." As defined in TSCA section 401 (15 U.S.C. 2681(9)), LBP means paint or other surface coatings that contain lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight or (1) in the case of paint or other surface coatings on target housing, such lower level as may be established by HUD, as defined in 42 U.S.C. 4822(c), or (2) in the case of any other paint or surface coatings, such other level as may be established by EPA.

This definition was codified as part of the Disclosure Rule (Ref. 6) at 40 CFR part 745, subpart F, and as part of the LBP Activities Rule (Ref. 21) at 40 CFR part 745, subpart L. TSCA section 402(a) directs EPA to promulgate regulations covering LBP activities to ensure persons performing these activities are properly trained, that training programs are accredited, and that contractors performing these activities are certified. On August 29, 1996, EPA published final regulations under TSCA section 402(a) that govern LBP inspections, risk assessments, and abatements in target housing and child occupied facilities (COFs) (also referred to as the LBP Activities Rule, codified at 40 CFR part 745, subpart L) (Ref. 21). The definition of "child-occupied facility" is codified at 40 CFR 745.223 for purposes of LBP activities. Regulations promulgated under TSCA section 402(a) contain standards for performing LBP activities, taking into account reliability, effectiveness, and safety.

TSCA section 402(c)(3) directs EPA to promulgate regulations covering renovation or remodeling activities in target housing, public buildings constructed before 1978, and commercial buildings that create LBP hazards. EPA promulgated final regulations for target housing and COFs in the Lead Renovation, Repair and Painting Rule, under TSCA section 402(c)(3) on April 22, 2008 (also referred to as the RRP Rule, codified at 40 CFR part 745, subpart E) (Ref. 22). The rule was amended in 2010 (75 FR 24802) (Ref. 23) to eliminate a provision for contractors to opt-out of prescribed work practices and in 2011 (76 FR 47918) (Ref. 24) to affirm the work practice requirements for cleaning verification of renovated or repaired spaces, among other things. For further information regarding lead and its health effects, and federal actions taken to eliminate LBP hazards in housing, see the background section of the RRP Rule.

TSCA section 403 is a related authority to carry out responsibilities for addressing LBP hazards under the Disclosure and LBP Activities Rules. Section 403 required EPA to promulgate regulations that "identify . . . lead-based paint hazards, lead-contaminated dust, and lead-contaminated soil" for purposes of TSCA Title IV and the Residential Lead-Based Paint Hazard Reduction Act of 1992. LBP hazards, under TSCA section 401, are defined as conditions of LBP and lead-contaminated dust and soil that "would result" in adverse human health effects (15 U.S.C. 2681(10)). TSCA section 401 defines lead-contaminated dust as "surface dust in residential dwellings"

that contains lead in excess of levels determined "to pose a threat of adverse health effects" (15 U.S.C. 2681(11)). The standards established in today's final rule under TSCA section 403 are used to calibrate activities carried out under TSCA section 402. As such, the utility of these standards should be considered in the context of the activities to which they are applied.

Pursuant to TSCA section 404, provisions were made for interested states, territories, and tribes to apply for and receive authorization to administer their own LBP Activities and RRP programs. Requirements applicable to state, territorial, and tribal programs are codified in 40 CFR part 745, subpart Q. As stated elsewhere in this document, EPA's regulations are intended to reduce exposures and to identify and mitigate hazardous levels of lead. Authorized programs must be "at least as protective of human health and the environment as the corresponding federal program," and must provide for "adequate enforcement." See 40 CFR 745.324(e)(2).

HUD's Lead Safe Housing Rule (LSHR) is codified in 24 CFR 35, subparts B through R. The LSHR implements sections 1012 and 1013 of Title X. Under Title X, HUD has specific authority to control LBP and LBP hazards in federally-assisted target housing (including COFs that are part of an assisted target housing property covered by the LSHR, because they are part of the common area of the property). The LSHR aims in part to ensure that federally-owned or federally-assisted target housing is free of LBP hazards (Ref. 25). Under the LSHR, when a child under age six (6) with an elevated blood lead level (EBLL) is identified, the "designated party" and/or the housing owner shall undertake certain actions.

HUD amended the LSHR in 2017, lowering its standard for identifying children with EBLLs from 20 µg/dL to 5 µg/dL, aligning its standard with CDC's BLRV. The amendments also included revising HUD's "Environmental Investigation Blood Lead Level" (EIBLL) to the EBLL, changing the level of investigation required for a housing unit of a child with an EBLL to an "environmental investigation" and adding a requirement for testing in other covered units when a child is identified in a multiunit property. HUD may revisit and revise the agency's EBLL via the notice and comment process, as provided by the definition of EBLL in the amended rule, if it is appropriate to do so in order to align with future changes to the blood lead level at which CDC's BLRV recommends that an environmental intervention be conducted. (Ref. 25).

C. Applicability and Uses of the DLHS

The DLHS reviewed in this regulation support the Lead-based Paint Activities and Disclosure programs, and apply to target housing (*i.e.*, most pre-1978 housing) and COFs (pre-1978 non-residential properties where children under the age of 6 spend a significant amount of time such as daycare centers and kindergartens). Apart from COFs, no other public and commercial buildings are covered by this final rule. For further background on the types of buildings to which lead program rules apply, refer to the proposed and final LBP Hazards Rule (Ref. 4).

Within the scope of Title X, the DLHS support and implement major provisions of the statute. They were incorporated into the requirements and risk assessment work practice standards in the LBP Activities Rule. The relationship between post-abatement clearance and the DLHS is discussed in further detail elsewhere in this final rule. The DLHS provide the basis for risk assessors to determine whether dust-lead hazards are present. A risk assessment may be required where dust-lead testing occurs to comply with the LSHR or where dust-lead testing occurs in response to discovery of a child with a blood lead level exceeding a federal or state threshold.

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. If LBP hazards are found, the risk assessor will also identify acceptable options for controlling the hazards in each property. These options should allow the property owner to make an informed decision about what actions should be taken to protect the health of current and future residents. Risk assessments can only be performed by certified risk assessors.

The risk assessment entails both a visual assessment and collection of environmental samples. The environmental samples include, among other things, dust samples from floors and window sills which are sent to a laboratory recognized by EPA's National Lead Laboratory Accreditation Program (NLLAP), as discussed in section III.A.2 for analysis for lead. When the lab results are received, the risk assessor compares them to the DLHS. If the dust-lead loadings from the samples are at or above the applicable DLHS, then a dust-lead hazard is present. Any LBP hazards found are listed in a report prepared for the property owner by the risk assessor.

For the Disclosure Rule under section 1018 of Title X (42 U.S.C. 4852d), EPA and HUD jointly developed regulations requiring a seller or lessor of most pre-1978 housing to disclose the presence of any known LBP and LBP 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, LBP hazards and/or any lead hazard evaluation reports available to the seller or lessor (40 CFR 745.107(a)(4) and 24 CFR 35.88(a)(4)). Accordingly, if a seller or lessor has a report showing lead is present in levels that would not constitute a hazard, that report must also be disclosed. Thus, disclosure is required under section 1018 even if dust and soil levels are less than the applicable LBP hazard standard. EPA notes, however, that with respect only to leases of target housing, disclosure is not required in the limited circumstance where the housing has been found to be LBP free by a certified inspector (24 CFR 35.82; 40 CFR 745.101).

D. Limitations of the DLHS

The DLHS are intended to identify dust-lead hazards when LBP risk assessments are performed. These standards, as were those established in 2001, are for the purposes of Title X and TSCA Title IV, and therefore 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. See 40 CFR 745.61. These standards cannot be used to identify housing that is free from risks from exposure to lead, 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 increased risk of exposure. If one chooses to apply the DLHS to situations beyond the scope of Title X, care must be taken to ensure that the action taken in such settings is appropriate to the circumstances presented in that situation, and that the action is adequate to provide any necessary protection for children exposed.

The DLHS do not require the owners of properties covered by this final rule to evaluate their properties for the presence of dust-lead hazards, or to take action if dust-lead hazards are identified. Although these regulations do not compel specific actions to address identified LBP hazards, these standards are incorporated into certain requirements mandated by state, federal, tribal, and local governments. An important concern for EPA is that if the

DLHS were set too low, the resources for LBP hazard mitigation would be distributed more broadly, diverting them from situations that present more serious risks. However, EPA does not believe that the levels in this final rule constrict these programs, considering the demonstrated achievability of these levels (Ref. 26). As such, these standards are appropriate for incorporation into the various assessment and LBP hazard control activities to which they apply.

E. Administrative Petition and Litigation

On August 10, 2009, EPA received an administrative petition from several environmental and public health advocacy groups requesting that EPA amend regulations issued under Title IV of TSCA (Ref. 27). The petitioners requested that EPA lower the Agency's DLHS issued pursuant to section 403 of TSCA, and the dust-lead clearance levels issued pursuant to section 402 of TSCA, from 40 µg/ft² to 10 µg/ft² or less for floors, and from 250 µg/ft² to 100 µg/ft² or less for window sills; and to lower the definition of LBP pursuant to section 401 of TSCA from 1 mg/cm² and 0.5 percent by weight, to 0.06 percent by weight with a corresponding reduction in units of mg/cm².

On October 22, 2009, EPA responded to this petition pursuant to section 553(e) of the Administrative Procedure Act (5 U.S.C. 553(e)) (EPA 2009) (Ref. 28). EPA agreed to commence an appropriate proceeding on the DLHS and the definition of LBP in response to the petition, but stated that it did not commit to a particular schedule or to a particular outcome.

In August 2016, administrative petitioners—joined by additional citizen groups—filed a petition for writ of mandamus in the Ninth Circuit Court of Appeals, seeking a court order finding that EPA had unreasonably delayed in promulgating a rule to update the DLHS and the definition of LBP under TSCA and directing EPA to promulgate a proposed rule within 90 days, and to finalize a rule within six months. On December 27, 2017, a panel majority of the Ninth Circuit granted the writ of mandamus and ordered that EPA (1) issue a proposed rule within ninety days of the date the decision becomes final and (2) issue a final rule one year thereafter (Ref. 2). On March 26, 2018, the Panel granted EPA's Motion for Clarification, specifying that the proposed rule was due ninety days from the date of that order (Ref. 3). On June 22, 2018, the EPA Administrator signed and EPA announced its proposed rule to lower the DLHS to 10 µg/ft² for floors and 100 µg/ft² for window sills and to make no change to the definition of lead-based paint due to a lack of sufficient information to support such a change. (Ref. 29). The proposed rule was published in the July 2, 2018 edition of the **Federal Register**.

EPA is issuing this final rule in compliance with the Court's order. Notably, the Court's majority decision suggested that EPA had already determined that amending these regulations was necessary pursuant to TSCA (15 U.S.C. 2687). However, EPA stated in its 2009 petition response that "the current hazard standards *may not* be sufficiently protective" (Ref. 28) (emphasis added). With regard to the definition of LBP, EPA had not even opined that the definition may not be sufficiently protective. Rather, throughout the litigation, EPA maintained that it would consider whether revision of the definition was appropriate. Also, the sufficiency of the standards was not at issue, as this mandamus petition was about timing, not substance and EPA had not previously conducted the analyses required to reach a conclusion under the statutory standard. It was not until EPA conducted its own analyses—during this rulemaking process—that it was in a position to express the conclusions that are set forward in this final rule.

F. Public Comments Summary

The proposed rule provided a 45-day public comment period, ending on August 16, 2018. EPA received 67 comments during the public comment period. After the close of the public comment period, EPA received an additional 13,376 comments nearly all of which were submitted as part of a mass mail campaign. Comments were received from private citizens, state governments, potentially affected businesses, academics, trade associations, and environmental and public health advocacy groups. Many commenters, including states, LBP businesses, lead poisoning prevention advocacy groups, individuals, and academics, supported revising the DLHS as proposed. A number of commenters suggested that EPA should promulgate DLHS lower than the proposed levels at 10 µg/ft² for floors, and 100 µg/ft² for window sills. Several commenters specifically suggested that EPA should revise the DLHS for floors to 5 µg/ft², and/or 40 µg/ft² for window sills. One commenter suggested that EPA should revise the DLHS only if the clearance levels are revised as well. Other commenters suggested that EPA either not revise the DLHS or revise them to levels higher than those in today's final rule. Another commenter expressed concern with a DLHS of 10 µg/ft² for floors, contending that this would increase the cost of the HUD Lead Hazard Control (LHC) grant program due to an increase in clearance failures. Several commenters sought clarity in terms of how a potential revision to the DLHS would affect LBP-related activities that had already taken place or were in the process of conducting lead hazard control activities. In this preamble, EPA has responded to the major comments relevant to this final rule. In addition, the more comprehensive version of EPA's response to comments related to this final action can be found in the Response to Comments document (Ref. 30).

III. Final Rule

EPA carefully considered all public comments related to the proposal. EPA is finalizing its proposal to lower the DLHS for floors from 40 µg/ft² to 10 µg/ft² and its proposal to lower the DLHS for window sills from 250 µg/ft² to 100 µg/ft².

This rule finalizes EPA's proposal to make no change to the definition of LBP because insufficient information exists to support such a change at this time.

A. Dust-Lead Hazard Standards

1. Approach for reviewing the dust-lead hazard standards. As EPA explained in the 2001 LBP Hazards Rule (Ref. 4) (66 FR 1206, 1207), one of the underlying principles of Title X is to move the focus of public and private sector decision makers away from the mere presence of LBP, to the presence of LBP hazards, for which more substantive action should be undertaken to control exposures, especially to young children. Since there are many sources of lead exposure (*e.g.* air, water, diet, background levels of lead), and since, under TSCA Title IV, EPA may only account for risks associated with paint, dust and soil, EPA continues to believe that non-zero LBP hazard standards are appropriate.

In the 2001 LBP Hazards Rule, EPA explained the issues and inherent discretion involved when the Administrator identifies LBP hazards (*i.e.*, those conditions that cause exposure to lead "that would result in adverse human health effects as established by the Administrator under this subchapter" (TSCA section 401(10))). Of particular note, EPA explained that the challenge to the Agency is how to deal with the statutory criterion, "would result in adverse human health effects." This is especially problematic because the statutory mandated activity that requires EPA to choose a cutoff for when this

risk exists does not lend itself to a straightforward empirical analysis that provides bright lines for decision makers. 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, it would not be appropriate to base a lead-based paint hazard standard on any specific probability of exceeding any specific blood-lead level. (Ref. 4).

As further explained in that 2001 LBP Hazards Rule, EPA first determined the lowest candidate DLHS by using a 1–5% probability of an individual child developing a BLL of 10 µg/dL. EPA then took a pragmatic approach by looking at numerous factors affected by the candidate standards and prioritized protection from the greatest lead risks so as not to dilute intervention resources.

To develop the DLHS proposal in 2018 (Ref. 5), EPA evaluated the relationship between dust-lead levels and children's health, and considered the achievability of the DLHS given the relationship between standards established under TSCA section 403 and the application of those standards in lead risk reduction programs. Additional factors that the Agency considered include whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government.

The TSD presents models to determine the risk of adverse health effects associated with dust-lead exposures at 19 levels (Ref. 18). Section 6.4 of the TSD summarizes the results of the metrics of interest, including the probability that an individual exposed to each potential candidate standard would have a BLL above 5 µg/dL.

Consistent with the establishment of the 2001 DLHS, EPA believes national standards are still an appropriate regulatory approach because they facilitate implementation and decrease uncertainty within the regulated community. Furthermore, national standards are appropriate because legacy lead paint remains in homes in most, if not all, parts of the country. For further information, see the LBP Hazards Rule (Ref. 4).

Based on the language of sections 401, 402, and 403 of TSCA and the purposes of Title X and its legislative history, EPA continues to believe that it is a reasonable exercise of its discretion to set hazard standards based on consideration of the potential for risk reduction, including whether such actions are achievable, and with consideration given to the existing programs aimed at achieving such reductions. This final rule revising the DLHS to 10 µg/ft² for floors and 100 µg/ft² for window sills is informed by the achievability of these standards in relation to their application in lead risk reduction programs, whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government. In this final rule, the Administrator is exercising his Congressionally delegated function to identify LBP hazards, which the statute defines as those conditions that cause exposure to lead "that would result in adverse human health effects as established by the Administrator," in light of the data and associated uncertainties and the statutory purpose of targeting intervention resources towards protection against the greatest lead risks.

EPA's hazard standards should not be considered in isolation, but must be contemplated along with the Agency's actions to address lead in other media. It is anticipated that this final rule, especially in conjunction with other federal actions, will result in better health outcomes for children. As described in the DLHS proposal in 2018 (Ref. 5), scientific advances made since the promulgation of the 2001 rule clearly demonstrate that exposure to low levels of lead result in adverse health effects. Moreover, since CDC has stated that no safe level of lead in blood has been identified, the reductions in children's BLLs as a result of this rule will help reduce the risk of adverse cognitive and developmental effects in children.

2. Selection of final DLHS. Reducing childhood lead exposure is an EPA priority, and today's final rule is one component of EPA's broad effort to reduce children's exposure to lead. While no safe level of lead in blood has been identified (Ref. 8), the reductions in children's blood-lead levels resulting from this rule are expected to reduce the risk of adverse cognitive and developmental effects in children. TSCA Section 403 required EPA to promulgate regulations that "identify . . . lead-based paint hazards, lead-contaminated dust, and lead-contaminated soil" for purposes of TSCA Title IV and the Residential Lead-Based Paint Hazard Reduction Act of 1992. LBP hazards, under TSCA section 401, are defined as conditions of LBP and lead-contaminated dust and soil that "would result" in adverse human health effects (15 U.S.C. 2681(10)). TSCA section 401 defines lead-contaminated dust as "surface dust in residential dwellings" that contains lead in excess of levels determined "to pose a threat of adverse health effects" (15 U.S.C. 2681(11)).

In selecting the DLHS, EPA gave significant weight to health outcomes identified in the TSD. As the TSD shows, health risks to young children decrease with decreasing dust-lead levels; incremental decreases to BLL and adverse health effects are seen at all points below the original DLHS established in 2001. Although 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. Therefore, it is appropriate for EPA to consider factors beyond health effects when selecting new standards. Additional factors that the Agency considered include achievability of the standards in lead risk reduction programs, whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government.

EPA is concerned that if DLHS were set too low, the limited resources for hazard mitigation would be distributed more broadly, diverting them from vulnerable communities or situations that present more serious risks to those that present lower risks. As described in the Key Federal Programs to Reduce Childhood Lead Exposures and Eliminate Associated Health Impacts document, as well as the Lead Action Plan, national data suggest disparities persist among and within communities due to factors such as race, ethnicity, and income (Ref. 20). In 2013–2016, the 95th percentile BLL of children ages 1 to 5 years in families with incomes below poverty level was 3.0 µg/dL (median is 0.9 µg/dL,) and among those in families at or above the poverty level it was 2.1 µg/dL (median is 0.7 µg/dL), a difference that is statistically significant. In 2011–2016, 2.2% of children in families below the poverty level had a BLL at or above 5 µg/dL, compared to 0.6% of children in families at or above the poverty level, a difference that is statistically significant. The 97.5th percentile in 2013–2016 is 3.3 µg/dL, a slight decrease from the value for 2011–2014 (Ref. 31).

As noted earlier in the preamble, EPA continues to believe that it is a reasonable exercise of its discretion to set hazard standards based on consideration of the potential for risk reduction, including whether such actions are achievable, and with consideration given to the existing programs aimed at achieving such

reductions. Additional factors that the Agency considered include whether lower dust-lead loadings can be reliably detected by laboratories, resources for addressing LBP hazards, and consistency across the federal government. As discussed in Units I.D. and II.A.2. of the proposal, EPA worked with HUD's Office of Lead Hazard Control and Healthy Homes (OLHCHH) to survey the office's LHC grantees to assess the achievability of candidate DLHS (Ref. 26). Survey results showed that reductions in dust-lead levels to 10 µg/ft² on floors and to 100 µg/ft² on window sills were shown to be technically achievable using existing cleaning practices, even though, at the time, the reductions had to be just down to 40 and 250 µg/ft², respectively. As explained in the survey's final report, testing results were collected from 1,552 housing units treated by 98 grantees, and included 7,211 floor and 4,893 window sill dust samples. The data were analyzed to determine the percentage of samples with dust-lead loadings at or below various levels. For floors, 72% of samples showed dust-lead levels at or below 5 µg/ft², 85% were at or below 10 µg/ft², 90% were at or below 15 µg/ft², and 94% were at or below 20 µg/ft². For window sills, 87% of samples showed dust-lead levels at or below 40 µg/ft², 91% were at or below 60 µg/ft², 96% were at or below 80 µg/ft², and 97% were at or below 100 µg/ft² (Ref. 26). This final rule revising the DLHS to 10 µg/ft² for floors and 100 µg/ft² for window sills is informed by the achievability of these standards in relation to their application in lead risk reduction programs. These standards will complement other federal actions aimed at reducing lead exposures for all children. EPA also believes that the standards will continue to inform where intervention resources should be directed for children with higher exposures. These are the lowest levels that EPA believes are reliably achievable using existing lead-hazard control practices and that are aligned with the clearance levels required under certain HUD grant programs. As such, these levels provide greater uniformity across the federal government than other options suggested by commenters and provide consistency for the regulated and public health communities.

EPA received a number of comments during the public comment period suggesting that EPA promulgate DLHS lower than the proposed levels at 10 µg/ft² for floors and 100 µg/ft² for window sills. Several commenters specifically suggested DLHS for floors at 5 µg/ft², and/or 40 µg/ft² for window sills. In the TSD, EPA models the risk of adverse health effects associated with dust-lead exposures at differing potential candidate standards (19 options) in children living in pre-1940 and pre-1978 housing, as well as associated potential health effects in this subpopulation. As explained in the EPA's proposal and section 3.2.3 of the TSD, floors have a larger impact on children's exposure to dust lead than sills because they take up more square footage of the housing unit and children spend more of their time in contact with the floor rather than the sills. Consequently, candidate standards that reduce floor dust-lead loadings more than sill dust-lead loadings have the biggest impact on exposure because of the greater likelihood and magnitude of children's exposure to floor dust-lead. For example, a candidate standard of 40 µg/ft² for floors and 100 µg/ft² for window sills is likely to be less effective than a standard of 10 or 20 µg/ft² for floors and 250 µg/ft² for window sills.

In addition, at least one study suggests that dust-lead may reaccumulate after LHC activities, especially when cleaning and interim controls are used, and therefore DLHS levels lower than 100 µg/ft² for window sills (*e.g.*, 40 µg/ft²) may not be maintained over time, and would therefore render a lower DLHS to be a less effective indication of what property owners and residents can do to achieve a reduction in lead exposure (Ref. 32).The study shows that after cleaning the geometric mean dust-lead level was 45 µg/ft² and the median dust-lead level was 57 µg/ft², both of which are slightly above commenters' suggested window sill dust-lead level of 40 µg/ft². But from six months through six years post-intervention, the window sill dust-lead levels were well above this level. At six months the geometric mean dust level was 105 µg/ft² and the median was 104 µg/ft², which is much closer to a DLHS for window sills at 100 µg/ft², rather than 40 µg/ft². These results call into question whether window sill levels at or below 40 µg/ft² can be maintained over time with routine cleaning practices, particularly interim controls. These inconsistencies, along with the other concerns discussed in this preamble, are why EPA has declined to select a lower DLHS for window sills as suggested by the commenters.

Dust sampling is a critical element of the lead-based paint program because it is how members of the public learn whether dust-lead hazards are present in their homes and properties. Dust sampling is conducted by wiping a representative surface of known area with a wet wipe and sending the wipe to a laboratory for analysis. The laboratory that conducts the analysis must be recognized by EPA's NLLAP. See TSCA section 405(b), 15 U.S.C. 2685(b); 40 CFR 745.90(c)(1); 40 CFR 745.223; 40 CFR 745.227(f); 40 CFR 745.327(c). EPA's NLLAP defines the minimum requirements and abilities that a laboratory must meet to attain EPA recognition as an accredited lead testing laboratory in the Laboratory Quality System Requirements (LQSR) (Ref. 33).

Several commenters expressed concern about laboratories' ability to meet lower limits resulting from a revision to the DLHS, and one commenter went further to recommend that EPA thoroughly examine laboratories' ability to accurately measure at lower levels. Several commenters specifically requested DLHS for floors at 5 µg/ft² and/or 40 µg/ft² for window sills. EPA agrees that a thorough understanding of laboratories' ability to meet lower LQSR limits as a result of revised DLHS is important, especially in consideration of commenters' suggestions for lower DLHS than were proposed and finalized in this rule. As indicated in the proposed rule (Ref. 5), EPA continues to believe in the importance of being able to assess whether the dust-lead loadings reflected in the revised DLHS can be reliably measured by laboratories. If NLLAP-recognized laboratories were unable to demonstrate meeting the LQSR requirements, then stakeholders would be unable to use those laboratories in conducting activities required by EPA's LBP program. Those laboratories would either take actions to meet the lower LQSR limits or discontinue analysis of lead dust wipe samples from their portfolio of services. If too many laboratories were to discontinue lead dust wipe analysis from their portfolios, it could be problematic for the regulated community that conducts the sampling (as well as residents, property owners, and other stakeholders), in the form of increased cost of analysis per sample, increased waiting periods that make testing for dust-lead hazards untenable, or a combination of both. As the number of NLLAP-recognized labs decrease, the potential for risk reduction is diminished.

In order to obtain a better understanding of laboratories' capabilities and capacity for dust wipe analysis, EPA conducted teleconferences with two accrediting organizations (Refs. 34; 35; and 36), five federally funded laboratories (Refs. 37; 38; 39; 40; and 41), and nine state or

privately funded laboratories (Refs. 42; 43; 44; 45; 46; 47; 48; 49; and 50). The clientele of the two accrediting organizations represent 99% of the laboratories recognized by NLLAP for dust-lead testing. Fourteen teleconferences with NLLAP-recognized laboratories represent approximately 13% of the NLLAP-recognized laboratories, and one of the privately funded laboratory contacts with whom EPA spoke is a parent company of sixteen (or approximately 15%) NLLAP-recognized laboratories (Ref. 45). EPA believes the accrediting organizations and laboratories with which teleconferences were held are representative of NLLAP-recognized laboratories. These teleconferences further informed the discussion below, which examines laboratory requirements and laboratories' ability to meet those requirements, various approaches by which laboratories can meet the lower LQSR limits, and how the viability of those approaches changes according to the DLHS in this final rule and why revised DLHS below those levels would impair the potential for risk reduction.

EPA established NLLAP to recognize laboratories that demonstrate the ability to accurately analyze paint chips, dust, or soil samples for lead. NLLAP-recognized laboratories must follow EPA's LQSR which identifies the limits laboratories must achieve (Ref. 33). All NLLAP-recognized laboratories are required to demonstrate they can achieve a quantitation limit and a method detection limit (Ref. 33), and accrediting organizations must use the LQSR when evaluating laboratories performing environmental testing activities under NLLAP. A quantitation limit, also known as a reporting limit (Ref. 5) or minimum reporting limit (Ref. 51), is the minimum level or quantity of lead "that can be quantified to a specified accuracy." (Ref. 33) A method detection limit is "[t]he minimum concentration of [lead] that . . . has a 99% probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero." (Ref. 33) NLLAP-recognized laboratories that analyze dust wipe samples for lead must show 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. 33) The quantitation limit must also be "at least 2 times but no greater than 10 times the method detection limit." (Ref. 33) When this final rule becomes effective, the "lowest action level for dust wipe samples" will be the DLHS for floors at 10 μg/ft². Therefore, as a result of this rulemaking, laboratories that wish to maintain or obtain NLLAP recognition must be able to demonstrate a quantitation limit equal to or less than 5 μg/ft², and a method detection limit no less than 0.5 μg/ft² and no greater than 2.5 μg/ft².

In the proposed rule, EPA requested comment on the achievability of lower standards, including the ability of laboratories to accurately test to lower levels, in part to gain information on how the rule would affect the status of NLLAP-recognized laboratories. One commenter claimed that EPA found that the proposed DLHS are "detectable among the labs used by" the HUD grantees that are already subject to the lower levels. Another commenter asserted that "100% of the labs that conduct lead tests are already equipped to test lead dust with lower standards than [are] currently being used." EPA agrees that the final DLHS are achievable by HUD LHC grantees but disagrees with the commenter's assertion that "100% of the labs that conduct lead tests are already equipped to test" for dust-lead at lower dust-lead levels than the previous DLHS. As mentioned in the proposed rule, HUD's policy guidance revision has already required its OLHCHH's LHC grantees to use clearance levels of 10 μg/ft² for floors and 100 μg/ft² for window sills when conducting LHC activities (Ref. 51). Therefore, 100% of the laboratories *used by these grantees* were using laboratories with a reporting limit equal to or less than 5 μg/ft². Although this means that "there is no technological barrier to reducing the current standard to the" revised DLHS, and the laboratories *used by the grantees* are able to do so (Ref. 5), it does not mean that all of the NLLAP-recognized laboratories are already able to meet the lower LQSR limits associated with the revised DLHS. Based on EPA's additional research, the agency believes a little less than half of NLLAP-recognized laboratories are already able to meet the lower LQSR limits associated with the revised DLHS. In addition, the other laboratories that wish to maintain or obtain NLLAP recognition will need to take actions to meet the lower LQSR limits as a result of this rulemaking (Ref. 14). EPA also notes that if the DLHS were revised to levels lower than this final rule, the Agency is not confident based on available data that the laboratories used by the HUD grantees could meet the lower LQSR limits.

There are a number of approaches by which laboratories can meet the lower LQSR limits. These approaches, in order of increasing burden for doing so (including financial, time, and personnel resources), are: Instruct their customers to increase the wipe area; modify sample preparation and revise accreditation; or acquire new instrumentation, modify sample preparation, and revise accreditation. Through EPA's research on laboratories' capability and capacity, EPA believes that most if not all of the laboratories that will need to take actions to meet the lower LQSR limits will be able to do so by instructing customers to increase the wipe area, modifying the sample preparation and revising accreditation, or executing some combination of those approaches with a revised DLHS at 10 μg/ft² for floors and 100 μg/ft² for window sills (Ref. 14).

However, if EPA were to revise the DLHS to levels lower than the levels in this final rule, the viability of those less burdensome approaches diminishes sharply. With DLHS levels suggested by commenters at 5 μg/ft² for floors, EPA estimates that a little over 40% of the NLLAP-recognized laboratories would either have to acquire new instrumentation, modify sample preparation, and revise accreditation, or discontinue dust wipe analysis for lead from their portfolio (Ref. 14). As further explained in the following paragraphs, EPA is concerned that laboratories that are faced with the decision of whether to meet lower LQSR limits may end up discontinuing dust wipe analysis for lead from their business models. This diminished capacity for laboratories that perform dust wipe analysis could in turn be problematic for the regulated community that conducts the sampling, either in the form of increased cost of analysis per sample, increased waiting periods that make testing for dust-lead hazards untenable, or a combination of both. As the number of NLLAP-recognized labs decrease, this could inadvertently put more children at risk of prolonged lead exposure.

Increasing the wipe area is a less burdensome, acceptable way that many laboratories can meet the lower LQSR limits associated with revisions to the DLHS in this final rule of 10 μg/ft² for floors and 100 μg/ft² for window sills. Dust wipes are typically used to sample a floor area of 1 ft² (Ref. 52). Increasing the wipe area will increase the amount of lead collected, making it more likely that the dust wipe sample will be measurable above the new quantitation limit without incurring additional expense. Some laboratories have indicated that they are able to test such samples by instructing their customers to wipe an area of 2 ft² (Ref. 14). In addition, several commenters relayed

that samples have been taken using a 2 ft^2 wipe area, and some laboratories have indicated that this is how they are meeting the HUD grant policy requirements. The commenters declare that a laboratory using less sensitive instrumentation will have difficulty meeting the lower requirements associated with the revised DLHS without the expansion of the wipe area. Commenters also note there have not been any problems reported by HUD grantees concerning the increased wipe area. Additionally, using a 2 ft^2 wipe area satisfies EPA's LQSR limits. A laboratory that modifies its sample preparation or instrumentation for dust wipe analysis would have to incur the additional burden of modifying or acquiring a new accreditation (Ref. 36), but an increase in the wipe area does not necessarily alter the sample preparation or instrumentation. Therefore, a laboratory that only requires increased wipe areas may not incur that additional burden. EPA agrees with the commenters that expanding the wipe area to 2 ft^2 can be an acceptable way for laboratories to meet the lower requirements associated with revisions to the DLHS in this final rule.

There are several potential issues, however, with expanding the sampling area to 4 ft^2 (Refs. 35 and 44). First, although one laboratory EPA contacted felt that it would be able to use its currently less sensitive instrumentation by instructing its customers to wipe a 4 ft^2 area (Ref. 45), there was no consensus among the laboratories with whom EPA spoke as to whether it is practical to increase the sampling area to 4 ft^2 in order to demonstrate compliance with the LQSR if the DLHS for floors was decreased to 5 $\mu g/ft^2$ (Ref. 14). The larger wipe area could interfere with the effectiveness of the sampling method and cause problems with preparation procedures and laboratory instrumentation (Ref. 14). Therefore, EPA does not believe that increasing the wipe area to 4 ft^2 would be a good approach for laboratories faced with the decision of how to meet the lower LQSR limits with less sensitive instrumentation, for a DLHS level lower than 10 $\mu g/ft^2$ for floors.

In addition, in some cases, window sills do not have enough surface area to allow for a sampling area that is large enough to collect a sufficient amount of dust-lead to meet all laboratories' quantitation limits with their existing analytical equipment.

Thus, EPA believes that setting the DLHS at 10 $\mu g/ft^2$ for floors and 100 $\mu g/ft^2$ for window sills is the best way to maintain the current number of NLLAP-recognized laboratories by ensuring the requirements can be implemented, which in turn helps to maximize the potential of this rule for continued risk reduction.

With DLHS at 10 $\mu g/ft^2$ for floors, laboratories that are not able to meet the LQSR limits by simply increasing the wipe area, due to their own variable processes and equipment, should be able to do so by modifying the sample preparation and revising their accreditation to meet new testing limits. There are several potential changes laboratories can make to modify their sample preparation that might allow a laboratory to lower its quantitation limit and method detection limit while using the same analytical instrumentation. To analyze dust wipe samples, laboratories take the dust wipe, heat it in a solution, and then analyze that solution for lead. Hence, increasing the concentration of lead in the digestate will facilitate achieving measurements above the quantitation limit without acquiring new instrumentation. This can be accomplished by reducing the final volume by using a higher acid concentration or evaporating the digestate and thereby the final concentration of lead for analysis. Additionally, laboratories may be able to use different equipment for heating the solution that would allow use of a lower volume of the digestate. Laboratories that institute these modifications would not need to start from scratch with an entirely new accreditation, but would have to modify their existing accreditation to maintain NLLAP recognition. However, these modifications to sample preparation have their limits. Several of the laboratories that EPA talked to indicated that these modifications would become less viable if the DLHS were to decrease below the levels in this final rule.

If the DLHS were set to levels lower than 10 $\mu g/ft^2$ for floors and 100 $\mu g/ft^2$ for window sills, EPA believes that an increasing number of the laboratories that need to take actions to meet the lower LQSR limits will have to use a different type of analytical instrument that is more sensitive, especially if the DLHS were set to 5 $\mu g/ft^2$ for floors and 40 $\mu g/ft^2$ for window sills, as some commenters requested. The majority of the laboratories that would have to use a different type of analytical instrument would have to purchase new instrumentation and revise their accreditation. This accreditation revision would likely have to include an on-site inspection from an accreditation body (Ref. 36). One commenter mentioned that if new instrumentation were required, such an upgrade could cost between $80,000–$250,000, "not including many consumable materials and retrofitting the laboratory for the equipment." EPA agrees with the commenter that the expense of new instrumentation can be significant, and notes that from its own research, the time required to purchase the new equipment, have it installed, run validation studies, optimize the methods and train personnel on its use, and then to revise the accreditation with an on-site inspection can be quite disruptive to a laboratory's operations. This is especially true for smaller laboratories with more limited resources. As more laboratories conclude that they must acquire new instrumentation and revise their accreditation with an on-site inspection, the likelihood of more laboratories discontinuing dust wipe analysis from their portfolios increases.

After the promulgation of this final rule lowering the DLHS, laboratories that need to take actions to meet the lower LQSR limits will have to take time to review their situation, determine the changes they need to make, decide whether they want to continue in the NLLAP program, and select among the approaches previously described. For DLHS lower than 10 $\mu g/ft^2$ for floors, the number of laboratories that would need to acquire new instrumentation, modify sample preparation, and revise their accreditation with an on-site inspection increases, which would take the most time and resources to accomplish. Laboratories that are faced with the decision to either take these actions or discontinue dust wipe analysis for lead from their portfolios, are much more likely to discontinue the analysis from their portfolios if they cannot simply increase the wipe area or modify their sample preparation. Based on EPA's research on laboratories' capabilities and capacity, EPA believes more laboratories may discontinue dust wipe analysis for lead from their portfolios if the DLHS were set lower than in this final rule. For these reasons, in addition to those discussed earlier in section III.A.(2), EPA believes it is within its discretion to set the DLHS at 10 $\mu g/ft^2$ for floors and 100 $\mu g/ft^2$ for window sills in consideration of the potential for risk reduction, including whether such actions are achievable in relation to their application in lead risk reduction programs.

3. Effect of this change on EPA and HUD Programs. a. EPA Risk Assessments. 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. Results of the sampling, among other things, are documented in a risk assessment report which is required under the LBP Activities Rule (Ref. 21). 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 the LBP Activities Rule, risk assessors will compare dust sampling results for floors and window sills to the new, lower DLHS from this rule. Sampling results above the new hazard standard will indicate that a dust-lead hazard is present on the surfaces tested. EPA expects that this will result in more hazards being identified in a portion of target housing and COFs that undergo risk assessments. The final rule does not change any other risk assessment requirements.

b. EPA-HUD Disclosure Rule. Under the Disclosure Rule (Ref. 6), prospective sellers and lessors of target housing must provide purchasers and renters with a federally approved lead hazard information pamphlet and disclose known LBP and/or LBP hazards. The information disclosure activities are required before a purchaser or renter is obligated under a contract to purchase or lease target housing. Records or reports pertaining to LBP or LBP hazards must be disclosed, including results from dust sampling regardless of whether the level of dust-lead is below the hazard standard. For this reason, the lower dust-lead hazard standard will not result in more information being disclosed because property owners would already be disclosing results that show dust-lead below the original DLHS of 40 μg/ft² on floors or below 250 μg/ft² on window sills. However, a lower dust-lead hazard standard may prompt a different response on the lead disclosure form, *i.e.*, that a lead-based paint hazard is present rather than not, which will occur when a dust-lead level is below the original standard but at or above the standard in this final rule.

c. Renovation, Repair and Painting (RRP) Rule. To avoid confusion about the applicability of this final rule, EPA notes that revising the DLHS will not trigger new requirements under the existing RRP Rule. The existing RRP work practices are required where LBP is present (or assumed to be present), and are not predicated on dust-lead loadings exceeding the hazard standards. The existing RRP regulations do not require dust sampling prior to or at the conclusion of a renovation and, therefore, will not be directly affected by this change to the DLHS.

d. HUD Requirements for Federally-assisted or Federally-owned housing. Under sections 1012 and 1013 of Title X, HUD established LBP hazard notification, evaluation, and reduction requirements for certain pre-1978 HUD-assisted and federally-owned target housing, known as the Lead Safe Housing Rule (LSHR). See 24 CFR part 35, subparts B through R. The programs covered by these requirements range from supportive housing services to foreclosed HUD-insured single-family insured housing to public housing. For programs where hazard evaluation is required, the DLHS provide criteria to risk assessors for identifying LBP hazards in residences covered by these programs. For programs that require abatement of LBP hazards, the DLHS are used to identify residences that contain dust-lead hazards as part of determining where abatement will be necessary.

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

f. LSHR Clearance Requirements. While this final rule does not change the clearance levels under EPA's regulations, it will have the effect of changing the clearance levels that apply to hazard reduction activities under HUD's LSHR. The LSHR requires certain hazard reduction activities to be performed in certain federally-owned and assisted target housing including abatements, interim controls, paint stabilization, and ongoing LBP maintenance. Hazard reduction activities are required in this housing when LBP hazards are identified or when maintenance or rehabilitation activities disturb paint known or presumed to be LBP. The LSHR's clearance regulations, 24 CFR 35.1340, specify requirements for clearance of these projects (when they disturb more than de minimis amounts of known or presumed lead-based painted surfaces, as defined in 24 CFR 35.1350(d)), including a visual assessment, dust sampling, submission of samples for analysis for lead in dust, interpretation of sampling results, and preparation of a report. Clearance testing of abatements and non-abatements is required by 24 CFR 35.1340(a) and (b), respectively.

The LSHR's clearance regulations cross-reference regulatory provisions to establish clearance levels for abatements that are different than those for non-abatement activities. The LSHR clearance regulations for both abatements and non-abatement activities, at 24 CFR 35.1340(d), cross-reference the standards, at 24 CFR 35.1320(b), to be used by risk assessors for conducting clearance; in turn, the standards at 24 CFR 35.1320(b) cross-reference EPA's DLHS at 40 CFR 745.227(h). In addition, the LSHR clearance regulations for abatements, at 24 CFR 35.1340(a), which set forth that clearance must be performed in accordance with EPA regulations, cross-reference EPA's clearance standards for abatements at 40 CFR 745.227(e). Because the EPA's DLHS and dust-lead clearance standards for abatements were the same, cross-referencing different EPA regulatory provisions, at 40 CFR 745.227(e) and (h), had no effect on hazard reduction activities under the LSHR.

The LSHR clearance regulations for non-abatement activities, at 24 CFR 35.1340(b) do not cross-reference EPA's clearance standards at 40 CFR 745.227(e). Only EPA's DLHS at 40 CFR 745.227(h) are referenced at 24 CFR 1340(d) as the clearance standards for non-abatement activities, because EPA does not have its own clearance standards for them. Accordingly, as explained in the proposed rule, non-abatement activities under the LSHR must be cleared using the EPA's DLHS when this final rule becomes effective.

EPA's LBP activities regulations on work practice requirements, at 40 CFR 745.65(d), specify that clearance requirements applicable to LBP hazard evaluation and hazard reduction activities are found in both the LSHR, at 24 CFR part 35, subpart R, and EPA regulations at 40 CFR part 745, subpart L. For abatements covered by both agencies' regulations, the LSHR regulations, at 24 CFR 35.145 and 35.1340(a), require clearance levels following abatement of LBP or LBP hazards to be at least as protective as EPA's clearance levels for abatements at 40 CFR 745.227(e).

This final rule revises the DLHS from 40 μg/ft² and 250 μg/ft² to 10 μg/ft² and 100 μg/ft² on floors and window sills, respectively. As a result of this final action, EPA's DLHS will be lower than EPA's clearance standards for

abatements, and according to HUD, abatements under HUD's LSHR will be cleared using the EPA's DLHS.

g. Effects of a Revision on Previous LBP-related Activities. Since the DLHS do not compel specific actions, revisions to the DLHS would not in and of themselves retroactively compel actions. Inspection reports and risk assessments describe conditions at a specific time. A report that indicates no presence of LBP and/or a LBP hazard should not imply the absence of those conditions in perpetuity. In addition, this rulemaking by itself does not impose retroactive requirements to regulated entities that have previously complied with the disclosure rule. A seller or lessor must properly disclose any available records or reports pertaining to LBP, LBP hazards and/or any lead hazard evaluative reports "before the purchaser or lessee is obligated under any contract to purchase or lease target housing that is not otherwise an exempt transaction pursuant to § 745.101" (40 CFR 745.107). 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, in perpetuity. Additionally, any LBP-free certification that was issued by a certified inspector, based on the previous DLHS, 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. However, the DLHS are 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. A more comprehensive version of EPA's response on these issues can be found in section 2.c. of the response to comments document. (Ref. 30).

B. The Definition of Lead-Based Paint

As noted in the preamble, EPA has neither opined nor concluded that the definition of LBP may not be sufficiently protective. In response to the administrative petition (Ref. 28) and throughout the litigation, EPA maintained that it necessarily would first consider *whether* revision to the definition of LBP was appropriate. In the proposed rule, EPA requested comment on making no change to the definition of LBP.

The definition of LBP is incorporated throughout EPA's LBP regulations, and application of this definition is central to how EPA's LBP program functions. EPA believes that accounting for feasibility and health effects would be appropriate when considering a revision. Given the current, significant data gaps presented below and the new approaches that would need to be devised to address them, EPA continues to lack sufficient information to conclude that the current definition requires revision or to support any specific proposed change to the definition of LBP. Some commenters in support of changing the definition of LBP discussed paint itself as a hazard, advocating for analysis separate and distinct from the causal relationship between LBP and dust-lead hazards. One commenter declared that, given examples of an independent paint-lead hazard, the current definition is "clearly inadequate." EPA reviewed these comments and has expanded the discussion of data gaps elsewhere in the preamble to include direct ingestion of paint. EPA did not receive any data during the public comment period to further inform whether a revision to the current definition of LBP is warranted or even possible at this time.

Evaluating whether revising the definition of LBP is appropriate requires analyzing levels of lead in paint that are lower than what was examined previously by EPA and other federal agencies. In the proposal, EPA requested any new available data or analyses of the relationship among levels of lead in paint, dust and risk of adverse health effects. Although some commenters supported updating the definition of LBP and/or said that the current level is inadequate, EPA did not receive data or analyses that would further inform whether a revision to the definition is warranted at this time. More information is needed to establish a statistically valid causal relationship between concentrations of lead in paint (lower than the current definition) and dust-lead loadings which 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 technology would be affected under a possible revision to the definition.

1. Relationship among lead in paint, environmental conditions, and exposure. EPA would need to further explore the availability and application of statistical modeling approaches that establish robust linkages between the concentration of lead in paint below the current definition and dust-lead on floors before EPA could develop a technically supportable proposal to revise the definition of LBP based on this route of exposure. To that end, EPA is coordinating with HUD to evaluate available data and approaches. Efforts suggest that most available empirical data and modeling approaches are only applicable at or above the current LBP definition (0.5% and 1 mg/cm^2). The highest dust-lead loadings from LBP are expected to be a result of paint removal activities during renovation. During renovation, LBP may be disturbed and abraded, leading to elevated dust-lead loading available for incidental ingestion. EPA developed a model to estimate lead-based dust loadings from renovation activities in various renovation scenarios in 2014 and a similar model was developed in 2011 by Cox et al. However, the underlying data that supported EPA's 2014 model for LBP was EPA's 2007 dust study, which included concentrations of lead in paint ranging from 0.8% to 13% by weight. The data that supported Cox et al. 2011 ranged from 0.7 to 13.2 mg/cm^2 (converted to approximately 0.6% to 31% by weight) of lead in paint (Refs. 53; 54; and 55). Given that the range of concentrations that support these models are well above the petitioners' requested concentration of lead in paint, there would be significant uncertainty associated with using these models to make predictions regarding lead in paint at concentrations an order of magnitude below the current definition.

In an attempt to address this uncertainty and build a modeling approach, EPA conducted a literature search for studies that co-report lead concentrations in paint and dust in order to identify available data (Ref. 53). Among other things, EPA looked to the literature to establish statistically valid associations between low concentrations of LBP and lead in dust, but was unable to find sufficient information to estimate concentrations of lead in household dust from paint concentrations below 0.8% by weight. Thus, EPA still needs to consider generation of new data, since, as discussed elsewhere in this document, EPA believes there is significant uncertainty associated with estimating dust-lead loadings for levels of lead in paint up to an order of magnitude lower than levels in the current definition using the existing models (Ref. 53), Cox et al. (Ref. 54). Such data is needed for EPA to develop an approach to estimate dust-lead from lower levels of lead in paint so that EPA could estimate incremental blood lead changes and associated health effects changes as described in the existing dust-lead

approach. This may involve conducting laboratory or field studies to characterize the relationship between LBP and dust-lead at lower levels of lead in paint (<0.5%) (Ref. 53).

2. Quantify exposure from direct paint ingestion. EPA would need to understand and develop an approach for estimating the amount of direct paint consumption and subsequent exposure by children before EPA could develop a technically supportable proposal to revise the definition of LBP based on ingestion of paint chips and direct teething of painted surfaces. Past studies have documented pica behavior as a risk factor for exposure to lead from LBP, however these studies have not provided a quantitative estimate of paint ingestion. Epidemiological studies generally rely on caregiver observations to classify whether a child has ever been known to consume paint chips. As described further in the Definition of Lead-Based Paint Considerations (Ref. 53), past studies estimate that a fraction of young children are known to have directly ingested paint, and published case studies of individual children provide radiographic evidence of paint chip ingestion. However, neither provide quantitative estimates of the amount of LBP ingested over time by children, information which is needed to quantify exposure.

3. Feasibility. In the proposal, EPA requested any new available data on the technical feasibility of a revised definition of LBP. EPA lacks sufficient information to support a change to the definition of LBP with respect to feasibility. Significant data gaps prevent the Agency from evaluating and subsequently determining that a change to the existing definition is warranted. EPA did not receive any comments with substantive information about whether portable field technologies utilized in EPA's LBP Activities and RRP programs, as well as HUD's LSHR, perform reliably at significantly lower concentrations of lead in paint.

Portable X-ray fluorescence (XRF) LBP analyzers are the primary analytical method for inspections and risk assessments in housing because they can be used to quickly, non-destructively and inexpensively determine if LBP is present on many surfaces. These measurements do not require destructive sampling or paint removal. Renovation firms may also hire inspectors or risk assessors to conduct XRF testing to identify the presence of LBP. When using XRF technology, the instrument exposes the substrate being tested to electromagnetic radiation in the form of X-rays or gamma radiation. In response to radiation, the lead present in the substrate emits energy at a fixed and characteristic level. The emission is called "X-Ray Fluorescence," or XRF (Ref. 52).

XRF Performance Characteristic Sheets (PCS) have been developed by HUD and/or EPA for most commercially available XRF analyzers (XRFs). In order to comport with the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, an XRF instrument that is used for testing paint in target housing or pre-1978 COFs must have a HUD-issued XRF PCS. XRFs must be used in accordance with the manufacturer's instructions and the PCS. The PCS contains information about XRF readings taken on specific substrates, calibration check tolerances, interpretation of XRF readings, and other aspects of the model's performance. For every XRF analyzer evaluated by EPA and/or HUD, the PCS defines acceptable operating specifications and procedures. The ranges where XRF results are positive, negative or inconclusive for LBP, the calibration check tolerances, and other important information needed to ensure accurate results are also included in the PCS. An inspector and risk assessor must follow the XRF PCS for all LBP activities, and only devices with a posted PCS may be used for LBP inspections and risk assessments (Ref. 52).

XRF analyzers and their corresponding PCS sheets were developed to be calibrated with the current definition of LBP. Therefore, these instruments would need to be re-evaluated to determine the capabilities of each instrument model available in the market to meet a potentially revised definition of LBP, and the corresponding PCS would need to be amended accordingly. If, as a result of a revised definition of LBP, the use of XRFs suddenly became unavailable, the effectiveness of the LBP activities programs would be severely harmed. Since these instruments are the primary analytical method for inspections and risk assessments performed pursuant to the LBP activities regulations, EPA would need to understand how a potential revision to the definition of LBP would affect the ability of the regulated community to use this technology.

When conducting renovations, contractors must determine whether or not their project will involve LBP, and thus fall under the scope of the RRP regulations under 40 CFR part 745, subpart E, or in certain jurisdictions, authorized state and Indian tribal programs under subpart Q (see Unit III.C). Under the RRP rule, renovators have the flexibility to choose among four strategies: Use (1) a lead test kit, (2) an XRF instrument, (3) paint chip sampling to indicate whether LBP is present; or (4) assume that LBP is present and follow all the work-practice requirements. For those using lead test kits, only test kits recognized by the EPA can be used for this purpose. EPA-recognized lead test kits used for the RRP program were evaluated through EPA's Environmental Technology Verification (ETV) Program or by the National Institute of Standards and Technology. ETV was a public-private partnership between EPA and nonprofit testing and evaluation organizations that verified the performance of innovative technologies. ETV evaluated the reliability of the technology used for on-site testing of LBP at the regulated level, under controlled conditions in a laboratory. ETV ended operations in early 2014. EPA would need to evaluate lead test kits using ETV-equivalent testing for a potential revision of the definition of LBP. This would allow EPA to evaluate the reliability of test kits for testing LBP under controlled conditions at levels lower than the current LBP definition, so contractors could continue to use this important tool in compliance with the RRP regulations.

The regulated community uses XRF analyzers for inspections and risk assessments and uses lead test kits to determine the presence of LBP during renovations. In consideration of any potential revised definition of LBP, EPA would need to fully understand the repercussions of such a revision on these portable field technologies in order to ensure the technological feasibility of any new revision. The methods EPA would need to employ to do so would involve complex processes that include evaluating the potential ability of XRF analyzers to detect LBP at lower levels than the current definition, the ability to recalibrate performance characteristic sheets for each available model of XRF analyzer, and re-evaluating lead test kits under controlled conditions in a laboratory. EPA currently lacks sufficient information to support such an undertaking.

C. State Authorization

Pursuant to TSCA section 404, a provision was made for interested states, territories and tribes to apply for and receive authorization to administer their own LBP activities programs, as long as their programs are at least as protective of human health and the environment as the Agency's program and provides adequate enforcement.

The regulations applicable to state, territorial and tribal programs are codified at 40 CFR part 745, subpart Q. As part of the authorization process, states, territories and tribes must demonstrate to EPA that they meet the requirements of the LBP Activities Rule. Over time, the Agency may make changes to these requirements. To address the changes in this final rule and future changes to the LBP Activities Rule, the Agency is requiring states, territories and tribes to demonstrate that they meet any new requirements imposed by this rulemaking in order to maintain or obtain authorization. Under this requirement, authorized states, territories and tribes have up to two years to demonstrate that their programs include any new requirements that EPA promulgates. A state, territory or tribe must indicate that it meets the requirements of the LBP Activities program in its application for authorization or, if already authorized, in a report it must submit in accordance with 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 tribe must demonstrate that it meets the new requirements by either 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. The Agency believes that this requirement allows sufficient time for states, territories and tribes to demonstrate that their programs contain requirements at least as protective as any new requirements that EPA may promulgate.

D. Effective Date

EPA has considered the impacts of the revised DLHS on NLLAP-recognized laboratories. This rule will become effective on January 6, 2020 in order to provide a reasonable amount of time for NLLAP-recognized laboratories to take actions to meet the lower LQSR limits so they can continue providing dust wipe testing services to the regulated community at the time the rule becomes effective.

In order to obtain a better understanding of laboratories' capability and capacity for dust wipe analysis, EPA conducted teleconferences with two accrediting organizations (Refs. 34; 35; and 36), five federally funded laboratories (Refs. 37; 38; 39; 40; and 41), and nine state or privately funded laboratories (Refs. 42; 43; 44; 45; 46; 47; 48; 49; and 50). Based on these conversations, EPA estimated that over half of accredited laboratories would have to take actions to meet the lower LQSR limits. They can accomplish this by asking their customers to increase the wipe area sampled and/or revising their operating procedures, validating the changes, and revising their accreditation accordingly. Such actions can take months to complete. EPA therefore believes that the effective date provides needed flexibility for laboratories while ensuring that the revised DLHS become effective in a timely manner.

IV. References

The following is a listing 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**.

1. Public Law 102–550, Title X—Housing and Community Development Act, enacted October 28, 1992 (also known as the Residential Lead-Based Paint Hazard Reduction Act of 1992 or "Title X") (42 U.S.C. 4851 *et seq.*).
2. U.S. Court of Appeals for the Ninth Circuit. A Community Voice v. EPA, No. 16–72816, Opinion. December 27, 2017.
3. U.S. Court of Appeals for the Ninth Circuit. A Community Voice v. EPA, No. 16–72816, Order. March 26, 2018.
4. EPA. Lead; Identification of Dangerous Levels of Lead; Final Rule. **Federal Register** (66 FR 1206, January 5, 2001) (FRL–6763–5).
5. EPA. Review of the Dust-Lead Hazard Standards and the Definition of Lead-Based Paint; Proposed Rule. **Federal Register** (83 FR 30889, July 2, 2018) (FRL–9976–04).
6. HUD, EPA. Lead; Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing; Final Rule. **Federal Register** (61 FR 9064, March 6, 1996) (FRL–5347–9).
7. President's Task Force on Environmental Health Risks and Safety Risks to Children. *Federal Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts.* December 2018. *https://www.epa.gov/lead/federal-action-plan-reduce-childhood-lead-exposure.*
8. CDC. *CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in "Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention."* June 7, 2012. *https://www.cdc.gov/nceh/lead/acclpp/cdc_response_lead_exposure_recs.pdf.*
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12. Children's Health Protection Advisory Committee (CHPAC). Letter to Lisa P. Jackson RE: Childhood Lead Poisoning Prevention. March 29, 2012. *https://www.epa.gov/sites/production/files/2015-10/documents/chpac_lead_letter_2012_03_29.pdf.*
13. CHPAC. Letter to Scott Pruitt RE: Highest Priorities for Childhood Lead Exposure Prevention. March 24, 2017. *https://www.epa.gov/sites/production/files/2017-04/documents/2017.03.24_chpac_lead_hazard_reduction_letter.pdf.*
14. EPA, Office of Pollution Prevention and Toxics. *Economic Analysis of the Final Rule to Revise the TSCA Dust-Lead Hazard Standards.* June 2019.
15. CDC. *Lead Poisoning in Children* (February 2011). *https://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/LeadPoisoningChildren.html.*
16. Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences. *Lead—ToxFAQs™ CAS # 7439–92–1,* August 2007. *https://www.atsdr.cdc.gov/toxfaqs/tfacts13.pdf.*
17. EPA. *Exposure Factors Handbook Chapter 5 (Update): Soil and Dust Ingestion.* U.S. EPA Office of Research and Development, Washington, DC, EPA/600/R–17/384F, 2017. *https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252.*
18. EPA, Office of Pollution Prevention and Toxics. *Technical Support Document for Residential Dust-lead Hazard Standards Rulemaking Approach taken to Estimate Blood Lead Levels and Effects from Exposures to Dust-lead.* June 2019.
19. Zartarian, V., Xue, J., Tornero-Velez, R., & Brown, J. *Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health Decision-Making.* Environmental Health Perspectives, 125(9), 097009–097009. September 12, 2017. *https://doi.org/10.1289/EHP1605.*
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21. EPA. Lead; Requirements for Lead-Based Paint Activities in Target Housing and

Child-Occupied Facilities; Final Rule. **Federal Register** (61 FR 45778, August 29, 1996) (FRL–5389–9).
22. EPA. Lead; Renovation, Repair, and Painting Program; Final Rule. **Federal Register** (73 FR 21692, April 22, 2008) (FRL–8355–7).
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V. Statutory and Executive Order Reviews

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

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

This action is an economically significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011). Any changes made in response to OMB recommendations have been documented in the docket. The Agency prepared an analysis of the potential costs and benefits associated with this action, which is available in the docket (Ref. 14).

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

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

C. Paperwork Reduction Act (PRA)

This action does not directly impose an information collection burden under the PRA, 44 U.S.C. 3501 *et seq.* Under 24 CFR part 35, subpart A, and 40 CFR part 745, subpart F, sellers and lessors must already provide purchasers or

lessees any available records or reports "pertaining to" LBP, LBP hazards and/or any lead hazard evaluative reports available to the seller or lessor. Accordingly, a seller or lessor must disclose any reports showing dust-lead levels, regardless of the value. Thus, this action would not result in additional disclosures. Because there are no new information collection requirements to consider under the proposed rule, or any changes to the existing requirements that might impact existing information collection request burden estimates, additional OMB review and approval under the PRA is not necessary.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA, 5 U.S.C. 601 *et seq.* In making this determination, the impact of concern is any significant adverse economic impact on small entities. The small entities subject to the requirements of this action are small businesses that are landlords who may incur costs for lead hazard reduction measures in compliance with the HUD Lead Safe Housing Rule (LSHR); residential remodelers (who may incur costs associated with additional cleaning and sealing in houses undergoing rehabilitation 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 15,000 small businesses would be subject to this rule, of which 96% have cost impacts less than 1% of revenues, 4% have impacts between 1% and 3% of revenues, and less than 1% have impacts greater than 3% of revenues. Details of the analysis of the potential costs and benefits associated with this action are presented in EPA's Economic Analysis, which is available in the docket (Ref. 14).

The rule sets health-based hazard standards for dust lead loadings on floors and window sills. The DLHS do not require the owners of properties covered by this final rule to evaluate their properties for the presence of dust-lead hazards, or to take action if dust-lead hazards are identified. Although these regulations do not compel specific actions to address identified LBP hazards, these standards are directly incorporated by reference into certain requirements mandated by HUD in housing subject to the LSHR. Aside from the HUD regulations, this rule does not impose new federal requirements on small entities.

EPA's Economic Analysis estimates potential costs for activities in two types of target housing—those subject to the HUD LSHR and those where a child with a blood lead level exceeding a federal or state threshold lives. The analysis presents low and high scenarios for the number of housing units where a child with a blood lead level exceeding a federal or state threshold lives. For the low scenario, environmental investigations are assumed to be conducted when a child's blood lead level exceeds the threshold set by that child's state. These thresholds vary from 5 µg/dL to 20 µg/dL, depending on the state. For the high scenario, environmental investigations are assumed to be conducted when a child's blood lead level exceeds the CDC's reference level of 5 µg/dL.

In order to estimate the broader potential impacts of the rule, EPA assumed that environmental investigations triggered by a child with a blood lead level exceeding a federal or state threshold include dust wipe testing of the child's home and that a clean-up occurs whenever the investigation indicates that dust-lead levels exceed a hazard standard. As previously indicated, the rule does not require these actions. Where dust-lead levels are below the standards in the 2001 rule but above the standards in this final rule, the potential clean-up costs are also included in the economic analysis. The low and high scenarios for the number of housing units affect the estimated number of small business that might incur costs for cleaning and additional dust wipe testing once the hazard standards in this final rule are in effect. Based on the two scenarios, a total of 22,000 to 48,000 small businesses are considered in the analysis (this total includes those firms mentioned above in the discussion of the HUD LSHR). About 7,000 to 33,000 are lessors leasing housing where a child with a blood lead level exceeding a federal or state threshold resides.

When considering this broader set of firms, EPA's analysis indicates that nearly 300 landlords that are small businesses may have cost impacts over 3% under the low scenario, and almost 1,500 may have such impacts under the high scenario. However, the high scenario makes a series of assumptions that are likely to overstate costs and impacts. The high scenario assumes that in all instances where a child's blood lead level is between the threshold set by that child's state and the CDC reference value, the dust lead levels are tested in the residence even when not required; that in all cases where the loadings are above the hazard standard in a rental unit the landlord takes action, and incurs costs, to reduce the dust lead levels even when that is not required. The analysis further assumes that in all those cases the costs are borne entirely by the landlord (as opposed to being passed through or recouped in whole or in part through increased rent). As a result of this series of conservative assumptions, the high scenario functions as a bounding estimate. A more realistic assessment of the potential impacts is that they are between the high and low scenarios. In light of these considerations, even if the broader set of firms were to be considered, EPA would certify that this action would not have a significant economic impact on a substantial number of small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The total estimated annual cost of the proposed rule is $32 million to $117 million per year (Ref. 14), which does not exceed the inflation-adjusted unfunded mandate threshold of $156 million.

F. Executive Order 13132: Federalism

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

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

This action does not have tribal implications as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). Tribes that have authorized LBP Activities programs must demonstrate that they have DLHS at least as protective as the standards at 40 CFR

745.227. However, authorized tribes are under no obligation to continue to administer the LBP Activities program, and if they do not wish to adopt new DLHS they can relinquish their authorization. In the absence of a Tribal authorization, EPA will administer these requirements. Thus, Executive Order 13175 does not apply to this action.

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

This action is subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is economically significant as defined in Executive Order 12866, and because the environmental health or safety risk addressed by this action may have a disproportionate effect on children. (Ref. 18)

The primary purpose of this rule is to reduce exposure to dust-lead hazards in target housing where children reside and in target housing or COFs. EPA's analysis indicates that there will be approximately 50,000 to 200,000 children per year affected by the rule (Ref. 14).

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

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001), because it is not likely to have a significant adverse effect on the supply, distribution or use of energy.

J. National Technology Transfer and Advancement Act (NTTAA)

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

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

This action is not expected to have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The documentation for this decision is contained in the Economic Analysis, which is available in the docket (Ref. 14). EPA's Economic Analysis estimates that the average baseline blood lead levels of children who are affected by the rule (particularly children in minority and low-income households) are higher than the nationwide average. The revised hazard standards would reduce exposure to lead for all residents of affected housing. Therefore, EPA has determined that the regulatory options will not have disproportionately high and adverse human health or environmental effects on any population, including any minority population or low-income population.

L. Congressional Review Act (CRA)

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

List of Subjects in 40 CFR Part 745

Environmental protection, Hazardous substances, Lead poisoning, Reporting and recordkeeping requirements.

Dated: June 21, 2019.

Andrew R. Wheeler,

Administrator.

Therefore, 40 CFR chapter I, subchapter R, is amended as follows:

PART 745—[AMENDED]

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

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

■ 2. In § 745.65, paragraph (b) is revised to read as follows:

§ 745.65 Lead-based paint hazards.

* * * * *

(b) *Dust-lead hazard.* 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/ft² on floors or 100 μg/ft² on interior window sills based on wipe samples.

* * * * *

■ 3. In § 745.227, paragraph (h)(3)(i) is revised to read as follows:

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

* * * * *

(h) * * *

(3) * * *

(i) 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 μg/ft² for floors and 100 μg/ft² for interior window sills, respectively;

* * * * *

■ 4. In § 745.325, paragraph (e) is revised to read as follows:

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

* * * * *

(e) *Revisions to lead-based paint activities program requirements.* When EPA publishes in the **Federal Register** revisions to the lead-based paint activities program requirements contained in subpart L of this part:

(1) A State or Tribe with a lead-based paint activities program approved before the effective date of the revisions to the lead-based paint activities program requirements in subpart L of this part must demonstrate that it meets the requirements of this section in a report that it submits pursuant to § 745.324(h) but no later than two years after the effective date of the revisions.

(2) A State or Tribe with an application for approval of a lead-based paint activities program submitted but not approved before the effective date of the revisions to the lead-based paint activities program requirements in subpart L of this part must demonstrate that it meets the requirements of this section either by amending its application or in a report that it submits pursuant to § 745.324(h) but no later than two years after the effective date of the revisions.

(3) A State or Tribe submitting its application for approval of a lead-based paint activities program on or after the effective date of the revisions must demonstrate in its application that it meets the requirements of the new lead-based paint activities program requirements in subpart L of this part.

[FR Doc. 2019–14024 Filed 7–8–19; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[Docket No. 120815345–3525–02]

RIN 0648–XS002

Snapper-Grouper Fishery of the South Atlantic; 2019 Commercial Accountability Measure and Closure for the Other Jacks Complex

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; closure.

SUMMARY: NMFS implements an accountability measure (AM) for the