Via: Federal eRulemaking Portal:
http://www.regulations.gov

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Mail Code 7407M
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Re: Review of the Dust-Lead Hazard Standards and Definition of Lead-Based Paint; Docket EPA-HQ-OPPT-2018-0166; FRL-9976-04

Please find attached for filing in Docket EPA-HQ-OPPT-2018-0166; FRL-9976-04 Comments from the National Multifamily Housing Council and the National Apartment Association.

Sincerely,

Eileen Lee

COMMENTS OF THE NATIONAL MULTIFAMILY HOUSING COUNCIL AND THE NATIONAL APARTMENT ASSOCIATION ON EPA'S PROPOSED RULE ON DUST-LEAD HAZARD STANDARDS AND THE DEFINITION OF LEAD BASED PAINT

Docket EPA-HQ-OPPT-2018-0166; FRL-9976-04

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I. INTRODUCTION:

Thank you for the opportunity to comment on EPA's proposed rule on dust lead-lead hazard standards and the definition of lead-based paint. These comments are submitted by the National Multifamily Housing Council ("NMHC") and the National Apartment Association ("NAA").

NMHC and NAA have partnered for over 25 years in a joint legislative program to provide a single voice for America's professionally owned and managed apartment industry.

NMHC represents the interest's one of the largest and most prominent apartment firms in the United States. Based in Washington, DC, the NMHC is a national nonprofit association that represents the leadership of the $1.3 trillion apartment industry. Our members engage in all aspects of the apartment industry, including ownership, development, management and finance, and provide apartment homes for 39 million Americans who live in apartments today. NMHC advocates on behalf of rental housing, conducts apartment-related research, encourages the exchange of strategic business information and promotes the desirability of apartment living.

NAA serves as the leading voice and preeminent resource through advocacy, education, and collaboration on behalf of the rental housing industry. As a federation of nearly 160 affiliates, NAA encompasses over 75,000 members representing 9.2 million apartment homes nationally. NAA believes that rental housing is a valuable partner in every community that emphasizes integrity, accountability, collaboration, community responsibility, inclusivity, and innovation. Nearly 16 percent, roughly18.9 million U.S. households reside in an apartment home in a building with five or more apartments[1]. Just under half of all apartments in buildings with 5 or more units were built in 1979 or earlier, according to NMHC tabulations of the 2016 American Community Survey microdata. [2]

II. EXECUTIVE SUMMARY:

NMHC and NAA members are strongly committed to providing healthy apartment homes for the residents of their properties. We support the development and implementation of health-based standards that protect our residents and workers.

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[1] U.S. Census Bureau, 2016 American Community Survey 1-Year Estimates, Tenure; U.S. Census Bureau, 2016 American Community Survey 1-Year Estimates, Tenure by Units in Structure

[2] 10,267,783 of 20,584,714 apartments in buildings with 5 or more units

EPA has asked for comment on the proposal to lower the dust hazard levels for windows and floors and definition of lead-based paint (LBP). The proposed rule perpetuates an unnecessarily narrow and constrained view of environmental lead hazards. Even as Congress promulgated Title X in 1992, there was wide spread awareness of other sources of lead (including historic automobile emissions, industrial emissions and emissions from aircraft and other vehicles, to name a few) that contributed to lead entrained in the general environment.

Literature confirms that over 60% of household dust is related to track-in from the exterior. U.S. Department of Housing and Urban Development (HUD) updated requirements for Grantees to include testing of dust-lead on porch areas as part of their testing regiment. Federally funded programs, such as the Lead Safe Program, have for years provided doormats to reduce lead from being introduced into the home environment. This lead has no nexus to lead based paint, yet EPA regulates this lead as lead derived from paint once it is identified at certain levels in residential soil or house dust.

Some 26 years later, EPA continues to regulate lead in dust as if it were uniformly associated with paint and, more consequentially, has done relatively little to address lead-contaminated drinking water which is increasingly recognized problem as a national public health challenge.

Changes to the dust lead standards and/or the definition of lead based paint will have a dramatic impact on the following persons and practices:

- Work practice standards for conducting LBP activities, including those in target housing and child-occupied facilities
- Those who operate training programs for target housing and child occupied facilities
- Certification of individuals and firms engaged in LBP activities for target housing and child-occupied facilities
- Environmental sampling professionals
- State and local enforcement agencies
- Those conducting rehabilitations in residential structures
- Disclosure requirements for sellers and lessors of target housing
- In addition, building construction, specialty trade contractors, real estate, child daycare facilities, elementary and secondary schools, trade schools, engineering services, lead abatement professionals and federal agencies that own residential property and property owners will likely be affected.

In short, just about every aspect of lead paint regulation, on both the federal and state level, will be impacted. Given this proposed rule's potentially staggering scope, as the Agency develops a record to consider any changes to the dust lead standards and changes to the definition of lead-based paint, the Agency must keep in mind the following overarching themes and points of these comments:

1. **Changes in the dust lead hazard standards could have unintended consequences under current state laws**.

a. These new standards will have an unintended effect of exposing property owners to liability where no such liability presently exists.
    i. Lowering the dust lead standards effectively creates a "new definition" of lead hazard which has the potential to impose liability on owners who were otherwise compliant until the changes were made.
    ii. Changing the standard would cause millions of property owners to be non-compliant under their current state law and 'create' a health-based hazard to be present despite no change in the condition of their property.
b. A change in these standards will impose a tremendous financial burden on property owners who have already invested money to comply with current regulations. A change in these standards could render all expenditures for compliance worthless and require significant new expenditures to be incurred to comply with the new standards, as there are no grandfather provisions proposed.

2. **Although the EPA declined to change the definition of lead-based paint due to insufficient information for now, it is important to note for future consideration that changing the definition would have an even greater negative impact upon properties that have been compliant with applicable regulations and create uncapped potential liability for paperwork violations.**

    a. All target housing currently certified as lead-free would have to be retested to meet the new standard.
    b. Properties formerly certified as lead-free properties could immediately be found non-compliant with laws administer by HUD and certain state and municipal authorities and could potentially result in large fines and other sanctions for property owners.
    c. The most commonly used method for testing for lead paint, XRF testing, would likely not be technically feasible if EPA were to adopt (as was suggested) a definition of 600 ppm. Due to technical limitations of XRF, testing at this level of detection could only be done by paint chip analysis of all painted surfaces in a property, an extremely costly and lengthy process.

    The re-testing of apartment communities would pose an enormous financial and time-consuming burden for addressing paperwork without necessarily protecting residents and workers from lead-hazards (if any).

III. FEDERAL LAW DISCLOSURE POLICY IMPACT UPON NEW LEAD DUST STANDARDS PROPOSED BY THE EPA

In March of 1996, the EPA initiated the Real Estate Notification and Disclosure Rule ("Disclosure Rule"), codified as Title 40 C.F.R., Part 745, Subpart F. The Disclosure Rule

requires the disclosure of information concerning lead-based paint and lead-based paint hazards in pre-1978 constructed residential housing. Under the Disclosure Rule, any property owner/manager or their agents must disclose information concerning LBP and/***or LBP hazards*** when selling or leasing pre-1978 constructed residential housing.

The seller or landlord is required to provide the leasee or purchaser with an EPA-approved lead pamphlet, and copies of any record or inspection report concerning ***lead-based paint and/or lead-based paint hazards***. Finally, a lead disclosure form, stating that the lead pamphlet was presented along with any records or reports relating to lead-based paint and/or ***lead-based paint hazards***, must be signed by the parties and included in the lease or purchase agreement.

Since June 1999, EPA has regulated renovation, repair and painting in pre-1978 housing. This rule generally requires that persons performing work, that is likely to disturb lead-coated surfaces, provide property owners and occupants with information on lead safe work practices and affirm that no ***lead-dust hazards*** have been left behind at the conclusion of the job.[3]

EPA has proposed revisions to the lead hazard standard without clarifying how these revisions will impact the regulations that are predicated on the definitions. In changing the definition of "lead hazard," dust tests performed over 20 years ago, in conformance with federal guidelines, across millions of apartment homes across the country, will be now be evidence of a *de facto* "lead based paint hazard" in the tested properties.

The current and proposed standards are as follows:

Components	Current Standard	Proposed Standard
Floors	40 µg/ft^2	10 µg/ ft^2
Window Sills	250 µg/ft^2	100 µg/ft^2

As such, if prior lead dust testing is below 40 µg/ft^2 on floors but above 10 µg/ft^2, the property would no longer be in compliance under the new lead dust standards with regard to the Disclosure Rule. EPA has failed to address how these revised standards will be used in the context of existing Disclosure reports. Will property owners and managers be required to re-test millions of currently compliant apartment units as a practical matter or be in technical non-conformance with revised levels?

Lack of uniformity in laboratory reporting also raises questions with respect to lead dust testing results that reflect "below detection limit" instead of providing an actual number. As demonstrated by both EPA and HUD, detection limits differ for each laboratory depending on

[3] 40 CFR 745, Subpart E

the technology and calibration of their machines. Laboratories may have set their detection limits based upon the current standard of 40 µg/ ft^2 . In these instances, questions will be raised as to whether a property owner would be required to contact the laboratory to find out their detection limit, retest their property or report "lead-based paint hazards" to a tenant.

The Agency has failed to address whether a revised lead disclosure form would now be required to be produced to the resident. In January 1998, the EPA issued the Real Estate Notification and Disclosure Rule Interim Final Enforcement Response Policy (Enforcement Policy), which provides penalties for violations of non-disclosure. Per the Enforcement Policy, EPA can bring civil penalty actions and issue notices of noncompliance or warning letters. Moreover, anyone who leased or purchased a home covered by the Disclosure Rule can bring a civil action against the seller, landlord or agent for failing to disclose the required information for treble damages[4].

Lead Residential Lead-Based Paint Disclosure Program (Section 1018 of Title X) also allows the purchaser or lessee to bring a civil action for damages and the court may award treble damages, court costs, reasonable attorney fees, and expert witness fees if that party prevails. Since the EPA began enforcement of the Disclosure Rule in 1997, it has brought civil penalty actions, and issued numerous warning letters to real estate agents, landlords, brokers, sellers, and agents for failing to disclose lead-based paint information.

Changes to these definitions without explaining how they will factor into other regulatory obligations has far reaching implications for rental property owners and managers, who are currently in compliance under the current state and federal standards. Property owners/managers who are currently compliant may incur fines, penalties, additional costs for testing of their properties and future lawsuits by residents once the new standards are adopted. In order to avoid penalties, should property owners self-report all units that may be potentially in non-compliance with amended standards? While disclosure may assist with penalties imposed by the EPA, it will not assist with compliance issues on the state level or civil actions brought by property residents.

IV. CONFUSION UNDER THE CURRENT RECOMMENDED CHANGES

EPA puts numerical values on allowable levels of dust in in three sections of 40 CFR Part 745:

- At 40 CFR 745.65(b)) (LBP hazard standard) which states that "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 40 µg/ft^2 on floors or 250 µg/ft^2 on interior window sills based on wipe samples."
- At 40 CFR 745.227(e)(8)(viii) (Clearance levels) which states that "The clearance levels for lead in dust are 40 µg/ft^2 for floors, 250 µg/ft^2 for interior window sills, and 400 µg/ft^2 for window troughs."
- At 40 CFR 745.227(h)(3)(i), (determining whether a hazard is present) which states that "In a residential dwelling on floors and interior window sills when the

[4] 42 U.S.C. § 4852d(b)(3)

> weighted arithmetic mean lead loading for all single surface or composite samples of floors and interior window sills are equal to or greater than 40 μg/ft^2 for floors and 250 μg/ft^2 for interior window sills, respectively."

In the proposed Rule, the agency addressed lowering the dust lead levels for hazard determinations on floors and window sills. It left in place the current clearance levels, creating confusion and undermining the intent of the new standards. It is not clear why the EPA would have a clearance level that is presumably less protective than the associated hazard standard.

Under the proposed new rule, dust testing following a lead related activity could "pass" Clearance at 30 μg/ft^2, however, if the average level of floor lead samples exceeds 10 μg/ft^2 there is a dust lead hazard. This proposed standard place the environmental sampling professional (certified paint inspector/certified risk assessor) in a quandary. Their obligation is to determine if the property is in compliance with the dust standards for Clearance. Should the environmental sampling professional merely "Pass" the property for Clearance or do they have an obligation to alert the property owner/manager to the dust lead hazard? EPA's proposed dust lead hazard change cannot be implemented without an evaluation of real-world circumstances.

Under the proposed new rule, utilizing the example above, are both the Abatement Contractor and the Environmental Sampling Professional protected from litigation as a result of passing a property for meeting the dust lead Clearance standards despite leaving behind dust levels that exceed EPA defined health-based standard? Will EPA set standards for their Certified Renovators and Risk Assessors related to the disclosure of Health-based Standards when in conflict with Clearance standards? As shown, the dust lead hazard standards would also impact work done pursuant to its Lead-Safe Renovation, Repair and Painting Rule (RRP)[5].

V. CHANGES TO THE DEFINITION OF LEAD BASED PAINT

Although EPA has determined that it has insufficient information at this time to warrant a change in the definition, the Agency has asked for comment on the current definition of LBP. This definition, established by statute in 1992,[6] states:

> ***Lead-based paint means paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight.***

In establishing this standard, Congress was aware that the Consumer Product Safety Commission (CPSC) had established a definition for lead paint as paint that contained lead in a concentration of 600 or more parts per million (ppm). Congress chose not to replicate this definition. Moreover, Congress established that lead-based paint was ***not*** a hazard *per se*. Rather, that it was damaged or deteriorated lead painted surfaces that posed a hazard. We have not been able to identify research studies that support the premise that the lead concentration in paint is correlated with the presence of lead hazards *per se*.

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[5] 40 CFR § 745, Subpart E

[6] 40 CFR § 745.103 and 40 CFR § 745.223

Current regulations enforced by EPA, HUD and various state and local authorities specify how renovation and repair activities should be conducted on lead-painted surfaces. The distinguishing feature in these regulations is the concentration of lead in any ensuing dust, not the level of lead in the painted substrate. If EPA were to revise the statutory definition, we strongly urge that the Agency conduct the necessary and specific research on this topic.[7]

Specifically, in § 401 of TSCA, Congress defined LBP to mean "paint or other surface coatings that contain lead in excess of 1.0 milligrams per centimeter squared or 0.5 percent by weight or (A) in the case of paint or other surface coatings on target housing, such lower level as may be established by the Secretary of Housing and Urban Development, as defined in section 302(c) of the Lead-Based Paint Poisoning Prevention Act, or (B) in the case of any other paint or surface coatings, such other level as may be established by the Administrator."[8]

EPA adopted this specification in the statutory definition without modification at 40 CFR 745.103 and 745.223 stating that "*Lead-based paint* means paint or other surface coatings that contain lead equal to or in excess of 1.0 milligrams per square centimeter or more than 0.5 percent by weight." HUD uses the same definition in its Lead-Safe Housing Rule.[9]

EPA's proposed modifications to the definition of lead paint under Section 6 of TSCA and 40 CFR 745.103 and 745.223 for previously applied paint or other surface coatings in housing, child-occupied facilities, public building and commercial buildings would not be feasible. The proposed drop from 5,000 ppm to 600 ppm does not reflect any corresponding reduction in the 1.0 milligrams per square centimeter standard. Is EPA suggesting the elimination of a milligrams per square centimeter standard?

Changes to the definition of LBP would impact just about every lead paint regulation, law and rule in place today. It would drastically change work practice standards, training programs, certification of individuals, approved methods and instruments to detect lead paint, rehabilitation on properties, disclosure requirements and construction.

Currently, X-ray Fluorescence instruments, (XRF) used to detect lead in paint on building components do not report in parts per million (ppm). The ability to comply with a parts per million (ppm) standard would require the Environmental Sampling community and property owners to utilize completely different methods of lead in paint detection. The communities would be forced to move backwards to paint chips analysis which was abandoned in the 1980's due to several factors among them cost, lack of accurate results, influencing factors such as substrate materials or layers of non-paint resulting in dilution of the sample. This process cannot be what EPA intends when they discuss a 600-ppm standard. If a discussion needs to occur we should at least stay within the framework of milligrams per square centimeters.

The cost for retesting could exceed $1,000,000,000.00 for some public housing buildings and result in hundreds of million dollars of related compliance costs on an annual basis according to discussions with knowledgeable industry experts. The economic consequences of

[7] 42 U.S.C. § 4851 et seq.; 24 CFR. § 35.80 et seq., and 40 CFR § 745.103 et seq
[8] 15 U.S.C. § 2681(9)
[9] 24 CFR § 35.110.

this change would drastically impact apartment homes that already have been tested for the presence of LBP by a certified lead risk assessor or lead inspector and found to have levels of lead in the paint below the 1.0 milligrams per square centimeter standard.

The proposed change would essentially force millions of apartment units to be retested and could result in properties that are currently designated "lead free" properties to now be identified as having lead-based paint. Many millions of dollars will be spent re-testing properties that are already compliant with lead regulations.

VI. EPA SHOULD ADDRESS KNOWN ENVIRONMENTAL CONTAMINANTS SUCH AS WATER AND SOIL

NMHC and NAA members are committed to providing heathy homes for their residents. We are concerned that in requiring compliant property owners to undertake massive investment in retesting and paperwork, that the public will be lulled into thinking that progress is being made in eliminating known sources of lead. We cannot stress strongly enough that code enforcement at the municipal level is the front line for protecting children and shutting down unscrupulous property owners who flout the law.

EPA should turn their focus to environmental sources of lead that are poisoning children every day. In addition to looking for lead hazards in housing, a comprehensive environmental lead testing program could look for other lead sources, including soil in playgrounds, schoolyards and street dust.[10]

Many of the studies relating to the impact of lead dust from paint in homes are outdated and do not reflect the current environmental factors present today. With the lower levels of exposure, it is becoming more difficult to identify lead sources and new approaches may be required for preventive action. The technology has improved such that studies can be performed that allow the EPA to perform research to determine the source of a child's lead.[11]

The EPA is aware of the lead burden caused by soil lead throughout the country. There is a means to determine environmental lead burdens within communities to determine which communities are most at risk for environmental exposure to lead.[12] The U.S. Department of Housing and Urban Development – Study of HUD's Risk Assessment Methodology in Three U.S. Communities supports the premise that environmental lead results can be used to identify homes where children are likely to have elevated blood lead levels. This study further indicated

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[10] *See* Centers for Disease Control and Prevention "Preventing Lead Poisoning in Young Children" Chapter 9, Environmental Surveys available at https://www.cdc.gov/nceh/lead/publications/books/plpyc/chapter9.htm

[11] Oulhote Y, Bot BL, Poupon J, et al. Identification of sources of lead exposure in French children by lead isotope analysis: a cross-sectional study. *Environmental Health*. 2011;10:75. doi:10.1186/1476-069X-10-75.

[12] Mielke HW, Gonzales CR, Powell ET. Soil Lead and Children's Blood Lead Disparities in Pre- and Post-Hurricane Katrina New Orleans (USA). Tchounwou PB, ed. *International Journal of Environmental Research and Public Health*. 2017;14(4):407. doi:10.3390/ijerph14040407.; Mielke HW, Gonzales C, Powell E, Mielke PW. Evolving from Reactive to Proactive Medicine: Community Lead (Pb) and Clinical Disparities in Pre- and Post-Katrina New Orleans. *International Journal of Environmental Research and Public Health*. 2014;11(7):7482-7491. doi:10.3390/ijerph110707482; Gasana J, Hlaing WM, Siegel KA, Chamorro A, Niyonsenga T. Blood Lead Levels in Children and Environmental Lead Contamination in Miami Inner City, Florida. *International Journal of Environmental Research and Public Health*. 2006;3(3):228-234.

that floor dust lead loading and perimeter soil lead concentrations were the two exposure sources most predictive of the presence or absence of a child with an elevated blood lead level. Lead-based paint was not reported as a significantly related to blood lead status.

There is no dispute that dust-lead hazard standards are critical since they are closely associated with elevated blood lead levels of young children. According to the EPA,[13] lead in house dust comes from a plethora of external (outside the residence) and internal sources. House dust includes numerous types of lead compounds that vary from house to house and from region to region.[14] Factors correlated with the lead concentration in house dust include the following:[15]

- Soil and area of exposed soil;
- House age, house material, and presence of deteriorated or damaged paint;
- Distance from roads, road type, and street dust;
- Renovation, remodeling, and abatement;
- Distance from commercial garages and smelting/ mining operations;
- Dust-fall rates and suspended particles indoors;
- Carpet wear and presence of a fireplace; and
- Certain parental occupations and hobbies

Researchers who evaluated the HUD-funded lead hazard control in target housing at 6 years post-intervention treatment, found that friction impact surfaces and paint on doors and windows are ***not*** significantly related to the floor dust lead loadings.[16] Instead, studies determined that lead is transported into a dwelling through blow-in and track-in. Exterior sources such as soil lead, exterior dust lead, ambient street lead and air were likely sources when evaluating floor dust levels.[17] These exterior sources also were found to be significant sources of lead in windowsill dust lead loading.[18] The findings support the need to address exterior lead hazards as part of routine lead hazard control activities.[19]

Environmental lead poses a great risk to children. Studies evidence that when children are residing in inner city areas where soil is exposed, the rate of exposure to lead for children has the potential to increase tenfold.[20] Upon testing the hands of children who played outside in an inner city environment and then testing the hands of children who played inside in an inner city

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[13] *See* Sampling House Dust for Lead: Basic Concepts and Literature Review, Final Report, EPA 747-R-95-007, September 1995, available at https://www.epa.gov/sites/production/files/documents/r95-007.pdf

[14] *Id.*

[15] E. Fergusson, Jack & D. Kim, Nicholas. (1991). Trace elements in street and house dusts: sources and speciation. The Science of the total environment. 100 Spec No. 125-50. 10.1016/0048-9697(91)90376-P.

[16] Wilson J, Pivetz T, Ashley P, Jacobs D, Strauss W, Menkedick J, et al. Evaluation of HUD-funded lead hazard control treatments at 6 years post-intervention. Environ Res. 2006;102:237–248.

[17] *Id*.

[18] *Id*.

[19] *Id*.

[20] According to one a study done by Mielke, in 1999, over 50% (some studies place this number at 70%) of children living in the inner city of New Orleans and Philadelphia have blood lead levels above 10 micrograms per deciliter. In contrast, in Manhattan, where very little of the soil is exposed and almost all apartment and housing contain lead-based paints, between 5 and 7 percent of children under 6 had levels of 10 micrograms per deciliter or higher. *See* Mielke HW. Lead in the inner cities. *Am Sci*. 1999;87:62–73

environment, researchers found that children have "several times more lead" on their hands after playing outdoors.[21]

Studies have found that coarse particles containing lead originate mainly from indoors while fine particles containing lead are carried in the house from out-doors. In fact, studies[22] were performed to determine the sources of particulate lead in houses. The primary contributing source in the 64–1000-µm size range (course particles) of the house dusts appears to be paint. In the 0–64-µm size fraction of the dusts (fine particles) paint, road dust and garden soil all make significant contributions.[23] ***Variations in the contributions made by the major sources appear to be unrelated to the age of the homes.***[24]

Studies continue to be published regarding the continuing impact of environmental lead dust, soil and water on children's blood lead. Studies show that the steepest decline in children's blood lead levels over the past 30 years track closely with the removal of lead from gasoline and the decline of lead in the environment.[25] However, lead from gasoline still plagues the communities as it is settled throughout the environment in the form of soil and dust lead.

The EPA is also aware of the need for tighter regulation of water supplies so that a crisis situation like the one in Flint, Michigan and Washington, D.C. does not occur again. However, if blinders are put on and only housing is suspected as the source of a child's lead exposure, these situations will continue to occur.

According to a recent study by that Natural Resources Defense Council, 17.6 million people are exposed to unsafe levels of lead in drinking water.[26] The EPA should turn their attention to the Lead and Copper Rule. Strengthening its language to include better modes for

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[21] *Id*. *See also,* Mielke H. W., Adams J. L., Reagan P. L., Mielke P.W. Soil-dust Lead and Childhood Lead Exposure as a Function of City Size and Community Traffic Flow: The Case for lead Abatement in Minnesota. Environ Geochem Health. 1989;9:253–271.

[22] Oulhote Y, Bot BL, Poupon J, et al. Identification of sources of lead exposure in French children by lead isotope analysis: a cross-sectional study. *Environmental Health*. 2011;10:75. doi:10.1186/1476-069X-10-75.

[23] The EPA put out a publication, over 20 years ago concluding that fine dust may be the most biologically significant for the hand-to-mouth route of child-hood lead poisoning. They cited several reasons for their conclusion.

- First, studies suggest that fine dust particles stick to a child's hands more readily than do other components of dust.
- Second, most research shows that lead is generally more concentrated in the fine fraction of dust.
- Finally, lead absorption into the body is inversely related to particle size. ***Thus, the smaller the dust particle, the more efficiently it is absorbed into the body.***

See Environmental Protection Agency. (1995) Final Report: Sampling House Dust for Lead (EPA Publication No. 747-R-95-007) available at https://www.epa.gov/sites/production/files/documents/r95-007.pdf

[24] Hunt, A., D.L. Johnson and I. Thornton [1993] Apportioning the Sources of Lead in House Dusts in the London Borough of Richmond. *Sci. Total. Environ*.: 138, 183-206.

[25] t than itCenters for Disease Control (1982) Morbidity and Mortality Weekly Report (MMWR) available at https://www.cdc.gov/mmwr/preview/mmwrhtml/00000225.htm; Pirkle JL, Brody DJ, Gunter EW, et al.; The Decline in Blood Lead Levels in the United States: The National Health and Nutrition Examination Surveys (NHANES). JAMA. 1994;272(4):284–291. doi:10.1001/jama.1994.03520040046039

[26] Erik Olson & Kristi Pullen Fedinick, *What's in Your Water? Flint and Beyond*, NRDC (June 28, 2016), https://www.nrdc.org/resources/whats-your-water-flint-and-beyond [https://perma.cc/2L92-SQPY]. For example, "[a]ccording to the most recent data available, 5,363 active community water systems across the United States" faced issues relating to the Lead and Copper Rule in 2015.

implementation, and enforcement would be a good start. The Rule should be amended as suggested by the NRDC to: (1) require the full replacement of all lead service lines; (2) more fully and fairly monitor lead levels, and prohibit water systems from using testing strategies that circumvent the detection or reporting of lead contamination; and (3) require clear, ongoing, timely, and culturally appropriate public education and notification of lead problems.

We applaud the EPA for its contributions towards minimizing interior dust lead, however, based on the research it appears that in order to minimize the impact of lead exposure on children, focus should be turned toward external sources that contribute to children's lead exposure.

VII. OBSERVATIONS

EPA has erred in proposing standards without explaining how these standards will be integrated into EPA's own regulations for pre-1978 housing.

EPA has not provided a timeline for how these regulations will be adopted into its own regulations let alone other federal agencies.

EPA has failed to address the potential for massive uncapped liability on the part of compliant property owners and managers who have incurred significant investments in retaining certified inspectors/risk assessors to document the lead status of the property and certified worker to mitigate lead-based paint and/or lead-based paint hazards identified using prior regulatory standards.

- EPA should develop a guidance document for housing providers that addresses implementation issues that we have raised regarding how these proposed standards interact with other regulations.
- EPA should issue guidance on the self-audit program for environmental compliance in regard to changing standards and the impact on existing paperwork.
- EPA in its leadership role of the *President's Task Force on Environmental Health Risks and Safety Risks to Children* (Task Force) should evaluate current federal outreach to states and local regulatory authorities around code enforcement and determine how the federal government might assist municipal authorities in improving housing/building code enforcement so that hazardous situations are addressed.