



**Consumer Federation of America**

September 27, 2010

Office of the Secretary  
Consumer Product Safety Commission  
Room 820  
4330 East-West Highway  
Bethesda, Maryland 20814  
Via e-mail: <http://www.regulations.gov>  
Docket No. CPSC-2010-0080

**Comments of Consumer Federation of America to the U.S. Consumer Product  
Safety Commission  
on  
“Children’s Products Containing Lead; Technological Feasibility of 100 ppm for  
Lead Content; Request for Comments and Information”**

**Introduction**

Consumer Federation of America (CFA) submits the following comments in response to the U.S. Consumer Product Safety Commission (“CPSC” or “Commission”) in the above-referenced matter (“Request for Comments”).<sup>1</sup> The CPSC has issued this Notice of Requirements pursuant to section 101(a) of the Consumer Product Safety Improvement Act (CPSIA) (15 U.S.C 1278a(a), Public Law 110-314). In this Request for Comments, CPSC requests information on the technological feasibility for manufacturers to meet the 100 ppm lead content limit for specific children’s products or product categories. We submit these comments in response to the CPSC’s Request for Comments.

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<sup>1</sup> “Children’s Products Containing Lead; Technological Feasibility of 100 ppm for Lead Content; Request for Comments and Information” 75 Fed. Reg., Vol. 75, No. 143, July 27, 2010.

## **Background**

Section 101(a) of the CPSIA provides that for products designed or intended primarily for children 12 years old and younger, the total lead content limit by weight in any part of a children's product is limited to 300 ppm as of August 14, 2009; and 100 ppm as of August 14, 2011, unless the Commission determines that it is not technologically feasible to have this lower limit for a product or product category. The Commission may make this determination after notice and comment and after analyzing the public health protections associated with substantially reducing lead in children's products. If the Commission determines that the 100 ppm lead content limit is not technologically feasible for a product or product category, the Commission shall, by regulation, establish the lowest amount below 300 ppm that it determines is technologically feasible.<sup>2</sup>

As the Commission analyzes the public health protections associated with substantially reducing lead in children's products and determines technological feasibility, we urge the Commission to consider the following information.

In December of 2008, a Task Group on Lead Levels<sup>3</sup> submitted a Memorandum to John Blair, then Chairman of ASTM F.15.62. The Memorandum focused on the Specification for Lead Content in Polyvinyl Chloride (PVC) Plastics Used in Children's Consumer Products, but included a section on the broader impacts of low levels of lead, which are directly relevant to the issue raised in this Request for Comments. The paragraphs that follow are from this document.<sup>4</sup>

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<sup>2</sup> Children's Products Containing Lead; Technological Feasibility of 100 ppm for Lead Content; Request for Comments and Information" 75 Fed. Reg., Vol. 75, No. 143, July 27, 2010, at 43942.

<sup>3</sup> The Task Group on Lead Levels, ASTM F.15.62, included: Rachel Weintraub, Director of Product Safety and Senior Counsel, Consumer Federation of America; Cindy Pellegrini, Assistant Director, Dept. of Federal Affairs, American Academy of Pediatrics; Marissa Scalia Sucosky, MPH, Epidemiologist, Lead Poisoning Prevention Branch, Centers for Disease Control and Prevention; Don Mays, Senior Director, Product Safety and Technical Public Policy, Consumers Union; Darlene Watford, Environmental Scientist US EPA/OPPTS Program Assessment and Outreach Branch U.S. Environmental Protection Agency; and David E. Jacobs, PhD, CIH, Director of Research, National Center for Healthy Housing.

<sup>4</sup> Full Memorandum is available upon request from Rachel Weintraub at Consumer Federation of America.

The overall weight of available studies provides clear evidence of significant health problems in young children associated with blood lead concentrations in the range of 5 to 10 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ), and possibly lower. Exposure to lead has been shown to have neurocognitive effects, including decreased IQ levels, and lower academic achievement, even at low levels of exposure. Cognitive effects have been reported by several studies when blood lead levels have been lower than 10  $\mu\text{g}/\text{dL}$ .<sup>5,6,7</sup> Intellectual functioning has been shown to be impaired, even when blood lead levels never exceeded 10  $\mu\text{g}/\text{dL}$ .<sup>8,9</sup> Another study indicated an inverse relationship between blood lead level and mental and psychomotor development, i.e., even though the children's blood lead levels did not exceed 10  $\mu\text{g}/\text{dL}$ , development was impaired proportionately to the recorded blood lead level.<sup>10</sup> Finally, another study reported intellectual deficits in children whose blood lead levels never exceeded 7.5  $\mu\text{g}/\text{dL}$ .<sup>11</sup> A decline of 6.2 points in full scale IQ for an increase in concurrent blood lead levels from 1 to 10  $\mu\text{g}/\text{dL}$  has been shown in this study, a pooled analysis of results derived from seven well-conducted prospective epidemiologic studies.

Thus, lead levels even at relatively low levels have been linked to developmental delays and other neurocognitive decrements. It is for this reason that the CDC has

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<sup>5</sup> Lanphear BP, Dietrich K, Auinger P, Cox C. Cognitive deficits associated with blood lead concentrations <10  $\mu\text{g}/\text{dL}$  in US children and adolescents. *Public Health Rep* 2000; 115: 521-29.

<sup>6</sup> Chido LM, Jacobson SW, Jacobson JL. Neurodevelopmental effects of postnatal lead exposure at very low levels. *Neurotoxicol Teratol* 2004; 26: 359-71.

<sup>7</sup> Kordas K, Canfield RL, Lopez P, Rosado JL, Vargas GG, Cebrian ME et al. Deficits in cognitive function and achievement in Mexican first-graders with low blood lead concentrations. *Environ Res* 2006; 100: 371-86.

<sup>8</sup> Canfield RL, Henderson CR Jr, Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP. Intellectual impairment in children with blood lead concentrations below 10  $\mu\text{g}$  per deciliter. *N Engl J Med* 2003;348: 1517-26.

<sup>9</sup> Bellinger DC, Needleman HL, Eden AN, Donohoe MT, Canfield RL, Henderson CR Jr, Lanphear BP. Intellectual impairment and blood lead levels. *N Engl J Med* 2003; 349:500-502.

<sup>10</sup> Téllez-Rojo MM, Bellinger DC, Arroyo-Quiroz C, et al. Longitudinal associations between blood lead concentrations lower than 10  $\mu\text{g}/\text{dL}$  and neurobehavioral development in environmentally exposed children in Mexico City. *Pediatrics* 2006; 118:e323-30. Available at <http://pediatrics.aappublications.org/content/vol118/issue2/index.shtml>

<sup>11</sup> Lanphear BP, Hornung R, Khoury J, et al. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environ Health Perspect* 2005; 113:894-99.

determined that there is no “safe” threshold below which adverse health effects have not been identified and that a blood level of 10 µg/dL or greater is not a threshold for the harmful effects of lead.

In CPSC’s document, “What You Should Know About Lead Based Paint in Your Home: Safety Alert,” CPSC Document #5054,<sup>12</sup> CPSC states:

In children, lead poisoning can cause irreversible brain damage and can impair mental functioning. It can retard mental and physical development and reduce attention span. It can also retard fetal development even at extremely low levels of lead. In adults, it can cause irritability, poor muscle coordination, and nerve damage to the sense organs and nerves controlling the body. Lead poisoning may also cause problems with reproduction (such as a decreased sperm count). It may also increase blood pressure. Thus, young children, fetuses, infants, and adults with high blood pressure are the most vulnerable to the effects of lead.

Scientific evidence unequivocally demonstrates that exposure to low levels of lead causes harm. Therefore, exposure to lead should be as low as possible. Reducing the lead standard for certain children’s products to 100 ppm reflects the public health imperative to reduce lead exposure as much as possible.

In addition to documenting that low levels of exposure of lead levels cause harm, the Memorandum of the Task Group on Lead Levels also included a section on “Testing and Detection”:

Based upon a survey of National Lead Laboratory Accreditation Program (NLLAP) laboratories, it is clear that most laboratories have method detection limits of 10 ppm or lower, using Inductively Coupled Plasma Emission Spectroscopy (ICP). Most, in fact can test to a significantly lower level using ICP or other testing methodologies. Only one laboratory out of the 13 for which

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<sup>12</sup> Available on the web at <http://www.cpsc.gov/cpsc/pub/pubs/5054.html>.

information was received was not able to detect lead at concentrations under 10 ppm.

Thus, since most laboratories can detect lead levels at concentrations below 10 ppm, detecting compliance with a 100 ppm standard would be technologically feasible.

Further, Section 101(f) of the CPSIA reduced the lead limit for paints and surface coatings from 600 ppm to 90 ppm on August 14, 2009. Section 101(f) amends section 1303.1 of CPSC's regulations (16 C.F.R. 1301.1) by substituting "0.009 percent for 0.06 percent" in subsection (a) of that section. We were unable to identify a statement by a paint or surface coating manufacturer expressing difficulty as it sought to comply with this new standard. CPSC should reach out to the paint industry to learn how that industry found it technologically feasible to comply with an even lower lead limit than what section 101(a) could require.

### **Recommendations**

We urge the CPSC to consider the public health protections associated with substantially reducing lead in children's products as it considers lowering the lead limit for children's products to 100 ppm. Accreditation bodies can currently identify lead levels in products at levels far below 100ppm making detection at and below that level technologically feasible. Further, CPSC should research how the paint and surface coating industry found it technologically feasible to comply with the 90 ppm limit in section 101(f) of the CPSIA, and determine the similarities between compliance with section 101(f) and 101(a).

Respectfully submitted,

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Consumer Federation of America