



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
CHILDREN'S HEALTH PROTECTION

Pamela Shubat, Ph.D.
Co-Chairwoman
Children's Health Protection Advisory Committee
Minnesota Department of Health
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Dear Dr. Shubat:

I would like to thank you for providing me with the Children's Health Protection Advisory Committee (CHPAC) letter on recommendations for the Agency to further reduce childhood lead exposure. We are actively reviewing these comments along with the recommendations you provided us in 2012 on unifying EPA lead actions, engaging stakeholders and federal agencies, identifying emerging sources of lead exposure, and eliminating global lead-based paint production.

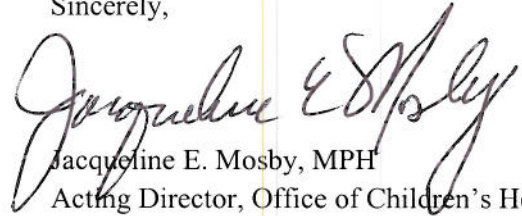
EPA has had a long standing commitment to reduce all sources of lead exposure in the United States. According to the 3rd Edition of America's Children and the Environment (2013), the median blood lead level for children age 1-5 years old has decreased 92% over the past three decades¹. Despite this success, recent research has shown neurological, immunological, and developmental effects at even low blood lead levels and has prompted the U.S. Centers for Disease Control and Prevention (CDC) to adopt a new reference level of concern for childhood blood lead levels based on the 97.5th percentile of the national average (currently at 5 mcg/dL). These critical updates have reinforced that a safe level of lead exposure has not been identified.

Given the CDC reference level change, many of your recommendations are particularly timely. Given the budgetary constraints currently in the federal government, we value your recommendation to proactively work with other federal agencies through various avenues, including the Interagency Task Force on Environmental Health Risks and Safety Risks to Children, to eliminate childhood lead poisoning and exposure prevention. We are already taking action toward unifying a consistent message, incorporating the new reference value into the Agency's work, reducing global lead exposure, eliminating new and persistent sources, and identifying new methods to cost-effectively test for lead at lower levels.

¹ US EPA (2013). America's Children and the Environment: Third Edition.
http://www.epa.gov/ace/publications/ACE3_2013.pdf

Please find the responses to your specific recommendations below. Again, we appreciate CHPAC's active engagement and continued input on this important issue. We look forward to continuing to address your recommendations in greater depth and share a similar goal in eliminating lead exposure to our nation's children.

Sincerely,



Jacqueline E. Mosby, MPH
Acting Director, Office of Children's Health
Protection

cc: Robert Perciasepe, Deputy Administrator
Janet McCabe, Acting Assistant Administrator, Office of Air and Radiation
Steve Page, Office Director, Office of Air Quality Planning and Standards
Jim Jones, Acting Assistant Administrator, Office of Chemical Safety and Pollution Prevention
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Jim Woolford, Office Director, Office of Superfund Remediation and Technology Innovation
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Peter Grevatt, Office Director, Office of Ground Water and Drinking Water
Lek Kadeli, Acting Assistant Administrator, Office of Research and Development
Becki Clark, Acting Director, National Center for Environmental Assessment

Recommendation 1: EPA, together with other federal agencies, should establish new goals for childhood lead poisoning and exposure prevention, because the nation did not meet the 2010 goal and to date no new goal has been established.

Response: We appreciate the overarching and detailed recommendations to update the 2000 Task Force Report, “Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead Paint Hazards”. The Agency agrees there needs to be further collaboration between Federal entities in order to decrease the number of children with elevated blood lead levels. U.S. EPA has raised your recommendation to the senior steering committee of Interagency Task Force on Environmental Health Risks and Safety Risks to Children. We will provide an update on the Task Force decision as soon a decision is made.

Recommendation 2: EPA’s outreach, education, training and enforcement strategies should incorporate the new CDC reference value so that all federal agencies have a common, consistent and effective message.

Response: EPA acknowledges the need to unify our messaging across EPA offices and actions to account for the change in CDC’s reference value, and to reiterate that no safe level of lead exposure has been identified. EPA is currently incorporating consideration of CDC’s new lower level into its strategies, and is revising current materials to reflect the change. We will continue to work as an Agency to create a consistent message with your criteria in mind.

EPA regularly engages with non-traditional target audiences such as health care providers to disseminate language on lead exposure. An outcome of our engagement on the lowered CDC reference value was the release of a guide for clinicians on interpreting and managing low blood lead levels in children¹ by an EPA and ATSDR-funded Pediatric Environmental Health Specialty Unit (PEHSU). EPA continues to strengthen existing partners and seek new partnerships to provide outreach to target populations. Furthermore, EPA regularly collaborates with CDC as well as a number of other Federal partners (e.g. US Department of Housing and Urban Development, Consumer Product Safety Commission, and others) on outreach, education and training through on-going efforts such as the Federal Interagency Lead-Based Paint Task Force and annual Lead Poisoning Prevention Week activities. We are working to further harmonize a clear and consistent message across the federal government.

Recommendation 3: EPA should lead efforts to regulate and reduce lead contaminated imports into the US and exports from the US, and should actively contribute to the dialogue of reducing lead exposures globally.

- EPA should promote revision of the “Action Plan for Import Safety” released by the Interagency Working Group on Import Safety to better protect consumers from the increasing volume of lead-contaminated imports entering the United States and also revise the National Strategy based on principles of prevention, intervention and response.
- EPA should also take further action to eliminate lead exposures from lead smelters, electronic waste, mining, and leaded motor vehicle and aviation gasoline. It should also support local regulatory actions.
- EPA should specifically take focused action on recycled lead batteries going from the US to Mexico and to other developing countries. EPA should support the date for certain targets outlined in a recent United Nations resolution and provide budget support for the Global Alliance to End Lead Paint. Furthermore, in 2010 the EPA instituted a reporting requirement under the Resource Conservation Recovery Act to better track exports of used lead batteries. The implementation of this program has proven to be a challenge for the EPA and exporters have not fully complied. Reports from Mexico have indicated that

¹http://depts.washington.edu/pehsu/sites/default/files/INTERPRETING_AND_MANAGING_BLOOD_LEAD_LEVELS_11.07.12.pdf

shipments of used lead batteries have been going to unauthorized lead recycling facilities and have been re-exported to other countries. Given these shortcomings with current efforts to track shipments of this hazardous waste, the EPA should adopt additional regulations to require all shipments of used lead batteries for export to be accompanied with a hazardous waste manifest that can be used to track batteries to their final destination.

Response: EPA has taken the lead on a number of actions pertinent to your recommendation aimed at reducing or eliminating lead exposure. The following are some of the actions:

Regulation of US lead smelters: The EPA and states regulate both primary and secondary lead smelters in a number of ways, including regulations on the handling of hazardous waste, air emissions, water discharges and occupational health and safety. U.S. lead smelter regulations are among the worlds most stringent. The U.S. also regulates the spent lead acid batteries (SLABs) themselves under the Resource Conservation and Recovery Act (RCRA) and DOT transportation requirements. EPA strengthened our regulations on SLABs in 2010 to require advance notice and consent for the export of SLABs from the United States.

Cathode Ray Tube Regulation: EPA regulates recycling and disposal of used cathode ray tubes (CRTs), which contain lead, under the Resource Conservation and Recovery Act (RCRA) hazardous waste regulations. Used CRTs being recycled must meet certain regulatory requirements to ensure safe management. Additionally, CRTs from commercial and industrial sources being disposed of must be sent to a Resource Conservation and Recovery Act (RCRA) permitted hazardous waste landfill. Also, EPA proposed to strengthen the export requirements for CRTs in March 2012.

Electronics Recycling Standards: EPA helped shape the electronics recycling environmental standards that are in the electronics recycler certification programs today. These programs advance best management practices and offer a way to assess the environmental, worker health and security practices of entities managing used electronics. Specifically, these certification programs are based on environmental standards which maximize reuse and recycling, minimize exposures to humans and the environment, and ensure safe management of materials by downstream handlers. The programs serve to reduce both environmental and workplace exposures to all toxic constituents (including lead) that are found in electronics waste. We realize that these certification programs are not the only answer to ensuring proper electronics management, but we expect that they will raise the environmental floor for the electronics recycling industry as a whole. We encourage all recyclers to become certified through one of the available certification programs and all users of electronics recyclers to choose those recyclers that are certified through one of the programs.

National Strategy for Electronics Stewardship: In the Presidential Proclamation for America Recycles Day, November 2010, the President established an Interagency Task Force on Electronics Stewardship. The Task Force has released the National Strategy for Electronics Stewardship (NSES) report², which details the federal government's plan to enhance the management of electronics throughout the product lifecycle — from the design to the eventual recycling or disposal of a product. While the Strategy covers more than lead, the Strategy shows a high level commitment to addressing used electronics. NSES recommendations are summarized below:

- Build Incentives for Design of Greener Electronics, and Enhance Science, Research and Technology Development in the United States
- Ensure that the Federal Government Leads By Example

² <http://www.epa.gov/epawaste/conserva/materials/ecycling/taskforce/docs/strategy.pdf>

- Increase Safe and Effective Management and Handling of Used Electronics in the United States
- Reduce Harm from U.S. Exports of E-Waste and Improve Safe Handling of Used Electronics in Developing Countries

Superfund Cleanup of Mining and Other Lead Contaminated Sites: Since the 1980s, the Superfund program has begun extensive lead soil cleanups at more than 400 sites nationwide, including massive sites such as Bunker Hill in Idaho. Through our cleanup efforts we have seen that, using the currently recommended 400 parts per million for residential soil preliminary remediation goal, our cleanups, when combined with education and outreach on topics such as how to minimize exposure and whom to contact in case health-related questions arise, result in blood lead levels that approach, if not meet, the new reference value. While average blood lead levels in children residing near sites before cleanup may exceed 10 µg/dL, blood lead levels following cleanup are reported to be below 5 µg/dL for sites such as Oronogo-Duenweg Mining Belt (NE), Bunker Hill (ID), Midvale (UT), and Tar Creek (OK). At some sites, in addition to soil cleanup and education, we may work with responsible parties and state and local governments to employ a multi-pathway program approach to address other sources of lead that are beyond the traditional Superfund scope, thereby reducing overall exposure.

Leaded Aviation Gasoline: The EPA banned the use of leaded gasoline for use in motor vehicles in the U.S. after December 1995. The EPA is currently collecting and evaluating information regarding exposure to lead from the combustion of leaded aviation gasoline by piston-engine aircraft. This is part of an ongoing investigation under section 231 of the Clean Air Act into the potential for these emissions to cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. EPA expects to propose, take comment on, and finalize this determination by mid-to-late 2015. If the EPA evaluation results in a positive determination of endangerment, the EPA would then be required to establish emission standards to control aircraft engine lead emissions, and the Federal Aviation Administration would be required to promulgate regulations addressing the fuel used by those aircraft. More information about EPA's actions on this issue is available at www.epa.gov/otaq/aviation.htm.

Motor Vehicles: Vehicles used in racing are not regulated by the EPA under the Clean Air Act and can therefore use alkyl lead additives to boost octane. The National Association for Stock Car Auto Racing (NASCAR) formed a voluntary partnership with the EPA with the goal of permanently removing alkyl lead from fuels used in the major race series. The major NASCAR race series now use unleaded fuels.

Global Alliance to Eliminate Lead in Paints: In support of global efforts to reduce lead exposures, EPA has played a leadership role in establishing and contributing to the Global Alliance to Eliminate Lead in Paints. On November 29, 2012, EPA re-affirmed its commitment to the Global Alliance to Eliminate Lead in Paints by becoming an official contributor.³ As stated in the Agency's contributor letter, EPA will continue to be an active member of the Global Alliance and will remain the lead for the Environmental Aspects Focal Area. For example, EPA has taken a significant role in the planning and implementation of the Global Alliance's International Lead Poisoning Prevention Week of Action scheduled for October 20-26, 2013.⁴ These efforts will directly support the Global Alliance's targets for increasing country awareness regarding the risks of lead in paint as well as encourage country participation in the other Global Alliance activities and efforts.

³ USEPA (2012). Letter to join the Global Alliance to Eliminate Lead in Paints. November 29.

http://www.unep.org/hazardoussubstances/Portals/9/Lead_Cadmium/docs/GAELP/Contributors%20Letters/US%20EPA%20official%20letter.pdf

⁴ http://www.who.int/ipcs/assessment/public_health/pb_campaign/en/index.html

U.S. Spent Lead-Acid Batteries (SLAB) exports to Mexico: EPA appreciates the concerns that the CHPAC expressed regarding the shipment of SLABs to Mexican lead recycling facilities. As you may know, on April 15, 2013, the North American Commission for Environmental Cooperation (CEC) released a report called, "Hazardous Trade? An Examination of US-generated Spent Lead-acid Battery Exports and Secondary Lead Recycling in Mexico, the United States and Canada" which included recommendations for responding to issues raised by the CEC. The Agency takes the recommendations in the CEC report very seriously. EPA provided a significant amount of information to the CEC while they were drafting their SLABs report. We at EPA are currently considering what actions we can take to address the concerns you raised as well as to respond to the CEC's recommendations.

Recommendation 4: EPA should focus ongoing and new research and regulation on the remaining sources and pathways of exposure and should accelerate enforcement of the Renovation, Repair and Painting Rule. EPA should reassess its enforcement and compliance assurance program in light of the residential Renovation, Repair and Painting (RRP) rule and should extend this rule to public and commercial buildings.

Response: Congress enacted Title IV of the Toxic Substances Control Act (TSCA) as part of the Lead-Based Paint Hazard Reduction Act of 1992 to reduce the public's exposure to lead, particularly from lead-based paint. The Act directs the EPA to promulgate regulations addressing renovation activities in target housing, public buildings constructed before 1978, and commercial buildings that create lead-based paint hazards. In April 2008, the EPA issued a final rule regulating renovation, repair, and painting activities in target housing, which is most pre-1978 housing, and child-occupied facilities (COFs) - defined in the rule as a subset of public and commercial buildings in which young children spend a significant amount of time. Currently, EPA is in the process of determining whether renovation, repair and painting activities performed in public and commercial buildings create lead-based paint hazards, and, for those that do, developing certification, training, and work practice requirements as directed by TSCA. To this end, on December 21, 2012, EPA announced a comment period to allow for additional data and other information to be submitted by the public and interested stakeholders. In conjunction with that announcement and in a later Federal Register notice of May 13, 2013, EPA provided advanced notice of a public meeting held on June 26, 2013. The public meeting provided another opportunity for stakeholders and other interested members of the public to provide data and information that the EPA may use in making its regulatory determinations.

As EPA makes this assessment, it should consider the following:

- **Housing renovations have traditionally been a local government function in most states, with the important exception of federally assisted housing. Therefore, enforcement efforts need to be more closely tied with local and state health, environment and housing departments.**

Response: The Renovation, Repair and Painting (RRP) Rule program and its underlying statutory provisions envision the delegation of the implementation and enforcement of the program to states and Tribes. They are in the best position to interact closely and in a timely manner with county and city governmental subdivisions to most effectively implement this rule which affects about 78 million residential units nationwide. EPA continues to foster delegation as part of its overall enforcement effort.

- **The RRP rule made clear that the regulated community is dominated by very small businesses often with fewer than ten employees. It is essential that enforcement be part of a tightly integrated effort designed to reach this community. Focus EPA compliance assurance on firms that are marketing renovation and remodeling services and that are not certified by EPA or states.**

Response: The EPA's Office of Pollution Prevention and Toxics (OPPT) in collaboration with the EPA's regional offices is engaged in ongoing efforts to reach uncertified firms and get them to become certified. In addition, EPA fosters programs to educate potential customers of renovation firms to understand the significant dangers of lead poisoning and the benefits of using a certified contractor who follows lead-safe work practice standards and other standards in the RRP Rule.

- **Firms must be certified to market these services for pre-1978 housing and child occupied facilities. By stemming marketing that violates the law, EPA can provide a powerful incentive for firms to become certified so that the agency can more effectively educate the firms and ensure compliance. In addition, EPA can undertake this effort from a central office using electronic services and can partner with services such as Angie's List and Checkbook that help market renovation and remodeling firms.**

Response: EPA has found that certification is no guarantee that a renovation firm will also comply with the lead-safe work practices and other standards in the RRP Rule. Unfortunately, too many firms that come to EPA's attention through tips and complaints are EPA-certified, but are not following the lead-safe work practice standards.

Several of EPA's regional offices have programs to target and reach out to uncertified renovation firms. These targeted contacts with remodeling firms advertising in local media often elicit the response that they do not take renovation, repair or painting jobs in residential units constructed before 1978 and therefore, they do not need to be certified. So, EPA, the states and Tribes must "catch them in the act" of renovating target housing or COF's in order to initiate an enforcement action.

- **The Safe Drinking Water Act Lead and Copper Rule of 1991 was enacted to protect communities; however, it has been estimated that 10–20% of the total lead exposure in children can be attributed to a waterborne route, through the consumption of contaminated water. Children are more vulnerable to lead poisoning because they consume more water per unit of body weight, and their bodies are developing. The former facilitates the bioaccumulation of lead and the latter makes expressed toxic effects more likely. CHPAC believes that the EPA's surveillance system for lead in water in homes is not sufficient to detect risks before children are dangerously exposed. This is especially important to rectify given the rapid changes in municipal water treatment systems and the uncertainty surrounding the underlying water chemistry. A new, more robust sampling protocol should be implemented. CHPAC encourages EPA to collaborate with organizations such as the "Get The Lead Out Plumbing Consortium" that will offer training program about Lead Free plumbing products in 2013 to the industry.**

Response: Monitoring for lead in public drinking water under EPA's regulations (Lead and Copper Rule), requires that a subset of households in the community are sampled regularly. Through the Lead and Copper Long-term Revisions, EPA is currently evaluating criteria which would improve the requirements which guide how lead is sampled. A new lead sample protocol, for example, could identify the highest levels of lead at households in the community. In August 2012, EPA convened a Reduction of Lead in Drinking Water Act Public Meeting. Participants included representatives from plumbing manufacturing companies, personnel from EPA Headquarters program and regional offices, State representatives, and public water system representatives. The objective of the public meeting was to discuss and solicit input from stakeholders on the implementation of the 2011 Reduction of Lead in Drinking Water Act. EPA is aware of the work that "Get The Lead Out Plumbing Consortium" is doing regarding "lead free"

plumbing products and EPA is also developing materials to assist with implementation of the 2011 Reduction of Lead in Drinking Water Act.

- **CHPAC believes that EPA should ensure that the National Children’s Study (NCS) maximizes resources and specifically encourages EPA funding of ancillary studies to determine sources and pathways of lead exposure for children in the study. The NCS should include blood lead testing of enrolled children during early childhood, and environmental source and pathway testing should be conducted at intervals consistent with other blood and environmental sampling. The impact of blood lead on developmental status, academic performance and life success, including behavioral issues, school failure and delinquency, as measured in participants over time, should be examined. Effect modification by nutrition status, early childhood education and home environment are also important areas of study. The NCS also offers an important opportunity to measure the impact of population blood lead levels during pregnancy and health outcomes for infants during their childhood and early adult life. Prenatal blood lead levels should be measured to allow for these later analyses.**

Response: The National Children’s Study (NCS) is led by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) of the National Institutes of Health in collaboration with a consortium of federal government partners. EPA’s role, as a NCS Study Partner, is to learn about the progress of the Study and to share ideas about the Study’s content, design, and implementation. EPA is also an ex officio member of the NCS Federal Advisory Committee which provides advice and recommendations to the NCS Director. In these roles, EPA will continue to actively engage and provide input to NICHD and the NCS Director. However, EPA cannot “ensure” that this input is incorporated into the study design which is ultimately shaped by NICHD.

Recommendation 5: EPA should focus ongoing and new research on new technologies that can cost effectively determine lead levels in environmental media below current detection limits, because these lower levels of contamination may contribute to childhood lead poisoning and adverse health effects.

Response: Given the recent CDC change, through the Federal Interagency Task Force on Lead-Based Paint, the EPA has actively engaged both federal partners and representatives of U.S. laboratories to discuss current methods and technologies for identifying and testing environmental lead at lower levels of detection. The information we obtained indicates that current laboratory measurement technologies for measuring lead in environmental media (i.e., paint, dust and soil) are capable of detecting lower lead concentrations.