

Re: ID number EPA-HQ-OPPT-2004-0126

Lead Hazard Information Pamphlet; Notice of Availability

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[Proposed Rules]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA-HQ-OPPT-2004-0126; FRL-7690-8]

Lead Hazard Information Pamphlet; Notice of Availability

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability.

This comment is jointly submitted by the New England Lead Coordinating Committee (NELCC), a regional consortium of state agencies working to eliminate lead poisoning, especially in children, by 2010, and by the Healthy Environments for Children (HEC) Initiative at the University of Connecticut. NELCC develops regional projects and promotes the exchange of information, ideas, materials, and programs among its member agencies, federal agencies, and other organizations working to eliminate lead poisoning throughout New England. HEC is an interdisciplinary initiative at the University of Connecticut. HEC specializes in translating sound research into practical information for a broad range of learners, including young children, literacy-challenged adults, and busy professionals. HEC programs are developmentally appropriate, culturally respectful, and instructionally sound. Through education and training, HEC strives to protect and improve the physical and psychological health of children.

NELCC and HEC applaud EPA for its efforts to provide information about protecting families from lead during renovation, repair, and painting. We appreciate the opportunity to comment on EPA's draft publication entitled PROTECT YOUR FAMILY FROM LEAD DURING RENOVATION, REPAIR & PAINTING. (Please note that NELCC and HEC are commenting not on the proposed rule but only on the pamphlet.)

We believe that the draft publication is deficient in several key areas:

1. The audience for this publication is unclear.
2. The purpose of this publication is unclear.
3. The reading level of the publication is too high for many potential readers.¹ The writing style does not follow principles of the federal government's plain language mandate.²

¹ National Assessment of Adult Literacy, accessed March 28, 2006, <http://www.nces.ed.gov/NAAL/index.asp>

² Clinton, W. 1998. "Memorandum for the heads of executive departments and agencies." <http://www.plainlanguage.gov/whatisPL/govmandates/memo.cfm>

1. Audience

The title suggests that the pamphlet is designed for anyone who is renovating, repairing, or painting or hiring a contractor to do so, as well as any tenant in a building that is being renovated, repaired, or painted. Yet this title is misleading, because (1) not all of these audiences are clearly addressed and (2) a major audience—property owners who may not reside inside the building—will not necessarily be protecting their own families (so “Protect **Your** Family” is inaccurate, as they will be protecting the families of their tenants). And while children’s health represents a major reason to use lead-safe work practices, adults should also be protected. Some possible alternative titles include:

- ▶ “What Property Owners and Tenants Need to Know about Lead during Renovation, Repair, and Painting”
- ▶ “What You Need to Know about Lead during Renovation, Repair, and Painting”

On page i, the pamphlet offers to guide the reader “through planning and completing a renovation, repair, or painting project using lead safe work practices.” Here the audience sounds like do-it-yourselfers and people hiring contractors, but probably not tenants. OK: let’s call this audience property owners.

On page ii, the pamphlet states that it is intended for people who “live in a home that was built before 1978 that is being renovated, repaired, or painted” or who are “considering such a project.” Now we might reasonably include tenants, especially in the first phrase. However, the pamphlet largely excludes that group—for example, by focusing on hiring contractors.

However, even in the property owner category, the pamphlet seems to address only issues of owner-occupied dwellings, since it does not discuss owner responsibilities with respect to tenants.

Page ii attempts to clarify the audience. It states that the pamphlet is not for abatement projects, do-it-yourself projects, and contractor education. Aside from the disconcerting lack of parallel construction (the first section identifies a **person** for whom the pamphlet is intended; the next section identifies **projects** for which the pamphlet is not intended), this approach does not appear to be carried out consistently through the pamphlet.

When we reach page 6, the pamphlet tells the reader to use lead safe work practices (contain the work area, minimize dust, and clean up). Now it sounds as if the reader is doing the work—yet contractors and do-it-yourselfers were earlier excluded.

Perhaps page 6 is intended to remedy a glaring gap on page 4, where readers are instructed to ask contractors what lead safe work practices they plan to use. A reader might then wonder, “What are the right answers to this question that I’m supposed to ask the contractor?” In fact, page 6 might be used to provide that information if it were rewritten from that point of view (and if the reader were told that the answers appeared on page 6). A better solution would be to revise/reorganize so that the question and the correct answers appeared together.

We note too that asking if a contractor is “aware of the laws about lead” (page 4) will be a meaningless exercise. Many contractors may say yes, whether they have a level of awareness that EPA would find acceptable or not. (And is “awareness” sufficient? Shouldn’t the contractor have **knowledge**, and the **skills** to apply the knowledge?) In fact, contractors may not recognize their own gaps in awareness, knowledge, and skills. And how can the reader assess those areas? It would be more reasonable to tell the property owner what the contractor is required to do (the pamphlet gives one requirement only as an example) rather than ask a contractor to assess his/her own awareness, knowledge, and skills. The property owner could also ask the contractor to document that he/she has taken an approved lead-safe work practices training.

In fact, NELCC and HEC propose that the pamphlet distinguish two audiences—property owners and tenants—and approach them separately, either in separate sections of one pamphlet or in two separate publications. Both sections/pamphlets should contain general information about lead, as well as the customized information for the different audiences.

2. Purpose of the publication

This issue is related to the question of audience. If the audience were determined to be property owners who live in the dwellings and are hiring contractors, then the purpose of the pamphlet would be to give them all the information necessary to hire contractors who would work safely. The pamphlet could then focus on this purpose. If the audience were determined to include tenants, then the purpose might be to inform them of the property owner’s and the contractors responsibilities as well as their own, as well as their potential remedies if they observe problems (information that is lacking in the current document).

One remedy to some of the information gaps in the current version would be to include a model contract for property owners. A sample from Maine’s Department of Environmental Protection is included as Attachment A.

3. Reading level

According to the latest assessment of literacy skills in the United States, some 30 million adults have skills that are below basic: that is, they have “no more than the most simple and concrete literacy skills.” They range from being nonliterate in English to being able to locate easily identifiable information in short, commonplace prose texts; to locate easily identifiable information and follow written instructions in simple documents (e.g., charts or forms); and to locate numbers and use them to perform simple quantitative operations (primarily addition) when the mathematical information is very concrete and familiar

Another 63 million have basic skills: they can “perform simple and everyday literacy activities.” That is, they can read and understand information in short, commonplace prose texts; read and understand information in simple documents; and locate easily identifiable quantitative information and use it to solve simple, one-step problems when the arithmetic operation is specified or easily inferred.

An interpretation of the National Adult Literacy Survey in *Pfizer Principles for Clear Health Communication* states that 1 in 5 adults reads at or below the 5th grade level and, on average, adults Americans read at the 8th-9th grade level.³

A recent literacy study, funded by the Pew Charitable Trusts, found that more than half of students at four-year colleges—and at least 75 percent at two-year colleges—lack the literacy to handle complex, real-life tasks such as understanding credit card offers.⁴

We believe that these figures suggest that for millions of adult Americans, the draft brochure would be too difficult.

To make the publication easier for readers to understand, we suggest the following (which are basic principles of plain language):

1. Use shorter sentences. The pamphlet is full of long sentences that can easily be divided into several shorter, easier-to-understand sentences.
 - a. Example: “Lead exposure can cause serious behavior and learning problems in children and high blood pressure and other health problems in adults.” Solution: “In children, lead exposure can cause serious behavior and learning problems. In adults, it can cause high blood pressure and other health problems.”
 - b. Example: “Is your home being renovated, repaired, or painted; or are you considering such a project?” Solution: “Is your home being renovated, repaired, or painted? Or are you considering such a project?”
 - i. Note that recasting as two sentences avoids a problematic semicolon; this piece of punctuation is rarely used in simple writing because it is confusing to low-literacy readers
 - c. Example: Page 1 The entire first paragraph is needlessly complicated. It could be paraphrased more simply:
Lead is especially dangerous for children under 6 years old.
It can hurt their brains and nerves and can cause
 - ▶ Loss of intelligence (lower IQ)
 - ▶ Problems with learning
 - ▶ Problems with behavior
 - ▶ Loss of hearing
 - ▶ Other health problems
2. Correct grammatical errors.
 - a. “A major source of lead is the lead-based paint in peoples’ homes.” (page i). The apostrophe creates an incorrect plural possessive: “the homes of peoples.” A grammatical version would say “people’s homes” (the homes of people), but since EPA is not talking about doghouses, the sentence could just omit “people.” Possible correction: “A major source of lead is the lead-based paint in homes that were built before 1978.” [But see below about explaining the meaning of ‘lead-based paint.’]

³ 2d edition, ed. Leonard G. Doak and Cecilia Conrath Doak,

⁴ <http://www.cnn.com/2006/EDUCATION/01/20/literacy.college.students.ap/index.html>

- b. Introductory dependent clauses should be set off with a comma. Page 2 “Even if you use a contractor you will play a key role” should be “Even if you use a contractor, you will play a key role.”
 3. Avoid difficult words and jargon, often phrased as noun clusters.
 - a. Example: Page 2: “normal hand-to-mouth activities.” Will all readers know what this means? We doubt it.
 - b. Example: Page i: “lead-based paint.” This term is not explained when it is first used. People in the discipline may think that this term is intuitively obvious, but we believe that many readers will not know how to interpret it. We do not believe that readers need a technical explanation of the percentage of lead that constitutes LBP, but they do need to know that you’re talking about paint that contains unsafe amounts of lead, or some other simple explanation.
 - c. Example: lead exposure. Solution: Exposure to lead
 - d. Example: worksite containment (page 2). This term must be expressed more simply and clearly. Fluent English speakers with good literacy skills will understand that it means “contain the work area” (page 6), but there is no need to use different terminology that may confuse low-literacy readers. Even the verb ‘contain’ may be confusing. We suggest: “Keep dust inside the work area.”
 - e. Example: dust-minimizing work methods. We suggest: ‘work methods that produce very little dust.’
 - f. Example: lead safe work practices. We suggest that you at least hyphenate ‘lead-safe,’ to avoid some misreadings, and define the term at first use, as in “work methods that will help keep your family safe from lead poisoning.”
4. Use active voice and strong, specific verbs
 - a. Page 1: “Lead gets into the body when it is swallowed or breathed” could be “Lead gets into the body when people swallow or breathe it” or “Lead gets into your body if you swallow or breathe it” [The second version also follows the Clinton memo’s recommendation for the use of the second person pronoun.]
 - b. Page 4 “Make sure the contract is clear about how the work will be set up...” could be “Make sure that the contract states clearly how the work will be set up ...”
5. Organize the information to encourage reading.
 - a. It’s not clear why the publication starts with the heading “Facts about lead” (page i). Unless readers have a reason to care (i.e., know that lead can harm their health and the health of their children), they may have no interest in “facts about lead.” For many lay readers, “facts” do not attract their attention or interest. Principles of instructional design suggest that EPA should start with an affective objective: make the reader understand why the information is important. A better heading might be something like, “Why it’s important to learn about lead” or “How lead can harm you and your family,” with content that focuses on health issues. Once readers understand how lead can affect their families, they may be more interested in learning where it comes from, etc.
 - b. Page 2 introduces “proper work practices” such as “worksite containment, dust-minimizing work methods, and a careful cleanup.” The first two terms are complicated and not explained until later on (where the wording is slightly

different—a difficulty for low-literacy readers). Readers who encounter this confusing series may give up in frustration at this point.

Literacy principles also suggest avoiding large blocks of text. The pamphlet should be reexamined with this principle in mind.

We regret that we have been able to offer only a cursory examination of the document. We urge EPA to clarify the audiences and messages and then to conduct a thorough editorial review, with a special focus on literacy issues. We further urge EPA to retest a revised pamphlet with focus groups representing the target audiences.

Respectfully submitted,

On behalf of the New England Lead Coordinating Committee
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Coordinator

On behalf of the Healthy Environments for Children Initiative
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Attachment A: Sample contract
(courtesy of the Maine Department of Environmental Protection)
<http://www.maine.gov/dep/rwm/lead/leadrenohomes.htm>

Contract Specifications for Lead Safe Renovation

The **Contractor** shall perform the renovation work listed above in a lead-safe manner. This means that the **Contractor** will:

- Post signs that clearly demarcate the work area and warn occupants and other persons not involved in renovation activities to remain outside the work area.
- Prevent the release of lead dust and debris from the work area into other areas by placing polyethylene sheeting or other impermeable covering over the floor, doorways, windows, heating and cooling vents, and/or the ground, as needed.
- Protect occupants' belongings that remain in the work area from lead dust and debris by completely covering them with polyethylene sheeting or other impermeable covering; tape edges to prevent lead dust from getting under the covering.
- Use wet scraping and wet sanding to minimize dust generation and migration.
- Ensure that all personnel, tools, and other items including waste are free of dust and debris when leaving the work area, or that the paths used to reach the exterior of the home are covered with plastic sheeting or other impermeable material to prevent the spread of lead contaminated dust and debris outside the work area.
- Clean up all visible dust and debris at the end of each work day.
- Put waste from renovation activities in containers to prevent the release of dust and debris before removing the waste from the work area. Store waste in a location protected from inadvertent disturbance.
- Dispose of all construction and demolition debris in accordance with all applicable state and local laws.
- Perform a final clean up of the work area(s). This includes: the removal of all debris, paint chips and other waste; thoroughly vacuuming the work area using a HEPA-equipped vacuum; and wet washing with an all purpose cleaner so that the work area is free of settled dust and is ready for lead dust clearance sampling by a licensed Lead Professional or by the homeowner in a single-family home.

The **Contractor will not** use the following methods to remove paint that is, or may be, lead-based:

- Open flame burning or torching;
- Machine sanding or grinding without a HEPA-local exhaust control
- Abrasive blasting or sandblasting without HEPA local exhaust control
- Heat guns operating above 1100 degrees Fahrenheit or charring the paint;
- Dry sanding or scraping except for very small areas and around electrical outlets.

The **Building Owner** will:

- Remove all personal belongings from the work area except for bulky furniture that is not easily relocated, and perform a general cleaning of the work area before the Contractor starts work;

- Stay out of the work area until the results of the lead dust clearance samples demonstrate that the work area is safe for re-occupancy; and
- Hire a Lead Professional licensed to perform dust clearance sampling; alternatively, homeowners may obtain a lead dust wipe test kit from the Maine Health & Environmental Testing Laboratory (287-2727) to collect dust wipe samples themselves. Collect samples within 48 hours of **Contractor** completion of work and have the samples analyzed within 24 hours of collection.

If the lead dust clearance samples do not meet U.S. Environmental Protection Agency clearance standards, the **Contractor** shall re-clean the work area, and the **Building Owner** shall again hire a Lead Professional to conduct lead dust clearance sampling (homeowners may conduct sampling themselves). The **Contractor** shall pay all costs associated with this additional sampling and any other additional sampling needed to demonstrate that the work area meets the U.S. Environmental Protection Agency clearance standards and is safe for re-occupancy.