



**PDHonline Course C286 (8 PDH)**

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# **Environmental Due Diligence**

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**2020**

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of two other groups who spoke on behalf of disadvantaged populations. These individuals comprised 20% of the membership of the process. Moreover, during the public comment period, EPA held two public meetings where residents of low-income communities and representatives of environmental justice groups offered public comment to EPA. The Agency also received written comments from 50 groups and several hundred individuals raising environmental justice concerns. Consequently, EPA believes that it has complied with the provision of the executive order to provide representatives of environmental justice interests to participate fully in the process and to provide input and comment to the Agency.

Furthermore, recognizing that these standards would be used by and affect millions of people that do not have a comprehensive understanding of the science of lead hazards, EPA made a conscious decision to make the standards simple. For example, instead of joint standards that might have better reflected overall risk under some circumstances, EPA chose to establish media-specific standards because they are easier to understand and use. Outreach documents (e.g. fact sheets) are written and designed with the specific objective of making the regulation easy for the public to understand. In addition, EPA's broader lead outreach program includes extensive elements that specifically target non-white and low income communities.

#### H. Executive Order 13045

Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997), applies to this rule because OMB has determined that this rule is "economically significant" as defined under Executive Order 12866 (see Unit VI.A.). In addition, the environmental health or safety risk addressed by this rule may have a disproportionate affect on children.

In accordance with section 5(501) of Executive Order 13045, EPA has evaluated the environmental health or safety effects of lead-based paint on children in the selection of the hazard standards contained in this rule. The results of this evaluation are contained in the "Risk Analysis to Support Standards for Lead in Paint, Dust, and Soil" and the supplement to this analysis. Copies of these documents have been placed in the public version of the official record for this rule. This analysis focused almost exclusively on

assessing exposure and risk to young children.

Moreover, the standards selected by EPA are designed first and foremost to protect children from lead in residential paint, dust, and soil. In this regard, EPA believes that it has selected the most protective standards possible. Although the Agency could have selected numerically more stringent standards, EPA concluded that more stringent standards would afford less protection to children because EPA believes that limited resources would be diluted and possibly diverted from children who are at greatest risk. The standards will also protect children by supporting implementation of other provisions of the national lead program, such as hazard disclosure prior to the sale or rental of most pre-1978 housing and evaluation and control of lead-based paint hazards and Federally-assisted and Federally owned housing prior to disposition.

#### I. National Technology Transfer and Amendment Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs 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 standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

The Agency has determined that there are no voluntary consensus standards for lead-based paint hazards. However, the Agency has, where appropriate, referred to voluntary consensus standards developed by such organizations as the American Society for Testing and Materials (ASTM) with respect to sampling and analytical methods.

#### J. Executive Order 12630

EPA has complied with Executive Order 12630, entitled *Governmental Actions and Interference with Constitutionally Protected Property Rights* (53 FR 8859, March 15, 1988), by examining the takings implications of this rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated

Takings" issued under the Executive Order.

#### K. Executive Order 12988

In issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988, entitled *Civil Justice Reform* (61 FR 4729, February 7, 1996).

#### VII. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a major 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 the Comptroller General of the United States. EPA has submitted a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives and the Comptroller General of the United States. This rule is a "major rule" as defined by 5 U.S.C. 804(2). A major rule cannot take effect until 60 days after date it is published in the **Federal Register** or is submitted to Congress whichever is later. This rule will take effect on March 6, 2001.

#### List of Subjects in 40 CFR Part 745

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

Dated: December 22, 2000.

**Carol M. Browner,**  
Administrator.

Therefore, 40 CFR part 745 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. By adding new subpart D to read as follows:

#### Subpart D—Lead-Based Paint Hazards

Sec.  
745.61 Scope and applicability.  
745.63 Definitions.  
745.65 Lead-based paint hazards.

#### Subpart D—Lead-Based Paint Hazards

##### § 745.61 Scope and applicability.

(a) This subpart identifies lead-based paint hazards.

(b) The standards for lead-based paint hazards apply to target housing and child-occupied facilities.

(c) Nothing in this subpart requires the owner of property(ies) subject to these standards to evaluate the property(ies) for the presence of lead-based paint hazards or take any action to control these conditions if one or more of them is identified.

#### § 745.63 Definitions.

The following definitions apply to part 745.

*Arithmetic mean* means the algebraic sum of data values divided by the number of data values (e.g., the sum of the concentration of lead in several soil samples divided by the number of samples).

*Chewable surface* means an interior or exterior surface painted with lead-based paint that a young child can mouth or chew. A chewable surface is the same as an "accessible surface" as defined in 42 U.S.C. 4851b(2)). Hard metal substrates and other materials that cannot be dented by the bite of a young child are not considered chewable.

*Common area group* means a group of common areas that are similar in design, construction, and function. Common area groups include, but are not limited to hallways, stairwells, and laundry rooms.

*Concentration* means the relative content of a specific substance contained within a larger mass, such as the amount of lead (in micrograms per gram or parts per million by weight) in a sample of dust or soil.

*Deteriorated paint* means any interior or exterior paint or other coating that is peeling, chipping, chalking or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate.

*Dripline* means the area within 3 feet surrounding the perimeter of a building.

*Friction surface* means an interior or exterior surface that is subject to abrasion or friction, including, but not limited to, certain window, floor, and stair surfaces.

*Impact surface* means an interior or exterior surface that is subject to damage by repeated sudden force such as certain parts of door frames.

*Interior window sill* means the portion of the horizontal window ledge that protrudes into the interior of the room.

*Lead-based paint hazard* means hazardous lead-based paint, dust-lead hazard or soil-lead hazard as identified in § 745.65.

*Loading* means the quantity of a specific substance present per unit of surface area, such as the amount of lead

in micrograms contained in the dust collected from a certain surface area divided by the surface area in square feet or square meters.

*Mid-yard* means an area of a residential yard approximately midway between the dripline of a residential building and the nearest property boundary or between the driplines of a residential building and another building on the same property.

*Play area* means an area of frequent soil contact by children of less than 6 years of age as indicated by, but not limited to, such factors including the following: the presence of play equipment (e.g., sandboxes, swing sets, and sliding boards), toys, or other children's possessions, observations of play patterns, or information provided by parents, residents, care givers, or property owners.

*Residential building* means a building containing one or more residential dwellings.

*Room* means a separate part of the inside of a building, such as a bedroom, living room, dining room, kitchen, bathroom, laundry room, or utility room. To be considered a separate room, the room must be separated from adjoining rooms by built-in walls or archways that extend at least 6 inches from an intersecting wall. Half walls or bookcases count as room separators if built-in. Movable or collapsible partitions or partitions consisting solely of shelves or cabinets are not considered built-in walls. A screened in porch that is used as a living area is a room.

*Soil sample* means a sample collected in a representative location using ASTM E1727, "Standard Practice for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques," or equivalent method.

*Weighted arithmetic mean* means the arithmetic mean of sample results weighted by the number of subsamples in each sample. Its purpose is to give influence to a sample relative to the surface area it represents. A single surface sample is comprised of a single subsample. A composite sample may contain from two to four subsamples of the same area as each other and of each single surface sample in the composite. The weighted arithmetic mean is obtained by summing, for all samples, the product of the sample's result multiplied by the number of subsamples in the sample, and dividing the sum by the total number of subsamples contained in all samples. For example, the weighted arithmetic mean of a single surface sample containing 60 µg/ft<sup>2</sup>, a composite sample (three subsamples) containing 100 µg/ft<sup>2</sup>, and a composite sample (4 subsamples) containing 110

µg/ft<sup>2</sup> is 100 µg/ft<sup>2</sup>. This result is based on the equation  $[60+(3*100)+(4*110)]/(1+3+4)$ .

*Window trough* means, for a typical double-hung window, the portion of the exterior window sill between the interior window sill (or stool) and the frame of the storm window. If there is no storm window, the window trough is the area that receives both the upper and lower window sashes when they are both lowered. The window trough is sometimes referred to as the window "well."

*Wipe sample* means a sample collected by wiping a representative surface of known area, as determined by ASTM E1728, "Standard Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques, or equivalent method, with an acceptable wipe material as defined in ASTM E 1792, "Standard Specification for Wipe Sampling Materials for Lead in Surface Dust."

#### § 745.65 Lead-based paint hazards.

(a) *Paint-lead hazard.* A paint-lead hazard is any of the following:

(1) Any lead-based paint on a friction surface that is subject to abrasion and where the lead dust levels on the nearest horizontal surface underneath the friction surface (e.g., the window sill, or floor) are equal to or greater than the dust-lead hazard levels identified in paragraph (b) of this section.

(2) Any damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by impact from a related building component (such as a door knob that knocks into a wall or a door that knocks against its door frame).

(3) Any chewable lead-based painted surface on which there is evidence of teeth marks.

(4) Any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

(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 40 µg/ft<sup>2</sup> on floors or 250 µg/ft<sup>2</sup> on interior window sills based on wipe samples.

(c) *Soil-lead hazard.* A soil-lead hazard is bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million (µg/g) in a play area or average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples.

(d) *Work practice requirements.* Applicable certification, occupant protection, and clearance requirements and work practice standards are found in regulations issued by EPA at 40 CFR part 745, subpart L and in regulations issued by the Department of Housing and Urban Development (HUD) at 24 CFR part 35, subpart R. The work practice standards in those regulations do not apply when treating paint-lead hazards of less than:

(1) Two square feet of deteriorated lead-based paint per room or equivalent,

(2) Twenty square feet of deteriorated paint on the exterior building, or

(3) Ten percent of the total surface area of deteriorated paint on an interior or exterior type of component with a small surface area.

3. In § 745.223, by removing the definitions for "Lead-contaminated dust" and "Lead-contaminated soil," and by revising paragraph (1) of the definition of "Abatement," to read as follows:

**§ 745.223 Definitions.**

\* \* \* \* \*

*Abatement* \* \* \*

(1) The removal of paint and dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of painted surfaces or fixtures, or the removal or permanent covering of soil, when lead-based paint hazards are present in such paint, dust or soil; and

4. In § 745.227, by revising paragraphs (d)(4), (d)(5), (d)(6) introductory text, (d)(7), (e)(7)(i), (e)(7)(ii), (e)(8)(ii), (e)(8)(v)(A), (e)(8)(v)(B), (e)(8)(vii), by redesignating paragraph (d)(8)(ii) as paragraph (d)(8)(iii) and paragraph (h) as paragraph (i), and by adding paragraphs (d)(8)(ii), (e)(8)(viii), and (h) to read as follows:

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

\* \* \* \* \*

(d) \* \* \*

(4) The following surfaces which are determined, using documented methodologies, to have a distinct painting history, shall be tested for the presence of lead:

(i) Each friction surface or impact surface with visibly deteriorated paint; and

(ii) All other surfaces with visibly deteriorated paint.

(5) In residential dwellings, dust samples (either composite or single-surface samples) from the interior window sill(s) and floor shall be collected and analyzed for lead concentration in all living areas where

one or more children, age 6 and under, are most likely to come into contact with dust.

(6) For multi-family dwellings and child-occupied facilities, the samples required in paragraph (d)(4) of this section shall be taken. In addition, interior window sill and floor dust samples (either composite or single-surface samples) shall be collected and analyzed for lead concentration in the following locations:

\* \* \* \* \*

(7) For child-occupied facilities, interior window sill and floor dust samples (either composite or single-surface samples) shall be collected and analyzed for lead concentration in each room, hallway or stairwell utilized by one or more children, age 6 and under, and in other common areas in the child-occupied facility where one or more children, age 6 and under, are likely to come into contact with dust.

(8) \* \* \*

(i) The rest of the yard (i.e., non-play areas) where bare soil is present.

\* \* \* \* \*

(e) \* \* \*

(7) \* \* \*

(i) If the soil is removed:

(A) The soil shall be replaced by soil with a lead concentration as close to local background as practicable, but no greater than 400 ppm.

(B) The soil that is removed shall not be used as top soil at another residential property or child-occupied facility.

(ii) If soil is not removed, the soil shall be permanently covered, as defined in § 745.223.

(8) \* \* \*

(ii) Following the visual inspection and any post-abatement cleanup required by paragraph (e)(8)(i) of this section, clearance sampling for lead in dust shall be conducted. Clearance sampling may be conducted by employing single-surface sampling or composite sampling techniques.

\* \* \* \* \*

(v) \* \* \*

(A) After conducting an abatement with containment between abated and unabated areas, one dust sample shall be taken from one interior window sill and from one window trough (if present) and one dust sample shall be taken from the floors of each of no less than four rooms, hallways or stairwells within the containment area. In addition, one dust sample shall be taken from the floor outside the containment area. If there are less than four rooms, hallways or stairwells within the containment area, then all rooms, hallways or stairwells shall be sampled.

(B) After conducting an abatement with no containment, two dust samples

shall be taken from each of no less than four rooms, hallways or stairwells in the residential dwelling or child-occupied facility. One dust sample shall be taken from one interior window sill and window trough (if present) and one dust sample shall be taken from the floor of each room, hallway or stairwell selected. If there are less than four rooms, hallways or stairwells within the residential dwelling or child-occupied facility then all rooms, hallways or stairwells shall be sampled.

\* \* \* \* \*

(vii) The certified inspector or risk assessor shall compare the residual lead level (as determined by the laboratory analysis) from each single surface dust sample with clearance levels in paragraph (e)(8)(viii) of this section for lead in dust on floors, interior window sills, and window troughs or from each composite dust sample with the applicable clearance levels for lead in dust on floors, interior window sills, and window troughs divided by half the number of subsamples in the composite sample. If the residual lead level in a single surface dust sample equals or exceeds the applicable clearance level or if the residual lead level in a composite dust sample equals or exceeds the applicable clearance level divided by half the number of subsamples in the composite sample, the components represented by the failed sample shall be recleaned and retested.

(viii) The clearance levels for lead in dust are 40 µg/ft<sup>2</sup> for floors, 250 µg/ft<sup>2</sup> for interior window sills, and 400 µg/ft<sup>2</sup> for window troughs.

\* \* \* \* \*

(h) *Determinations.* (1) Lead-based paint is present:

(i) On any surface that is tested and found to contain lead equal to or in excess of 1.0 milligrams per square centimeter or equal to or in excess of 0.5% by weight; and

(ii) On any surface like a surface tested in the same room equivalent that has a similar painting history and that is found to be lead-based paint.

(2) A paint-lead hazard is present:

(i) On any friction surface that is subject to abrasion and where the lead dust levels on the nearest horizontal surface underneath the friction surface (e.g., the window sill or floor) are equal to or greater than the dust hazard levels identified in § 745.227(b);

(ii) On any chewable lead-based paint surface on which there is evidence of teeth marks;

(iii) Where there is any damaged or otherwise deteriorated lead-based paint on an impact surface that is caused by

impact from a related building component (such as a door knob that knocks into a wall or a door that knocks against its door frame; and

(iv) If there is any other deteriorated lead-based paint in any residential building or child-occupied facility or on the exterior of any residential building or child-occupied facility.

(3) A dust-lead hazard is present in a residential dwelling or child occupied facility:

(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 40 µg/ft<sup>2</sup> for floors and 250 µg/ft<sup>2</sup> for interior window sills, respectively;

(ii) On floors or interior window sills in an unsampled residential dwelling in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled residential unit on the property; and

(iii) On floors or interior window sills in an unsampled common area in a multi-family dwelling, if a dust-lead hazard is present on floors or interior window sills, respectively, in at least one sampled common area in the same common area group on the property.

(4) A soil-lead hazard is present:

(i) In a play area when the soil-lead concentration from a composite play

area sample of bare soil is equal to or greater than 400 parts per million; or

(ii) In the rest of the yard when the arithmetic mean lead concentration from a composite sample (or arithmetic mean of composite samples) of bare soil from the rest of the yard (i.e., non-play areas) for each residential building on a property is equal to or greater than 1,200 parts per million.

5. In § 745.325, by revising paragraphs (d)(2)(iii)(A) and (d)(2)(iii)(B), by redesignating (d)(2)(iv) and (d)(2)(v) as (d)(2)(v) and (d)(2)(vi), respectively, and by adding paragraphs (d)(2)(iii)(C), (d)(2)(iii)(D), (d)(2)(iv), and (e), to read as follows:

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

\* \* \* \* \*

(d) \* \* \*

(2) \* \* \*

(iii) \* \* \*

(A) An assessment, including a visual inspection, of the physical characteristics of the residential dwelling or child-occupied facility;

(B) Environmental sampling for lead in paint, dust, and soil;

(C) Environmental sampling requirements for lead in paint, dust, and soil that allow for comparison to the standards for lead-based paint hazards established or revised by the State or Indian Tribe pursuant to paragraph (e) of this section; and

(D) A determination of the presence of lead-based paint hazards made by

comparing the results of visual inspection and environmental sampling to the standards for lead-based paint hazards established or revised by the State or Indian Tribe pursuant to paragraph (e) of this section.

(iv) The program elements required in paragraph (d)(2)(iii)(C) and (d)(2)(iii)(D) of this section shall be adopted in accordance with the schedule for the demonstration required in paragraph (e) of this section.

\* \* \* \* \*

(e) The State or Indian Tribe must demonstrate that it has standards for identifying lead-based paint hazards and clearance standards for dust, that are at least as protective as the standards in § 745.227 as amended on February 5, 2001. A State or Indian Tribe with such a section 402 program approved before February 5, 2003 shall make this demonstration no later than the first report submitted pursuant to § 745.324(h) on or after February 5, 2003. A State or Indian Tribe with such a program submitted but not approved before February 5, 2003 may make this demonstration by amending its application or in its first report submitted pursuant to § 745.324(h). A State or Indian Tribe submitting its program on or after February 5, 2003 shall make this demonstration in its application.

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