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Standard Guide for Evaluation, Management, and Control of Lead Hazards in Facilities¹

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1. Scope

1.1 This guide provides detailed guidance for use by owners and property managers in developing and implementing a lead hazard management program in facilities that are likely to be occupied or visited by children under six or by pregnant women by providing an organized approach to using ASTM and other standards. Its purpose is to protect occupants, visitors, staff, other workers, and the environment from lead hazards in these facilities.

1.1.1 Fig. 1 provides an overview of the major lead hazard identification and management program elements.

1.1.2 Fig. 2 provides an outline of the lead hazard identification and management program process.

1.2 Limitations:

1.2.1 This provisional guide does not apply to facilities that are not likely to be occupied or visited by children under six, or by pregnant women. It does not apply to occupational exposures other than those resulting from maintenance, cleaning, lead hazard control work, and other renovation and repair work that generates lead hazards.

1.2.2 This guide is based on federal and national standards and guidelines that may be different from applicable state and local regulations. It does not, however, comprehensively address OSHA, EPA, or DOT requirements. It may not protect all users, or occupants, visitors, staff, other workers, and the environment affected by their facilities from lead hazards. Users must comply with applicable laws and regulations and modify the guidance provided by this guide accordingly. The user is advised to adopt the most stringent version of each requirement among federal, state, and local regulations.

1.3 Execution of work discussed or recommended in this guide may cause exposure to construction safety and health hazards, to health hazards from lead in paint, dust, and bare soil, and to health hazards from products and methods associated with lead hazard control. *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to*

establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents

2.1 These documents are subject to periodic updating and other revisions. It is the responsibility of the user to ensure that the version of each document used is current.

2.2 ASTM Standards:

D 3559 Test Method for Lead in Water²

D 4309 Practice for Sample Digestion Using Closed Vessel Microwave Heating Technique for Determination of Total Metals in Water²

D 4840 Guide for Sampling Chain-of-Custody Procedures²

D 5438 Collection of Floor Dust for Chemical Analysis³

D 5463 Guide for Use of Test Kits to Measure Inorganic Constituents in Water²

E 631 Terminology of Building Constructions⁴

E 1480 Terminology of Facility Management (Building-Related)⁴

E 1553 Practice for Collection of Airborne Particulate Lead During Abatement and Construction Activities⁴

E 1583 Practice for Evaluating Laboratories Engaged in the Determination of Lead in Paint, Dust, Airborne Particulates, and Soil Taken From and Around Buildings and Related Structures⁴

E 1605 Terminology Relating to Abatement of Hazards from Lead-Based Paint in Buildings and Related Structures⁴

E 1613 Test Method for the Analysis of Digested Samples for Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption (FAAS), or Graphite Furnace Atomic Absorption (GFAAS) Techniques⁴

E 1644 Practice for Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead by Atomic Spectrometry⁴

E 1645 Practice for the Preparation of Dried Paint Samples for Subsequent Lead Analysis by Atomic Spectrometry⁴

¹ This guide is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.23 on Abatement of Hazards from Lead in Buildings and Related Structures.

Current edition approved Dec. 10, 1999. Published March 2000.

² *Annual Book of ASTM Standards*, Vol 11.01.

³ *Annual Book of ASTM Standards*, Vol 11.03.

⁴ *Annual Book of ASTM Standards*, Vol 04.11.



Identification

Consider lead hazard program:

- Review scope of ASTM standard
- Determine whether ASTM standard applies to the facility(ies)
- Continue if there are facilities likely to be occupied or visited by children under six or by pregnant women
- Stop if there are no facilities likely to be occupied or visited by children under six or by pregnant women

Categorize facility(ies) for lead hazards:

- Classify each facility as Class A, B, or C* based on initial information
- Consider doing detailed evaluation in Class A and B facilities on a prioritized basis
- If a facility is evaluated, retain or change classification based on resulting information
- Response to classification:
 - For Class A and B facilities, document findings and prioritize facilities for action
 - For Class C facilities, document findings

Management of Class A and B Facilities

Develop and implement lead hazard management program for:

- Routine maintenance and cleaning
- Occupant education and protection
- Environmental, safety, and health programs
- Real estate transaction procedures
- Elevated blood lead child response

Prioritize lead hazard control work, if there is more than one facility

Conduct lead hazard control projects as needed:

- Plan projects
- Perform projects

Monitor and reevaluate on an ongoing basis

For all activities:

- Use qualified persons and organizations
- Sample and analyze as appropriate
- Document activities and conditions

* See Section 6 and Figure 3 for facility classification procedure:

In Class A facilities, lead paint or lead hazards are probable.

In Class B facilities, lead paint or lead hazards are less probable.

In Class C facilities, lead paint and lead hazards are not likely.

FIG. 1 Lead Hazard Identification and Management Program Overview

E 1726 Practice for Sample Digestion of Soils for the Determination of Lead by Atomic Spectrometry⁴

E 1727 Practice for Field Collection of Soil Samples for Lead Determination by Atomic Spectrometry Techniques⁴

E 1728 Practice for Field Collection of Settled Dust Samples Using Wipe Sampling Methods for Lead Determination by Atomic Spectrometry Techniques⁴

E 1729 Practice for Field Collection of Dried Paint Samples for Lead Determination by Atomic Spectrometry Techniques⁴

E 1741 Practice for Preparation of Airborne Particulate Lead Samples Collected During Abatement and Construction Activities for Subsequent Analysis by Atomic Spectrometry⁴

E 1753 Practice for the Use of Qualitative Chemical Spot Test Kits for The Detection of Lead in Dry Paint Films⁴

E 1775 Guide for Evaluating the Performance of On-Site

Extraction and Field-Portable Electrochemical or Spectrophotometric Analysis for Lead⁴

E 1792 Specification for Wipe Sampling Materials for Lead in Surface Dust⁴

E 1795 Specification for Liquid Coating Encapsulation Products for Lead Paint in Buildings⁴

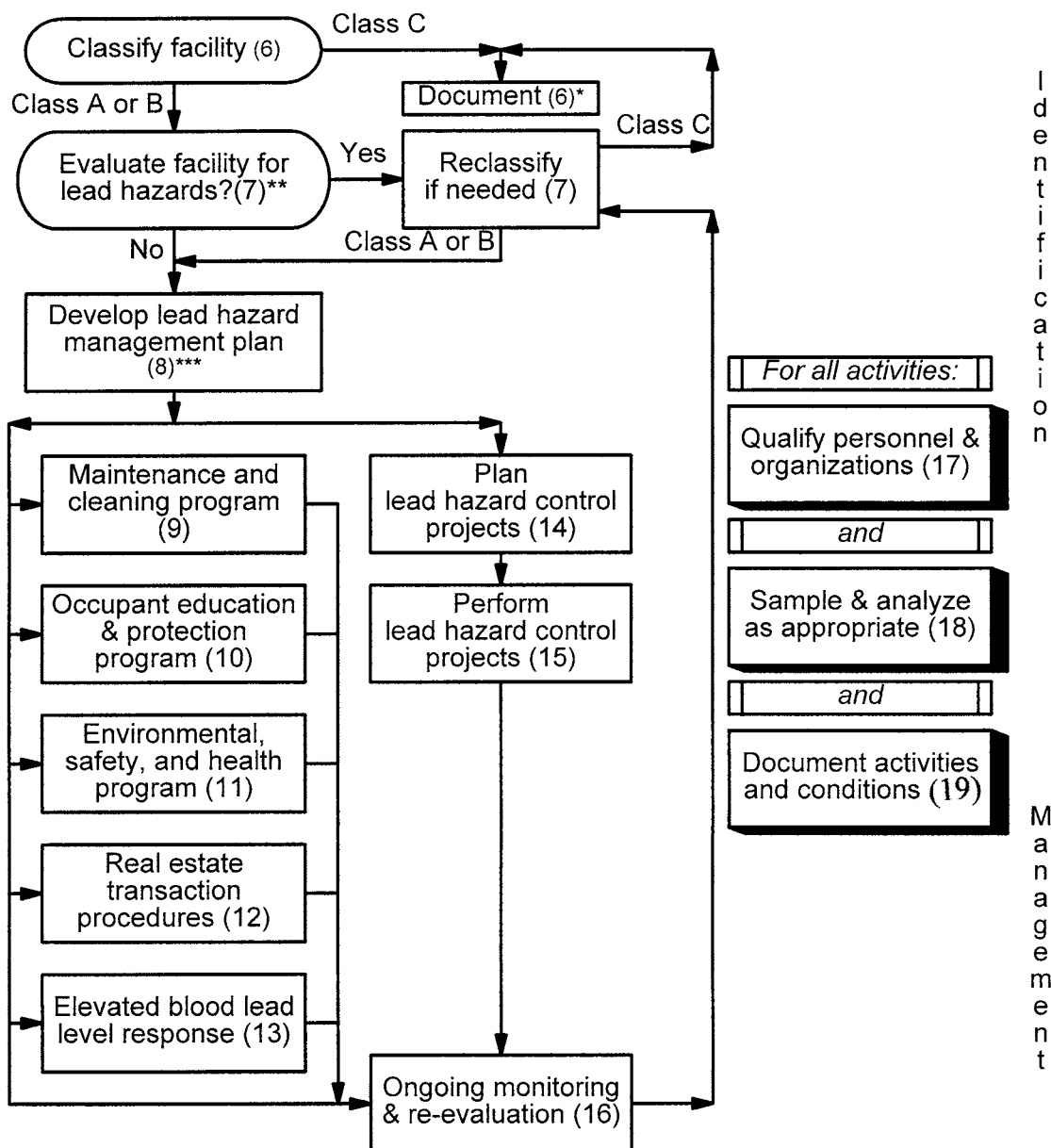
E 1796 Guide for Selection and Use of Liquid Coating Encapsulation Products for Lead Paint in Buildings⁴

E 1797 Specification for Reinforced Liquid Coating Encapsulation Products for Lead Paint in Buildings⁴

E 1828 Guide for Evaluating the Performance Characteristics of Qualitative Chemical Spot Test Kits for Lead in Paint⁴

E 1864 Practice for Evaluating Quality Systems of Organizations Engaged in Conducting Facility and Hazard Assessments to Determine the Presence and Extent of Lead in Paint, Dust, Airborne Particulate, and Soil In and Around





* Corresponding section numbers are in parentheses. See Section 6 and Figure 3 for facility classification procedure: In Class A facilities, leaded paint or lead hazards are probable. In Class B, leaded paint or lead hazards are less probable. In Class C, leaded paint and lead hazards are not likely.

** While facilities can be classified without evaluation for the presence, concentration and condition of leaded materials, evaluations generally lower time, costs and liability by helping managers increase confidence in their lead programs and avoid unnecessary control work. Some rules require some evaluation of federally-owned or -assisted housing

*** Class A facilities tend to have broader and more stringent lead hazard management plans and programs than do Class B facilities, because of Class B's generally fewer potential or actual lead hazards, and generally lower risk when they do occur.

FIG. 2 Lead Hazard Identification and Management Program

Buildings and Related Structures⁴

E 1908 Standard Guide for Sample Selection of Debris waste from a Building Renovation or Lead Abatement Protect for Toxicity Characteristic Leaching Procedure (TCLP) testing for Leachable Lead (Pb)⁴

E 1973 Provisional Practice for the Collection of Surface Dust by Air Sampling Pump Vacuum Technique for Sub-

sequent Lead Determination⁴

E 1979 Standard Practice for Ultrasonic Extraction of Paint, Dust, Soil, and Air Samples for Subsequent Determination of Lead⁴

E 2051 Practice for The Determination of Lead in Paint, Settled Dust, Soil and Air Particulate by Field-Portable Electroanalysis⁴



Documents

Document Sharing Hub



2.3 U.S. Laws and Regulations:

- 24 CFR (Code of Federal Regulations) Part 35, Subpart H, Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards upon Sale or Lease of Residential Property (HUD regulation)⁵
- 24 CFR 35, HUD Lead-Based Paint Poisoning Prevention in Certain Residential Structures⁵
- 29 CFR 1910.1025, OSHA Lead (Regulation for General Industry)⁵
- 29 CFR 1910.1200, OSHA Hazard Communication (Regulation for General Industry)⁵
- 29 CFR 1926, OSHA Regulations for Construction (29 CFR 1926.62, OSHA Lead and 29 CFR 1926.59, OSHA Hazard Communication)⁵
- 40 CFR 141, EPA National Primary Drinking Water Regulations⁵
- 40 CFR 261, EPA Identification and Listing of Hazardous Waste⁵
- 40 CFR 745, EPA Lead-Based Paint Poisoning Prevention in Certain Residential Structures⁵
- 42 U. S. C., Chapter 63 (Sections 4821-4846), Lead-Based Paint Poisoning Prevention⁵
- 42 U. S. C., Chapter 63A (Sections 4851-4854), Residential Lead-Based Paint Hazard Reduction⁵
- 49 CFR 171-177, DOT Hazardous Materials Regulations⁵
- Public Law 99-339, Safe Drinking Water Act Amendments of 1986, Act of June 19, 1986⁵
- Public Law 100-572, Lead Contamination Control Act of 1988, Oct. 31, 1988⁵
- Public Law 102-550, Title X of the Housing and Community Development Act of 1992, Oct. 28, 1992⁵
- 2.4 *Governmental Agency Guidance:*
- EPA Guidance on Identification of Lead-Based Paint Hazards, Federal Register (FR) v. 60, pp. 47247-47257, 11 Sept 1995⁶
- Guidance on the Lead-Based Paint Disclosure Rule, HUD, EPA, ongoing series. (“Disclosure Rule Guidance”)⁶
- Guide Specification for Military Construction, CECS 02090, Lead Based Paint (LBP) Abatement and Disposal, U.S. Army Corps of Engineers, April 1994. (“CoE Specifications”)⁷
- Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, U.S. Department of Housing and Urban Development (HUD), June 1995. (“HUD Guidelines”)⁷
- Inspection and Compliance Procedures for Lead in Construction. OSHA Instruction CPL 2-2.58⁶
- Lead Based Paint (LBP) Lead Hazard Containment Detail Setup Drawings, U.S. Army Corps of Engineers, April 1994. (“CoE Containment”)⁷

National Lead Laboratory Accreditation Program (NLLAP) List. U.S. Environmental Protection Agency (EPA), monthly. (“NLLAP List”)⁶

Preventing Lead Poisoning In Young Children: A Statement by the Centers for Disease Control-October 1991. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control. (“CDC Statement”)⁶

Protect Your Family From Lead in Your Home, EPA, HUD and CPSC, EPA 747-R-94-001, May 1995. (“EPA/HUD/CPSC Information Pamphlet”)⁶

Reducing Lead Hazards When Remodeling Your Home, EPA, EPA 747-R-94-002, April 1994. (“EPA Renovation Pamphlet”)⁶

Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, November 1997. (“CDC Guidance”)⁶

Putting the Pieces Together: Controlling Lead Hazards in the Nation’s Housing. Report of Lead-Based Paint Hazard Reduction and Financing Task Force, HUD, 1995. (“HUD Task Force Report”)⁸

“Protecting Workers Exposed to Lead-Based Paint Hazards: A Report to Congress, National Institute for Occupational Safety and Health: Cincinnati, OH (1997): DHHS (NIOSH) Publ, No 98-112 (“NIOSH Report to Congress”)⁹

2.5 *Private-Sector Standards and Guidance:*

American Institute of Architects Guidance¹⁰

American Consulting Engineers Council Guidance¹¹

NIBS-Lead-Based Paint Operation and Maintenance Work Practice Manual for Homes and Buildings, National Institute of Building Sciences (NIBS), 1995. (“NIBS Manual”)¹²

NIBS-Guide Specifications for Reducing Lead-Based Paint Hazards, NIBS, 1995. (“NIBS Specifications”)¹²

SSPC-Standard Procedure for Evaluating the Qualifications of Painting Contractors to Remove Hazardous Paint: Qualification Procedure No. 2 (SSPC-QP2), Steel Structures Painting Council, 19 May 1995¹³

3. Terminology

3.1 *Definitions*—If applicable, refer to existing ASTM terminology standards having general application. Examples are as follows:

3.1.1 See Terminology E 631 for general definitions,

3.1.2 See Terminology E 1480 for building-related terms, and

3.1.3 See Terminology E 1605 for lead hazards.

⁸ Available from HUD USER, P.O. Box 6091, Rockville, MD 20849.

⁹ Available from NIOSH Publications, 4676 Columbia Parkway, Cincinnati, OH 45226.

¹⁰ Available from American Institute of Architects, 1735 New York Ave., NW, Washington, DC 20006.

¹¹ Available from American Consulting Engineers Council, 1015 15th St., NW, #802, Washington, DC 20005.

¹² Available from the National Institute of Building Sciences, 1201 L St., NW, Suite 400, Washington, DC 20005.

¹³ Available from SSPC, 40 24th Street, 6th Floor, Pittsburgh, PA 15222-5555.

⁵ Available from Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954.

⁶ Available from the National Lead Information Clearinghouse, 1025 Conn. NW, W. Suite 1200, Washington, DC 20036.

⁷ Information on availability can be obtained from U.S. Army Engineering and Support Center, Attn: CEHNC-ED-ES-G, 4820 University Square, Huntsville, AL 35816-1822. The documents can be found on the World Wide Web at <http://www.mrd.usace.army.mil/mrdded-h/publish.html>.



3.1.4 Other terms related to lead hazards and to activities for identifying and controlling them have been defined in HUD Guidelines, Title X as codified in 42 U. S. C. Chapters 63 and 63A, and 40 CFR 745.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *Class A facilities*—facilities in which leaded paint or lead hazards are probable.

3.2.2 *Class B facilities*—facilities in which leaded paint or lead hazards are less probable than in class A facilities.

3.2.3 *Class C facilities*—facilities which are likely not to have leaded paint or lead hazards.

3.2.3.1 *Discussion*—“Likely not to have leaded paint” means that there is specific evidence to support this conclusion, rather than an absence of evidence against it.

3.2.4 *deteriorated paint*—any interior or exterior paint that is peeling, chipping, or cracking.

3.2.5 *environmental investigation blood lead level*—a blood lead level in a child under 6 years of age with that is high enough to trigger an environmental investigation (and possibly further action) as recommended by the Centers for Disease Control and Prevention (CDC), or as defined by applicable laws and regulations.

3.2.5.1 *Discussion*—CDC Guidance recommends environmental investigation for children with a confirmed blood lead level of 20 micrograms per deciliter or above (measured in a single test), or a level of 15 micrograms per deciliter or above (measured in two consecutive tests that are at least three months apart).

3.2.6 *elevated blood lead level (EBL)*—total (whole) blood lead level in a child under 6 years of age that equals or exceeds 10 micrograms per deciliter.

3.2.7 *facility*—a physical setting used to serve a specific purpose.

3.2.7.1 *Discussion*—A facility may be an entire building and its surroundings or an individual dwelling unit and the portions of its surroundings that are used by its occupants, depending on the purpose. It may also be a property without a building, such as a playground, if visited by children under six or pregnant women.

3.2.8 *lead-based paint inspection*—a surface-by-surface evaluation to determine the presence of lead-based paint.

3.2.8.1 *Discussion*—Also called an inspection or *paint inspection*. See 40 CFR 745 and HUD Guidelines, Chapter 7.

3.2.9 *leaded paint*—paint or other coatings containing lead compounds at potentially hazardous concentrations.

3.2.9.1 *Discussion*—Leaded paints having lead concentrations exceeding the Consumer Products Safety Commission limit (0.06 % by weight of nonvolatile solids or dried film) are called *lead-containing paints*. Leaded paints having concentrations equal to or exceeding limits established under Section 302(c) of the Lead-Based Paint Poisoning Prevention Act (0.5 % by weight or 1.0 mg/cm² in dried film) or limits established under state or local regulations, are called *lead-based paints*. OSHA regulations cover any detectable level of lead in paint.

3.2.10 *leaded paint characterization*—a procedure for determination of the lead content in paint in order to determine whether it is potentially hazardous.

3.2.10.1 *Discussion*—The difference between leaded paint characterization using an XRF and a *lead-based paint inspection* is that, in characterization, “negative” results are followed by quantitative analysis and “inconclusive” results are treated as “positive.”

3.2.11 *lead hazard*—condition that may cause exposure to lead that may result in adverse human health effects such as exceeding limits established by the federal, state, or local agency having jurisdiction. Such conditions include deteriorated leaded paint, lead-contaminated bare soil, and lead-contaminated dust on such surfaces as floors, window sills, and window troughs, the release of leaded paint on, for example, friction, impact or accessible surfaces; lead-related environmental, occupational, and safety hazards; and water containing lead at concentrations exceeding EPA guidelines or applicable regulations.

3.2.11.1 *Discussion*—This definition includes *lead-based paint hazards* as defined by Title X, as well as hazards that may arise from such other sources as lead in water and leaded paints.

3.2.12 *lead hazard management*—activities to characterize the presence of lead hazards at a facility; develop a facility-specific plan to control and eliminate lead hazards based on these findings; and implement a program based on the plan.

3.2.13 *maintenance*—work performed to keep facilities in good condition.

3.2.14 *owner*—any person or entity that alone or with others, meets the following conditions: (1) holds legal title to a facility or real property, (2) occupies or controls the facility or real property under an agreement that gives the person or entity the option to purchase it, or (3) occupies or controls the facility or real property under a net lease.

3.2.15 *property manager*—any person who exercises control over a facility.

3.2.16 *renovations and repairs*—work designed to alter facilities or to restore their good condition.

3.2.17 *lead risk assessment*—an on-site evaluation including, but not limited to, visual evaluation and dust and soil testing to determine and report the existence, nature, severity, and location of lead hazards. As used in this guide, the term does not include *risk screens*.

3.2.17.1 *Discussion*—See 40 CFR 745 and HUD Guidelines, Chapter 5.

3.2.18 *risk assessment*—see *lead risk assessment*.

3.2.19 *risk screen*—an on-site evaluation, consisting of visual evaluation and dust testing, to identify whether potential lead-based paint hazards are present.

3.2.19.1 *Discussion*—Also called *lead hazard screen* or *lead hazard screen risk assessment*. See 40 CFR 745 and HUD Guidelines, Chapter 5.

3.2.20 *sample*—as applied to lead hazard evaluations of multifamily housing or to occupational exposure assessment, a group of housing units or portion of materials taken from a large collection of housing units or quantities of material (i.e., a population) which serves to provide information that may be used as a basis for making a decision concerning the larger collections.



3.2.20.1 *random sample*—a sample drawn from a population in a way that allows each member of the population to have a chance of being selected with known probability, using a randomization procedure (such as a random-number generator or the flip of an unbiased coin) to determine which member(s) of the population is (are) selected to enter the sample.

3.2.20.2 *targeted sample*—a sample selected from a population, based on information supplied by the owner, that is likely to have the greatest probability of having the property of interest.

3.2.20.3 *worst-case sample*—a sample selected from a population, based on information from a visual examination of the whole population likely to have the greatest probability of having the property of interest.

3.2.21 *specialized cleaning*—the use of cleaning protocols that have been shown to be effective in removing lead-contaminated dust to achieve clearance levels as established by the applicable government agency.

3.2.22 *substrate*—unfinished building-material surface to which finishes are applied. Examples include wood, plaster, drywall, masonry, and metal.

3.2.22.1 *Discussion*—Also called *substrate base*.

3.2.23 *tenant*—any person or entity that occupies a facility pursuant to the terms of a lease or other agreement.

3.2.24 *visited*—as applied to visits to a facility by one or more children under six or pregnant women, the condition of their being present for at least 3 hours per day on at least 2 days per week and at least 60 hours per year.

3.2.24.1 *Discussion*—Children have some chance of incurring adverse health effects from exposures at facilities with leaded paint in poor condition or other severe lead hazards during periods too short to meet the definition. The user may wish to apply this guide to such facilities.

4. Summary of Guide

4.1 This guide outlines a procedure for identifying and managing lead hazards in facilities occupied or visited by children under six or by pregnant women.

4.2 Facilities are classified according to lead hazard potential.

4.3 Facilities in which there is a significant probability of leaded paint or lead hazards require, as a baseline, Essential Maintenance Practices in accordance with the HUD Task Force Report.

4.4 In addition, facilities in certain classifications require a lead hazard management program unless and until lead hazards and their potential sources are removed.

4.5 The lead hazard management program supports a written plan that includes standard operating procedures for:

- 4.5.1 Evaluating lead hazards,
- 4.5.2 Occupant education and protection,
- 4.5.3 Environmental, safety, and health programs,
- 4.5.4 Maintenance and cleaning,
- 4.5.5 Real estate transaction procedures,
- 4.5.6 Responding to elevated blood lead level (EBL) cases,
- 4.5.7 Planning lead hazard control projects,
- 4.5.8 Performing lead hazard control projects,
- 4.5.9 Ongoing monitoring and reevaluation,

4.5.10 Qualification of personnel and organizations,

4.5.11 Sampling and analysis, and

4.5.12 Documentation.

NOTE 1—Owner-occupants and owners of up to four residential dwelling units may wish to implement their program without a complete written plan; they should note that certain regulations require documentation. (See Appendix X4.)

4.6 Fig. 2 provides an outline of the lead hazard management process.

5. Significance and Use

5.1 This guide provides direction for the planning, execution, and evaluation of lead hazard management activities and lead hazard control work in facilities occupied or visited by children under six or by pregnant women. It provides a framework for implementing the policy outlined in the HUD Task Force Report and applying relevant ASTM standards. It does not specify whether to perform lead hazard control activities, nor when to do them, but how to do them.

5.2 This guide is also useful for protecting occupants, staff, and other workers from harmful exposure to lead.

5.3 This guide may be used by owners and property managers including owner-occupiers and others responsible for maintaining properties. It may also be used by lead hazard management consultants, construction contractors, and labor groups. It may also be used by real estate, financial, and insurance organizations and by legislators, regulators, and lawyers.

5.4 This guide supplements standard practices and guidance material by helping users make decisions among alternatives that are applicable to their facilities.

6. Classifying Facilities According to Lead Hazard Potential

6.1 The facility classification procedure is intended to:

6.1.1 Establish which facilities have leaded paint or lead hazards and set priorities for lead hazard management.

6.1.2 Determine which facilities are likely not to have lead paint or lead hazards and therefore do not need lead hazard management.

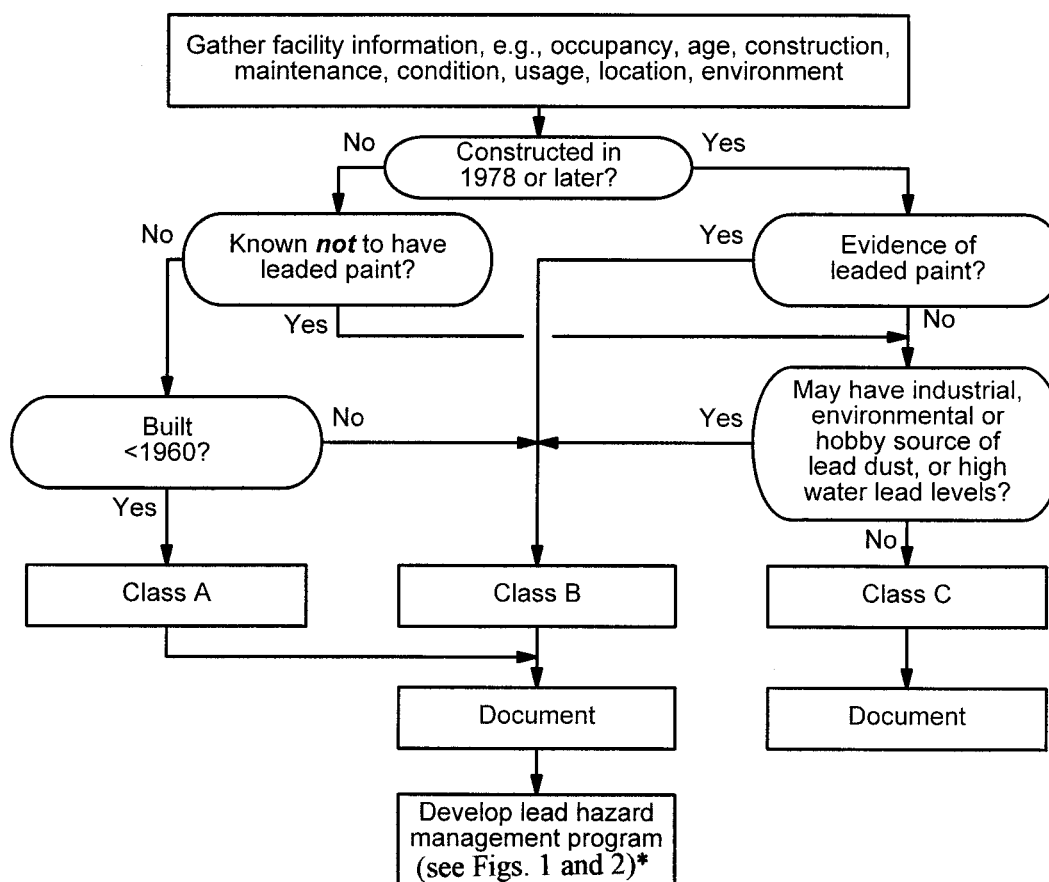
6.1.3 Fig. 3 is a flow diagram of a typical procedure. In some cases, some of the steps may not be appropriate, or their order may need to be changed.

6.2 HUD Guidelines, HUD Task Force Report, NIBS Manual, and other documents (see Section 2 for full titles) should be used to gain general knowledge of the sources, nature, and extent of lead hazards, and an overall understanding of the procedures used to identify and control them.

6.3 Gather information, defined in 40 CFR 745, HUD Guidelines, HUD Task Force Report, and Appendix X1, relating to the possible existence and extent of lead hazards. Potential sources of information are construction drawings and specifications, property records, maintenance records, records of any and all activities associated with lead hazard evaluation and control, staff, occupants, and former owners.

6.4 Classify facilities according to their potential for lead hazards using the information gathered.

6.5 A qualitative scheme that may be used is:



* Class A facilities tend to have broader and more stringent lead hazard management plans and programs than do those in Class B, because of Class B facilities' generally fewer potential or actual lead hazards, and the generally lower risk when they do occur.

FIG. 3 Procedure for Classification of Facilities

6.5.1 *Class A Facilities*—Leaded paint or lead hazards are probable.

6.5.2 *Class B Facilities*—Leaded paint or lead hazards are less probable.

6.5.3 *Class C Facilities*—Likely not to have leaded paint or lead hazards.

NOTE 2—"Likely not to have leaded paint" means that there is specific evidence to support this conclusion, rather than an absence of evidence against it.

6.6 Class A Facilities:

6.6.1 Any facility built before 1960, except as provided in 6.8.2.

NOTE 3—The date criterion of 1960 may be adjusted by the user based on information about the facility or facilities affected. The date used here is based on U.S. production of white lead, which decreased during the 1940s and the beginning of the 1950s. It decreased again in the 1960s, shortly after the American National Standards Institute (ANSI) adopted a voluntary standard limiting the lead concentration in paint to 1 % by weight (in 1955). The user may wish to select a criterion of 1950 if information about the facilities indicates that those constructed between 1950 and 1977 are less likely to have potential for lead hazards, such as

their having lower lead concentrations in their leaded paint or less leaded paint, or both. Similarly, the user may wish to develop criteria with two (or more) pre-1978 dates for facility classification, such as pre-1950 (Class A1) and 1950-1959 (Class A2).

6.6.1.1 Any other facility that is known to have significant areas of deteriorated paint that is known or can reasonably be presumed to be leaded.

6.6.1.2 Any other facility that is known or can reasonably be presumed to have other extensive lead hazards.

6.7 Class B Facilities:

6.7.1 Any facility built since 1960 and before 1978, except as provided in 6.8.2.

6.7.2 Any facility built in 1978 or later in which there is specific evidence that lead-containing paint, including pre-1978 paint stocks, paint sold for nonresidential use, or imported paint has been used.

6.7.3 Any facility built in 1978 or later with an environmental source of lead contamination, such as:

6.7.3.1 Facilities within several hundred yards (meters) of an outdoor steel structure or superstructure or an industrial or mining source of lead,

6.7.3.2 Facilities containing building components, or owner-supplied fixtures or equipment, that have been identified as sources of lead hazards by an appropriate agency. An example is lead-containing vinyl miniblinds.

6.7.4 Any facility built in 1978 or later in which an industrial process or hobby likely to produce lead contamination has been or is being performed in a common area or about which the owner or lessor has been or reasonably should be aware.

NOTE 4—HUD Guidelines, Chapter 16, and CDC Statement, pages 22 and 24, and CDC Guidance, page 45, list some potential sources of environmental, occupational, and hobby lead contamination.

6.7.5 Any facility built since 1978 for which the owner or lessor has been notified by the local water authority that lead levels in tap water exceed the EPA Action Level listed in 40 CFR 141.

6.8 *Class C Facilities:*

6.8.1 Any other facility built in 1978 or later.

6.8.2 Any facility built before 1978 for which there is a complete and reliable history that excludes the past use of lead-containing paint and excludes the occurrence of activities with the potential to create lead hazards.

NOTE 5—If there is significant uncertainty about the basis for classifying a facility as Class C, classify as Class A or Class B instead.

6.9 *Evaluation and Program Implementation*—Decide whether to evaluate for lead hazards, and implement applicable programs, as follows:

6.9.1 *Class A or Class B facility*—Decide whether to evaluate for lead hazards.

6.9.1.1 Consider such facility-based factors as its use, occupancy, and condition.

6.9.1.2 Consider such location-based factors as neighborhood condition, existence and reliability of community blood lead screening data, and the legal, regulatory, and guidance environment.

6.9.1.3 If the facility is evaluated, base the evaluation on the procedures of Section 7.

6.9.2 *Class C Facility:*

6.9.2.1 Unless new information is discovered that could change its classification, a Class C facility does not require further action under this guide.

6.9.2.2 Implement facility environmental, safety, and health programs in accordance with applicable laws, regulations, and the policies of the owner, property manager, and, as applicable, lessor(s).

6.10 Document the classification for each facility.

7. Evaluating Lead Hazards

7.1 Lead hazard evaluation is used to identify current lead hazards and the potential current and future sources of lead hazards, in order to support decision-making for implementing the lead hazard management program application of lead hazard control methods. Fig. 4 illustrates the procedure.

7.1.1 Lead hazard evaluation methods include lead-based paint inspection, lead risk assessment, and paint characterization.

7.1.2 Allowable levels of lead in dust and soil are listed in EPA Guidance on the identification of Lead Hazards, reproduced in HUD Guidelines Chapter 5, or in state or local regulations.

7.2 A facility in which a child with an environmental intervention blood lead level has been detected requires an immediate response independent of any classification system. It takes priority over all other facilities. Respond to EBL cases in accordance with Section 13.

7.3 Prioritize Class A and Class B facilities, or groups of these facilities, to consider for lead hazard evaluation. Give the first priority to facilities currently occupied, or planned to be occupied, by children under six, or a woman known to be pregnant. Among these, give Class A priority over Class B. Then prioritize according to the following factors; other things being equal, give Class A priority over Class B.

7.3.1 Date of construction.

7.3.2 Age and physical condition of the facility.

7.3.3 Presence of environmental sources of lead contamination.

7.3.4 Known existence and number of children with elevated blood levels of lead (EBLs) in the neighborhood.

7.3.5 Plans for occupant turnover.

7.3.6 Plans for renovations or repairs for other reasons.

7.4 Determine whether there are groups of facilities with similar construction and maintenance histories that may be evaluated by sampling.

7.5 Decide whether to evaluate lead hazards and which methods to use according to the following:

7.5.1 Potential advantages of evaluation, including:

7.5.1.1 Reductions in cost, time, and effort from avoiding unnecessary or inappropriate lead hazard control activities.

7.5.1.2 Increased confidence of owner, staff, and occupants in the safety of the facility.

7.5.2 Whether particular evaluation methods must be used in order to comply with regulations, such as 24 CFR 35 for federally-assisted housing.

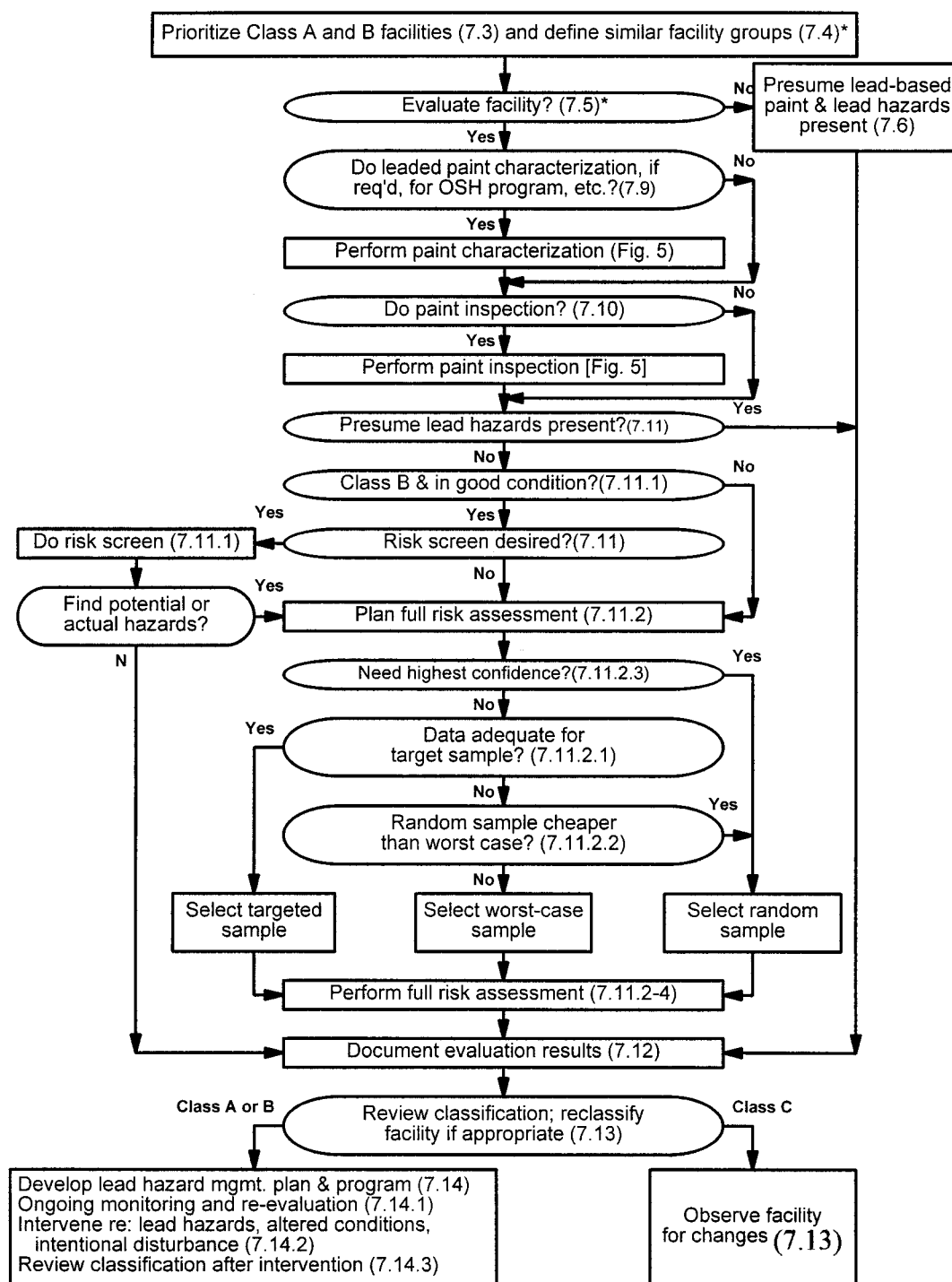
7.5.3 Whether independent verification and documentation of the lead hazard status of a facility is required by regulations or is desirable to minimize liability.

7.6 Unless and until lead-based paint inspections or leaded paint characterizations are performed in Class A and B facilities, presume that all paint in them is lead-based paint. Unless and until risk screens or lead risk assessments are performed in Class A and B facilities, presume that deteriorated paint is lead-based paint and that all dust and bare soil are lead-contaminated. Make these presumptions if tenant refuses access.

7.7 Follow ASTM standards except where other standards and practices are required by regulations. In that case, use the more stringent of the individual provisions between the regulation and the corresponding ASTM standard.

7.8 Perform visual evaluations of structures, substrates, and surfaces in accordance with 40 CFR 745 and HUD Guidelines, Chapter 5.

7.9 Decide whether to perform leaded paint characterization. It may be performed on all surfaces in lieu of lead-based paint inspections, or on individual surfaces that are inspected by



* Corresponding section numbers are parenthesized. While facilities can be classified without evaluation for the presence, concentration and condition of lead-based materials, evaluations generally lower time, costs and liability by helping managers increase confidence in their lead programs and avoid unnecessary control work. Some rules require evaluations of federally-owned or -assisted housing.

FIG. 4 Evaluation of Lead Hazards

be disturbed. Fig. 5 describes how the lead-based paint characterization procedure is used.

7.9.1 The purpose of lead-based paint characterization is to determine the lead content in paint in order to determine whether it is potentially hazardous. It may detect some types of lead hazards, such as high lead levels in accessible or chewable

paint. It does not detect all lead hazards. It is useful for compliance with OSHA regulations that apply to work-related airborne lead dusts, independent of the level of lead in the paint disturbed or dust dispersed.

7.9.2 Perform lead-based paint characterization if required by state or local regulations, such as for certain facilities before