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Standard Guide for Limited Asbestos Screens of Buildings¹

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1. Scope

1.1 The purpose of this *guide* is to (1) define good commercial and customary practice in the United States of America for conducting a baseline *limited asbestos screen* (hereinafter, *LAS*) to evaluate the presence of *asbestos-containing materials* (*ACMs*) in *major building systems* within the interior of *buildings* involved in *commercial real estate transactions*, including, but not limited to, acquisitions, sales, leasing and financing; (2) facilitate consistency in the industry as to the scope and *reports* associated with an *LAS*; (3) establish reasonable expectations and an industry baseline standard of care for an *LAS*; and (4) recommend protocols for *providers* in communicating observations, opinions and recommendations in a manner meaningful to the *user*.

1.2 *Other Purpose Limitations*—While an *LAS* is intended to reduce the risk of the presence of *ACM* within a *building*, it is not designed to eliminate that risk. The *LAS* presented in this *guide* is not intended to serve as a *comprehensive asbestos building survey*, *comprehensive inspection* or *comprehensive assessment* for the presence of *ACM* in all or most of the building systems throughout a *building*, nor does an *LAS* serve to adequately assess the presence of *ACM* in a *building* or portions thereof for pre-demolition, pre-renovation or OSHA notification purposes. For such services, a *comprehensive asbestos building survey* should be performed that meets applicable state and local regulations. In light of the foregoing purposes, this *guide* primarily offers scope and insight into the limited nature of *asbestos* screens driven by the commercial real estate market. It is recognized, however, that the *asbestos* industry utilizes procedures for sample collection, friability evaluation and analyses based upon such rules and regulations as AHERA, OSHA, and various state regulations. This *guide's* use of terms defined by such regulations (e.g., *friability*, *damage assessment*, *suspect materials*) in no way implies that the scope of this *guide* is designed to meet all other mandates of those regulations.

1.3 *Considerations Beyond This Scope*—The use of this *guide* is strictly limited to the scope set forth in this section.

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The scope of this *guide* does not include safety considerations, certification or licensure of *inspectors* other than requiring that work be performed in a safe manner and that *inspectors* be properly credentialed, as described in 3.3.8. The *LAS* set forth in this *guide* is not intended to eliminate the risk potential of *ACM* within the *building*, nor should it be interpreted as a *comprehensive building asbestos survey*, *comprehensive inspection* or *comprehensive assessment* for the presence of *ACM* in all or most of the building systems throughout a *building*, nor does this *LAS* serve to adequately assess the presence of *ACM* in a *building* or portions thereof for pre-demolition or pre-renovation purposes. Assessment of roofing materials and exterior materials (such as siding/stucco), conveying systems (such as escalators and elevators), energized systems (e.g., charged electrical systems, hydraulic and pneumatic pressure systems), or private single-family residences are specifically excluded from this *guide*. Such exclusions are addressed in *comprehensive building asbestos surveys*, or *users* may request the addition of the foregoing exclusions as Additional Services (see Section 11).

1.4 *Organization of the Guide*—This *guide* has 12 sections. Section 1 defines the Scope. Section 2 is Referenced Documents. Section 3 is Terminology. Section 4 defines the Significance and Use of this *guide*. Section 5 describes *User Responsibilities*. Section 6 sets forth the components of an *LAS* under this *guide*. Section 7 describes the Interview and Report Review process. Section 8 describes the scope of the *building walk-through*. Section 9 provide Analytical Guidelines. Section 10 describes *LAS report* contents. Section 11 identifies Non-Scope Considerations. Section 12 lists keywords for Internet reference.

1.5 *Uncertainty Is Not Eliminated*—A *LAS* is not designed to wholly eliminate uncertainty regarding the potential for the existence of *asbestos-containing materials* within the building systems of a *building*. Conformance with this *guide* is intended to reduce, but not eliminate, uncertainty regarding the potential for *asbestos* in *major building systems* within *buildings*. Although such uncertainty is generally reduced in proportion to an increased number of sampling locations and increased number of samples collected, this *guide* does not purport to be *comprehensive* or fully evaluate a *building* for the presence of *asbestos-containing materials*.

1.6 This guide offers a set of instructions for performing one or more specific operations and should be supplemented by education, experience and professional judgment. Not all aspects of this guide may be applicable in all circumstances. This ASTM standard guide does not necessarily represent the standard of care by which the adequacy of a given professional service must be judged nor should this document be applied without consideration of a project's unique aspects. The word "standard" in the title means only that the document has been approved through the ASTM consensus process.

2. Referenced Documents

2.1 ASTM Standards:²

E1368 Practice for Visual Inspection of Asbestos Abatement Projects

E2356 Practice for Comprehensive Building Asbestos Surveys

2.2 Other Documents:

Model Accreditation Plan, 40 CFR Part 763

3. Terminology

3.1 *Scope*—This section provides descriptions of terms and a list of acronyms for many of the words used in this *guide*. The terms are an integral part of the *guide* and are critical to understanding it.

3.2 Definitions:

3.2.1 *asbestos*—any of six naturally occurring fibrous minerals found in certain rock formations.

3.2.1.1 *Discussion*—Of the six, chrysotile, amosite and crocidolite are most commonly found in building materials. When mined and processed, *asbestos* is typically separated into very thin fibers. Because *asbestos* is strong, incombustible and corrosion-resistant, *asbestos* has been used in many commercial products. Its use peaked in the period from World War II into the early 1970s, although significant quantities of asbestos were used in some common building materials through the middle and into the late 1980s (especially drywall joint compound, stucco and flooring materials). Some newly purchased or installed non-friable building materials, such as roofing cement and caulks, may contain asbestos. When inhaled or ingested, *asbestos* fibers can cause serious health problems.

3.2.2 *asbestos-containing material (ACM)*—a building material containing more than one percent (1 %) *asbestos* using Polarized Light Microscopy (PLM).

3.2.2.1 *Discussion*—Some state laws promulgate lower thresholds (e.g., California at one-tenth of one percent (0.1 %)).

3.2.3 *bulk sample*—a sample of suspect *asbestos-containing material* collected for identification and determination of the quantity of *asbestos* present in said sample.

3.2.4 *commercial real estate transaction—for purposes of this guide*, a transfer of title to (i.e., sales/acquisition) or

possession (i.e., lease) of improved real property or receipt of a security interest in improved real property (i.e., lending) excepting individual dwellings.

3.2.5 *component*—a portion of a major building system or building element.

3.2.6 *friable*—a material which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

3.2.6.1 *Discussion*—This may also include previously non-friable material, which is damaged or deteriorated. Examples of *friable* materials include, but are not limited to, acoustic plaster, acoustic ceiling texture, ceiling tile and panels, fireproofing materials on structural members, corrugated duct insulation, paper duct insulation, and pipe/vessel insulation. Note, however, some jurisdictions (e.g. New York City) define *friable* as being able to be reduced to powder by any mechanical means.

3.2.7 *guide*—a series of options and instructions that do not recommend a specific course of action.

3.2.8 *interviews*—discussions with those knowledgeable about the *building*, its construction and history.

3.2.9 *laboratory*—an entity accredited for analysis of asbestos in *bulk samples* by the NVLAP of the NIST, or the AIHA Bulk Asbestos Proficiency Analytical Testing Program, or both, or meeting any applicable state accreditation requirements, or combination thereof.

3.2.10 *National Emission Standards for Hazardous Air Pollutants (NESHAP)*—rules promulgated by US EPA, under the Clean Air Act. Notably, the *asbestos NESHAP* rule requires *building* owners to inspect *buildings* for *asbestos-containing material* prior to renovation or demolition. In some areas, responsibility for administration of the *asbestos NESHAP* has been delegated to a state or local government agency.

3.2.11 *non-friable materials*—those materials not meeting the definition of *friable*, as that term is defined in this *guide*.

3.2.11.1 *Discussion*—Examples of *non-friable* materials include vinyl and asphalt floor tile, sheet vinyl flooring (the backing is *friable* if disturbed), plaster, stucco, paint, composition roofing, finishing/surface texturing materials where the fibers are firmly bound in a hard material, skim coat applications on wall/ceiling substrates, floor leveling compounds, fiber-cement pipes, flooring mastics, and drywall joint compound provided that the material is not damaged.

3.2.12 *observe*—to conduct an *observation* pursuant to this *guide*.

3.2.13 *practice*—a definitive procedure for performing one or more specific operations or functions that does not produce a test result.

3.2.14 *provider*—the firm, company, or entity retained by the *user* to perform the *LAS* and employing, either directly or through a sub-consulting contract, the *inspector*.

3.2.14.1 *Discussion*—The *provider* and the *inspector* may be the same physical person.

3.2.15 *report*—a document produced by the *provider* documenting the services performed for the *user*.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

laboratory results and conclusions in conformance with the requirements of this *guide*.

3.2.16 *standard*—as used in ASTM, a document that has been developed and established within the consensus principles of the Society and that meets the approval requirements of ASTM procedures and regulations.

3.2.17 *user*—the person, persons or entity retaining the provider to perform the LAS.

3.2.17.1 *Discussion*—A *user* may include, but is not limited to, an actual or potential purchaser, actual or potential tenant, owner, existing or potential mortgagee, lender, or property manager of the *building*.

3.3 Definitions of Terms Specific to This Standard:

3.3.1 *actual knowledge*—the knowledge actually possessed by an individual who is a real person, rather than an entity.

3.3.1.1 *Discussion*—Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

3.3.2 *baseline*—the minimum level of observations, inquiry, research, document review and preparation of opinions for conducting an LAS as described in this *guide*.

3.3.3 *building*—any structure identified by the user for purposes of a LAS.

3.3.4 *comprehensive*—complete, thorough, entire, methodical and detailed.

3.3.5 *comprehensive building asbestos survey*—a *comprehensive* assessment of building systems throughout the *building* in order to identify ACM present in the *building* (see Practice E2356).

3.3.5.1 *Discussion*—*Comprehensive* assessments for ACM are required prior to demolition or renovation of *buildings* or portions thereof (see 3.2.10 and applicable state or local regulations). This *guide* and the LAS presented herein are not intended to be *comprehensive* in scope or purpose.

3.3.6 *easily observable*—describes items, components and systems that are conspicuous, patent, and which may be observed visually during the *walk-through* without intrusion, removal of materials, and exploratory probing.

3.3.7 *exterior*—that portion of the *building* not defined herein as *interior* (see 3.3.9).

3.3.8 *inspector*—a person conducting a LAS pursuant to this *guide* who is appropriately trained and who has obtained appropriate licensure, registration, accreditation, or certification as an asbestos inspector in the locale in which the LAS is to occur.

3.3.8.1 *Discussion*—Appropriate training includes, at a minimum, completion of an asbestos training course as described in 40 CFR 763 (published February 3, 1994 at 59 FR 5236) and meeting any additional requirements of the state and local authorities having jurisdiction at the site where the LAS is performed. Many states (e.g., MA, RI, CT, VT, NY) require a license to perform inspections for ACM even if samples are not taken.

3.3.9 *interior*—as consistent with the definition under the MAP, the interior space of any *building* including exterior

hallways connecting *buildings*, porticos, and mechanical systems used to condition interior space.

3.3.10 *LAS observations*—observations of representative *major building systems* to the extent that they are *readily accessible* and *easily observable*.

3.3.10.1 *Discussion*—This does not mean all *suspect materials* on *major building systems* in the *building* are observed.

3.3.11 *LAS sampling*—collecting samples of *suspect ACM* from representative *major building systems* of the *building* in accordance with the requirements of this *guide* and does not mean all *suspect materials* on *major building systems* in the *building* are sampled.

3.3.11.1 *Discussion*—Sampling protocols are discussed in more detail in this *guide*.

3.3.12 *limited*—not *comprehensive* in scope or purpose; will not eliminate the risk potential for ACM within a *building*.

3.3.12.1 *Discussion*—The term “*limited*” as utilized for this *guide* necessarily provides for LAS observations and LAS sampling of *readily accessible major building systems* in the *building*.

3.3.13 *limited asbestos screen (LAS)*—a review of relevant documents, interviews, LAS observations of the *readily accessible major building systems* in a *building*, LAS sampling of *suspect materials* thereof, submission of the samples to a *laboratory* for analysis of *asbestos* content, and preparation of a *report* for the purpose of determining the presence and condition of ACM in accordance with and subject to the limitations set forth in this *guide*.

3.3.14 *major building system*—interacting or independent components or assemblies, which form single integrated units, that comprise a *building* and its site work as follows: mechanical (plumbing and HVAC), structural (beams, columns and decks) and architectural (ceilings, walls and floors).

3.3.14.1 *Discussion*—Charged electrical systems, conveying systems (such as elevators and escalators) and energized systems are excluded from this definition for purposes of this *guide*, as further described under 1.3 and Section 11.

3.3.15 *multi-unit apartment complex*—a *building* (or group of *buildings* in close proximity) consisting of more than one residential unit.

3.3.16 *multi-story building*—a *building* with more than one story, excluding a *multi-unit apartment complex*.

3.3.17 *nondestructive*—the use of coring tools, utility knives or similar tools in order to collect small samples of *suspect materials* for LAS sampling.

3.3.17.1 *Discussion*—Such sampling necessarily involves the removal of a small sample of *suspect material* but generally does not cause objectionable damage to such materials. This is discussed in more detail under 8.7.1.

3.3.18 *non-friable organically bound (NOB) materials*—materials that are not *friable* and that consist of fibers and other particulate matter embedded in a solid matrix of asphaltic, vinyl or other organic substances.

3.3.18.1 *Discussion*—Examples are vinyl asbestos floor tile or other materials where small fiber size is not a concern.