This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

Designation: D7390 – 18ε1

Standard Guide for Evaluating Asbestos in Dust on Surfaces by Comparison Between Two Environments[1]

This standard is issued under the fixed designation D7390; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ε1 NOTE—Editorial corrections were made throughout in October 2018.

1. Scope

1.1 There are multiple purposes for determining the loading of asbestos in dust on surfaces. Each particular purpose may require unique sampling strategies, analytical methods, and procedures for data interpretation. Procedures are provided to facilitate application of available methods for determining asbestos surface loadings and/or asbestos loadings in surface dust for comparison between two environments. At present, this guide addresses one application of the ASTM surface dust methods. It is anticipated that additional areas will be added in the future. It is not intended that the discussion of one application should limit use of the methods in other areas.

1.2 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.* For specific warning statements, see 5.7.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D5755 Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Number Surface Loading

D6480 Test Method for Wipe Sampling of Surfaces, Indirect Preparation, and Analysis for Asbestos Structure Number Surface Loading by Transmission Electron Microscopy

E456 Terminology Relating to Quality and Statistics

E2356 Practice for Comprehensive Building Asbestos Surveys

3. Terminology

3.1 *Definitions*—Unless otherwise noted all statistical terms are as defined in Terminology E456.

3.1.1 *activity generated aerosol, n*—a dispersion of particles in air that have become airborne due to physical disturbances such as human activity, sweeping, airflow, etc.

3.1.2 *background samples, n*—samples taken from surfaces that are considered to have concentrations of asbestos in surface dust that are representative of conditions that exist in an environment that is affected by only prevailing conditions and has not experienced events, disturbances or activities unusual for the environment.

3.1.3 *control, n*—an area that is used as the basis for a comparison.

3.1.3.1 *Discussion*—This could be an area where the dust has been previously characterized, an area thought to be suitable for occupancy, an area that has not experienced a disturbance of asbestos-containing materials, or that is for some other reason deemed to be suitable as the basis for a comparison.

3.1.4 *control samples, n*—samples collected for comparison to the study samples.

3.1.4.1 *Discussion*—These differ from background samples in that they are collected: either: in an area where the dust has been previously characterized, or in an area that has not experienced a disturbance of asbestos-containing materials, or in an area that is for some other reason deemed to be suitable as the basis for comparison.

3.1.5 *dust, n*—any material composed of particles in a size range of <1 mm.

3.1.6 *environment, n*—well defined three-dimensional area and everything that is in it.

[1] This guide is under the jurisdiction of ASTM Committee D22 on Air Quality and is the direct responsibility of Subcommittee D22.07 on Sampling, Analysis, Management of Asbestos, and Other Microscopic Particles.

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[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.

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