FOREWORD

The second edition of this volume includes basic standards for sample collection and the assessment of indoor environments for mold contamination. These standards were developed by the IESO Standards Sub-Committee, and adopted by an advisory board representing all aspects of mold contamination and its affect on property. The standards are reviewed periodically to be updated and revised as necessary. All changes to the standards must go through the standards sub-committee and be approved by a majority vote of the advisory board.

Your comments are welcome for the improvement of these standards for future additions. Please direct your suggestions to IESO, 4248 Park Glen Road, Minneapolis, MN 55416.

About IESO

IESO is a non-profit organization founded in 2002 that provides a national forum for the development and publication of voluntary consensus standards for the assessment of indoor environments.

Mission Statement

To be the foremost developer and provider of voluntary consensus indoor environmental quality standards, related technical information, and services having recognized quality and applicability that promote public health and safety, and the overall quality of life.

Strategic Objectives

To establish standardized procedures for the assessment of indoor environments for contaminants.

To establish standards that protect both inhabitant and inspector during the course of assessing indoor environments for contaminants.

To establish certification programs to promote compliance with the established standards.
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SECTION 1. COLLECTION OF ENVIRONMENTAL SAMPLES TO BE ANALYZED FOR MOLD CONTAMINATION

The following standards in Section 1 have been developed with the intent of providing step-by-step standards of practice for the collection of environmental samples for mold contamination. As such, the standards in Section 1 do not include indications for sampling or data interpretation.

Where applicable, these standards were based on the information provided by the manufacturer(s) of each sample collection device. Accredited laboratory protocols for sample collection using the devices and procedures described in these standards may go beyond these minimum standards, and should be followed at the discretion of the end user.

IESO does not endorse or recommend the use of any specific product. The manufacturers and/or suppliers of the sample collection devices described in these standards have provided IESO with peer-reviewed, published validation studies demonstrating the accuracy and applicability of each sample collection device.
1. Scope

1.1 This practice covers the procedures for obtaining samples of mold by the use of clear adhesive tape.

2. Terminology

2.1 Chain of custody form, a written form that contains fields for company information, sample identification, sample information, and analysis requested. This form must accompany samples to be analyzed by a laboratory. Provides a signed, recorded history of the “custody” of every sample.

2.2 ISO, International Organization for Standardization (ISO) is a worldwide federation of national standards bodies.

2.3 ISO 17025, the ISO standard for testing laboratories titled: “General Requirements for the Competence of Calibration and Testing Laboratories”.

2.4 Accredited Laboratory, a laboratory that has been accredited by a recognized accrediting agency to the ISO 17025 Standard.

2.5 Microscopic Analysis, the analysis of a sample by direct microscopy using validated non-culture based methods.

3. Equipment and Supplies

3.1 Clear adhesive tape, must have optical characteristics suitable for microscopic analysis, and be compatible with stains used for laboratory analysis (Scotch™ Transparent Tape (07457-8) or equivalent; or contact an accredited laboratory for suitable adhesive material).

3.2 Microscope slides, plastic or glass.

3.3 Microscope slide holder or new sealable plastic bags, with zip-type or other sealable closure.

3.4 Permanent ink marker or pen.

3.5 Chain of custody form.

4. Method Summary

4.1 Remove a strip of tape no longer than 3 inches and fold one half inch over at one end taking special care to not touch the sticky surface to the skin or any other non-test surface, and holding the tape by the folded end, carefully apply the tape to test surface and slowly remove with steady force.

4.2 Only one surface sample should be taken per strip of tape. Laboratory analysis of the tape sample is typically less than 1-2 cm². Contact the laboratory for specific limitations.

4.3 There should be a light deposit of material on the tape. Too much material may interfere with the laboratory analysis.

4.4 Affix each tape sample to an individual microscope slide or to the inside of a plastic bag, avoiding folds or creases in the tape taking special care not to touch the tape surface to skin or any other surface.

4.5 Using a permanent marker, label the tape with the sample information, matching this information to the sample information on the chain of custody.

4.6 If microscope slides are used, place the slides in a slide holder, or in a sealed plastic bag.

4.7 Secure the samples and the chain of custody in a shipping container (no refrigeration needed) and deliver to the laboratory for analysis.

4.8 Samples should be sent to a laboratory that is in compliance with the ISO 17025 Standard for performing the microscopic analysis of adhesive tape for mold.