TO: Joint Committee on Biosafety Cabinetry
FROM: Robert W. Powitz, Chair of the Joint Committee
DATE: April 28, 2020
SUBJECT: Proposed revision to NSF/ANSI 49 – Biosafety Cabinetry: Design, Construction, Performance and Field Certification (49i154r1)

Revision 1 of NSF/ANSI 49, issue 154 is being forwarded to the Joint Committee for consideration. Please review the proposal and submit your ballot by May 19, 2020 via the NSF Online Workspace <www.standards.nsf.org>.

When adding comments, please identify the section number/name for your comment and add all comments under one comment number where possible. If you need additional space, please upload a word or pdf version of your comments online via the browse function.

Purpose

The purpose of this ballot is to affirm revised language in Standard 49 Normative Annex 5 regarding air velocity measurements and the field certification label.

Background

The issue proponent contends that Normative Annex 5 does not explicitly prohibit the use of hand-holding of the anemometer while performing the velocity measurements. Further, details surrounding the certification label are ambiguous is N-5.12.1, and some slight revisions would clear up potential confusion.

If you have any questions about the technical content of the ballot, you may contact me in care of:

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c/o Allan Rose
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Normative Annex 5
(formerly Annex F)

Field tests

N-5.2 Downflow velocity

N-5.2.3 Method: setting nominal set point
The removable equipment nonessential to cabinet operation (acceptable option components) shall be removed prior to setting the nominal set points to replicate the as-manufactured conditions tested by the testing organization when required. The air measurement probe shall be held rigidly in a freestanding fixture that permits accurate positioning and does not distort the airflow pattern (ring-stand and clamp). This includes a ring-stand and clamp, or manufacturer supplied probe holder, but not hand-holding of the probe.

N-5.3 Inflow velocity (face velocity) test

N-5.3.3 Methods
One of these methods was validated per cabinet model and provided by the manufacturer, which was reviewed and approved by the testing organization. Manufacturer validation procedures contained no fewer than ten replicate tests. The testing organization's approval will be based on review of data and successful reproduction of test results. The validated alternate method is on the manufacturer's data plate. The air measurement probe shall be held rigidly in a freestanding fixture that permits accurate positioning and does not distort the airflow pattern. This includes a ring-stand and clamp, or manufacturer supplied probe holder, but not hand-holding of the probe.
5.12.1 Field certification label

Biosafety cabinets field tested to this Standard shall include the following information:

- date of field certification;
- date cabinet should be field recertified: no later than __________________________
- certifier's report number (reference document showing tests performed and results);
- name of certifying company, company website, and telephone number. A street address shall be used if a website is not available;
- unit serial number, certifier's report number (reference document showing tests performed and results); and
- signature of the person who performed the field certification tests.

**Rationale:** This language explicitly disallows the use of hand-holding of the anemometer during velocity measurement methods, and clarifies the collection of field certification data.