

**Meeting Summary  
Steering Committee  
NSF International Biosafety Cabinet Field Certifier Accreditation Program  
Las Vegas, Nevada  
April 17, 2016**

Maren Roush (NSF International) read NSF's Antitrust Statement and initiated the meeting.

**Quality Control**

Maren Roush (NSF International) discussed current concerns within NSF International about the quality of work performed by some NSF Accredited Field Certifiers. NSF has received complaints about issues such as: certifiers not using ring stands to take downflow velocity measurements (holding the anemometer probe by hand), using incorrect test grids, using the wrong correction factor for the secondary method inflow velocity, and even missing visible holes in HEPA filters during the filter scan. Ms. Roush explained that NSF has a Quality and Compliance group that is separate from the Biosafety Cabinetry Program Office. When the program office receives complaints about accredited field certifiers from their customers or competitors, those complaints are forwarded to the Quality and Compliance group, cataloged, and investigated. (Refer to the NSF policies for more information regarding compliance procedures, sections GP-8 through GP-13.) Penalties for noncompliance with NSF program policies range from minor corrective action plans to withdrawal of accreditation and public notice in extreme cases.

Ms. Roush explained that some people are hesitant to lodge complaints, but wanted to encourage them to do so, since addressing problems makes both the NSF Mark and the Accreditation Program stronger. In some cases, there may not be tangible evidence to back up a complaint (in which case, the complaint is still appreciated for informational purposes, but NSF cannot investigate based on hearsay, especially if the person making the complaint is a direct competitor). Examples of good evidence to submit with complaints are: links to websites falsely representing individuals as NSF Accredited, copies of test reports that demonstrate a cabinet was not tested properly (wrong test grid or correction factor), written statement from facility about questionable test procedures, and videotapes of ineffective test methods. Field certifiers may need to work with their management to ensure it does not encourage behaviors that could negatively impact public health (for example, management should not have unrealistic expectations about how many BSCs can be tested each day).

Ms. Roush explained that, in the future, paper reviews will be conducted first for all complaints. Notices (both random and targeted) will be sent to field certifiers, requesting copies of test reports, and test reports will be examined for quality compliance. Cary Binder (ENV Services) asked whether, if test reports demonstrate questionable data, NSF will send technicians to the facility to certify the biosafety cabinet(s) in question. Ms. Roush said that this is a possibility, but NSF would have to be invited on-site by the facility. In addition, if the biosafety cabinets are found to be out-of-balance, this would not be proof beyond a doubt that the field certifier left them that way – if a lot of time has passed, someone else may have adjusted the biosafety cabinets, either by accident or on purpose. Todd Urton (QCC) and Dennis Miller (AABC Testing

Inc.) agreed with this, saying that it is not unusual, in their experience, for safety officers or lab technicians to adjust cabinets after they are field certified (e.g. turning down the motor speed or lowering/raising the sash height).

Ms. Roush asked how NSF could encourage people to better communicate their concerns to NSF. Alex Atmadi (Esco) asked for clarification on how to submit a complaint to NSF. Ms. Roush stated that she can serve as a contact, and will forward all complaints to NSF's Quality and Compliance group. Jason Shields (NSF International) heads up this area. He can be reached at [jshields@nsf.org](mailto:jshields@nsf.org). Rene Soetens (Con-Test) suggested that an annual report be sent out summarizing the number and types of complaints filed under the NSF Biosafety Cabinet Field Certifier Accreditation Program each year. NSF agreed to look into providing this information.

### **Alarm Requirements for Canopy Connections/Customer Communications**

Ms. Roush thanked the meeting participants for working with NSF to ensure that the 2010 revisions to NSF/ANSI 49 related to canopy alarms were being implemented in the field after a phase-in period. She welcomed field certifiers to forward any questions or complaints on this issue to NSF. When talking with facilities and users about this issue, she can explain the standards development process and why the Joint Committee felt it was important to update the standard when it did. She further stated that NSF would like Accredited field certifiers to have an ongoing relationship with their customers, so that they can provide information about upcoming changes to the standard in a timely fashion and promote public health through better communications/education.

### **NSF's Customer Database**

Ms. Roush emphasized that NSF Accredited field certifiers should try to be proactive in sending NSF updated contact information if they have moved or switch companies. In addition, calibration records for test equipment are required to be submitted to NSF once a year.

### **Decontamination Test Development**

For the past two years, a task group headed up by Bob Jones (NSF Accreditation Program Proctor) has worked to detail a decontamination test for the practical exam, as directed by the Steering Committee. Mr. Jones provided the Steering Committee with draft decontamination data sheets, stating that there are 9 key concepts the task group felt were most important for a field certifier to understand when conducting a decontamination test. The list can be defined as:

1. Proper displaying of signage
2. Proper calculation of decontaminating and neutralizing agents
3. Safe handling and transportation of decontamination agents
4. Proper setup procedures and sealing of the cabinet
5. Decontamination process
6. Neutralization, ventilation, and cleanup process
7. Formaldehyde monitoring and reporting process
8. The use of proper PPE

## 9. Emergency protocol

Copies of the draft data sheets for formaldehyde, hydrogen peroxide and chlorine dioxide decontamination methods are attached to this meeting summary. Field Certifiers would have a simulated practical exam test using one of these methods (the field certifier can elect the method on which they are evaluated). In addition, questions relevant to all approved techniques will be added to the written examination.

The Steering Committee voted unanimously to remove the cabinet leak test and replace it with the decontamination test. The decontamination test will be a primary test. The implementation date for this change was proposed as January 1, 2017. Three months after implementation, the test data will be reviewed to see if revisions to the test methods and/or written examination questions are needed.

### **Action Items:**

- the proctors shall provide proposed test sheets and corresponding score sheets to the Program Office for distribution to the Steering Committee for comment and revision if necessary;
- written examination questions related to decontamination technologies shall be developed and added to the written examination (propose at least 2-3 questions per decontamination method); and
- the Program Office will advertise the changes to the practical examination tests once the data sheets are available and can be posted publicly. This public notice will also allow training institutes advanced notice of the upcoming changes to the Accreditation Program.

### **Pitot Tube Traverse Method**

Mr. Jones described the current practical examination test for calculating the inflow for type B2 cabinets using an anemometer and pitot tube. He said that nobody in the industry uses this method anymore and that the manufacturers' recommended secondary inflow methods (typically using a constricted access opening) are more accurate. Bill Peters (NuAire) made the motion to disassociate the pitot tube duct traverse measurement from the current practical examination test for type B2 inflow (but still have field certifiers test the inflow of a type B2 cabinet in order to achieve accreditation). Ken Barkley (BIOLAB) seconded the motion. There was further discussion on this topic. The motion was revised as follows: field certifiers will continue to demonstrate their competency with respect to measuring inflow velocity using both the DIM and constricted access opening methods. One of these two tests must be conducted on a type B2 cabinet, with the concurrent balance measured at the same time, in order to demonstrate the candidates' understanding of pitot tubes and duct traverse measurements. The test will be renamed from inflow velocity (type B2) to "concurrent balance value test". The motion passed unanimously. The implementation date will be January 1, 2017.

## **Committee Membership**

Ms. Roush said that the issue of committee membership will be reexamined at the next Steering Committee meeting, which will take place in conjunction with the annual ABSA conference in Grapevine, Texas, in early October.

## **New Business**

Mr. Urton raised the issue of the units referenced in the vibration test in NSF/ANSI Standard 49, which are inches rms amplitude. The standard specifies that a vibration analyzer with a minimum reliable reading of  $1 \times 10^{-4}$  in rms amplitude be used for the test. However, it is not possible to purchase vibration analyzers that measure in rms amplitude anymore. Is there another unit of measure that NSF can suggest in regards to vibration meters? Cary Binder recommended writing an issue paper and submitting it to the Joint Committee for consideration.

The meeting was adjourned. The next meeting of the Steering Committee for the NSF Biosafety Cabinet Field Certifier Accreditation Program will take place at ABSA in October 2016. Time and meeting location are TBD.