Microbiology Expert Committee (MEC)
Meeting Summary

March 8, 2022

1. Roll Call:

   Cody, Chair, called the meeting to order at 1:40pm Eastern on March 8, 2022 by teleconference. Attendance is recorded in Attachment A – there were 9 members present. Associates present: Carl Kircher, Anagha Chitre, Debbie Bond, Jessica Jensen, Joe Guzman, Stacey Chumura, Thekkekalathil Chandra, Bryan and Diuto Esiobu.

   Jody motioned to approve the December 14, 2021 and January 18, 2022 minutes as written. The motion was seconded by Christabel and there was no further discussion. The motion was unanimously approved.

2. Membership

   Maria Friedman applied to become a voting member. She will replace Vanessa who wanted to resign from the Committee. A motion was made by Ashley by email on February 25, 2022 to have Maria join the Microbiology Expert Committee as a voting member. The motion was seconded by Elisa on February 25, 2023. Vote - on 2/25/23: Hunter, Cody, Cristabel, Robin, Elisa, Matt, Enoma, Vanessa, and Jody. The motion was approved.

   Cody would like to take Jessica up on her offer to continuing with a third term. Robin confirmed addition makes it 15. There are no Other or AB applications pending. There was general committee support to ask her to serve another term. This puts the committee full at 15. Ilona noted a full committee right now is a good idea given the action items ahead for the Committee.

   Cody will follow-up with the CSDP EC this Thursday to get an OK to add Jessica.

   (Addition: Cody followed up with CSDP EC and they approved a third term for Jessica.

   Robin made a motion by email on March 22, 2022 to approve Jessica for a third voting term on the Microbiology Expert Committee. The motion was seconded by Maria on March 22, 2022.

   Cody provided the following voting results on 3/23/22 :

Hunter Adams	Lab	X	
Jody Frymire	Other		
Cody Danielson	Lab	X	
Robin Cook	Lab	X	motion
Lily Giles	AB	X	
Ashley Larssen	Lab		
Enoma Omoregie	Lab		
Christabel Monteiro	Lab	X	
Mary Robinson	AB		
Elisa Snyder	Lab	X	
Amy Hackman	AB	X	
Robert Royce	AB	X	
Matt Graves	Other	X	
Maria Freidman	AB	X	second

The motion passed.)

3. Training Course

Cody asked if people reviewed the work done last month and asked for input. A number of people have volunteered by email to Cody to start working on this class outside of the monthly meeting.

Thoughts on content: None

MEC Training Workgroup
Cody Danielson
Robin Cook
Amy Hackman
Diuto Esiobu
Brian Mercer
Tina Buttermore
Christabel Monteiro
Stacey Chmura
Jody Frymire
Ashley Larssen

4. Review of Comments to the DRAFT Standard

Comment 6:

1.7.3.6.b.i and 1.7.3.6.b.ii.a.4	*Sections 1.7.3.6(b)(i) and 1.7.3.6(b)(ii)(a)(4) The specified requirements for "verification" are somewhat vague in both instances. It could be interpreted as "yes, this is indeed a thermometer" for verification purposes. Suggestion for improvement: Replace all instances of the word "verification" with "calibration verification" in both places.*

Module 2 already talks about verification. Section 1.7.3.6 cites V1M2 5.5.13.1, which outlines requirements for verifications. The thought is to consider this as non-persuasive.

We won't be voting on any of these until we finish the entire table.

Comment 8:

1.7.3.1.a.ii and 1.7.3.1.a.iii	*V1M5 1.7.3.1.a.ii It appears this section is being brought into harmony with 1.7.3.1.a.iii and although ORELAP agrees this change will allow greater operational flexibility, we are concerned this could lead to abuse. The proposed language would allow any object to be included in the sterilization batch and used for the sterility check. Examples of inappropriate objects could include brand new glassware, anti-microbial objects, and objects with significantly less surface area than the filter funnels (e.g., small glass stopper). The intent is to make sure the funnels have been sterilized, so why are we allowing the laboratory to use a proxy that may have not been exposed to sample water? This seems like it will not add value. Please consider striking this change or defining appropriate objects.*

This was discussed in San Antonio. The suggestion was to change it to:

1.7.3.1.a.ii: The laboratory shall perform a sterility check on one (1) funnel per lot of pre-sterilized single use funnels using nonselective growth media. The laboratory shall perform a sterility check on one (1) funnel / or object representative in size and use per sterilization batch sterilized in the laboratory with non-selective growth media.

1.7.3.1.a.iii: The laboratory shall perform a sterility check on at least one (1) container for each lot of purchased, pre-sterilized sample containers with non-selective growth media. The laboratory shall perform a sterility check on one (1) container / or object representative in size and use per sterilization batch sterilized in the laboratory with non-selective growth media.

There was general agreement with these changes and the initial thought is that this comment is Persuasive.

Summary of Today's Discussion prepared by Cody:

We made a ton of headway during this afternoon's meeting regarding the confusion over method blank start/stop requirements for filtration methods. For those that were not on the call, below is the comment to the Draft Standard (DS) that we were discussing and the DS language:

Comment 9:

DS Section	Comment	DS language
1.7.3.2.a	*V1M5 1.7.3.2.a This seems like a change rather than a clarification. This could mean an increase in media plate consumption of close to 200% for laboratories using one filtration unit per sample (2 blanks for every 1 sample). This will likely lead to a shift from one filtration unit per sample to one filtration unit for the entire batch in order to cut down on the number of blanks. If the filtration units are sterilized (and checked), and stored appropriately, then it should not be necessary to run blanks on each one. Please consider striking this change.*	"For filtration technique, the laboratory shall conduct method blanks per the analytical method.. The filtration series may include single or multiple filtration units, which have been sterilized prior to beginning the series**.** At a minimum, the filtration series shall include a beginning and ending blank for each filtration unit."

We had discussed last month that there was confusion and thought that they had to run a method blank after each individual funnel.

After discussing today, we determined that the following language (in the DS and the 2016 Standard) "The filtration series may include single or multiple filtration units, which have been sterilized prior to beginning the series" more or less states that a 'filtration unit' is a funnel.
Therefore, our language in the DS: "At a minimum, the filtration series shall include a beginning and ending blank for each filtration unit" is saying that a beginning and ending blank is required for each funnel. This is NOT our intent.

We discussed several ideas before we had to end the call, including various options like:

- taking the language in the DS that combines funnels, filtration units, manifolds, filtration series like language and split it up
- defining 'filtration series' in the definitions of M5
- removing the language that is duplicative to the method and MCLAWD regarding filtration series (regarding 30 minutes and rinse water and sterilized prior to)
- changing language to make it clear when we are talking about a funnel, a manifold port and a filtration series to include what to do with the different kinds of funnels and what to do with multiple manifold ports

We decided that the language for the following sections needs to be edited and were working out how we want it to read. We know we need to change it so that the fact that each manifold port used requires a start and end blank.

a. For filtration technique, the laboratory shall conduct method blanks per the analytical method. The filtration series may include single or multiple filtration units, which have been sterilized prior to beginning the series. At a minimum, the filtration series shall include a beginning and ending blank for each filtration unit.
b. The filtration series is considered ended when more than thirty (30) minutes elapses between successive filtrations. During a filtration series analysis, filter funnels shall be rinsed with three (3) 20-30 ml portions of sterile rinse water after each sample filtration. In addition, laboratories shall insert a method blank after every ten (10) samples or sanitize filtration units by UV light (254-nm) after sample filtration.

We left off considering changing the second sentence of b) from "During a filtration series" to "During analysis."

Cody invited Committee members to continue the conversation by email and at the next meeting. This one is likely persuasive.

(Addition: 3-24-23 from Amy Hackman and Dwayne Burkholder for consideration:

- *For filtration methods, the laboratory shall perform method blanks for each analytical method.*
  - *i. For each reusable membrane filtration unit used during a filtration series, the laboratory shall prepare at least one method blank at the beginning and end of the filtration series. A filtration series is considered ended when more than thirty (30) minutes elapses between successive filtrations. The laboratory shall insert a method blank after every ten (10) samples/dilutions filtered through each reusable membrane filtration unit.*
  - *ii. For presterilized single use filtration units that consist of only the funnel, method blanks shall be performed as in section a)i) above.*
- *Laboratories may use a single membrane filtration unit or multiple membrane filtration units (i.e. manifolds). Method blanks shall be analyzed on each reusable membrane filtration (funnel/base) unit used to analyze samples, per a) above.*
- *Each membrane filter unit shall be rinsed with three (3) 20-30 mL portions of sterile rinse water after each sample/dilution filtration through the membrane filtration unit whether reusable or presterilized single use.*

- *Filtration units must be sterilized prior to beginning sample analysis. Pre-sterilized single use filtration units must be stored in a manner that ensures sterility. UV lights (254-nm) may be used to sanitize reusable filtration units in between each sample/dilution filtration. Sanitation of funnels does not replace sterilization of funnels.)*

5. New Business

None.

6. Next Meeting and Close

The next meeting will be by teleconference on April 12, 2022, at 1:30pm Eastern.

A summary of action items and backburner/reminder items can be found in Attachment B and C.

Cody adjourned the meeting at 3:04 pm Eastern.

Attachment A

Participants
Microbiology Expert Committee (MEC)

Members	Affiliation	Balance	Contact Information
Cody Danielson (Chair) (2022*) **Present**	Oklahoma	AB	Cody.Danielson@deq.ok.gov
Lily Giles (2022*) **Present**	Louisiana	AB	Lily.Giles@LA.GOV
Mary Robinson (2022*) **Absent**	Indiana	AB	mrobinson@isdh.IN.gov
Robin Cook (Vice Chair) (2024*) **Present**	City of Daytona Beach, EML	Lab	cookr@codb.us
Ashley Larssen (2024*) **Absent**	KC Water	Lab	ashley.larssen@kcmo.org
Jody Frymire (2022*) **Present**	IDEXX	Other	Jody-Frymire@idexx.com
Vanessa Soto Contreras (2023) **Absent**	Florida DOH	AB	Vanessa.SotoContreras@flhealth.gov
Elisa Snyder (2023*) **Present**	City of Austin – Austin Water Division	Lab	elisa.snyder@austintexas.gov
Hunter Adams (2023*) **Absent**	City of Wichita Falls – Water Purification	Lab	hunter.adams@wichitafallstx.gov
Enoma Omoregie (2024) **Absent**	NYC DOHMH	Lab	eomoregie@health.nyc.gov
Christabel Monteiro (2024) **Present**	Pace National, Analytical	Lab	christabel.monteiro@pacelabs.com
Robert Royce (2025*) **Present**	New Jersey	AB	Robert.royce@dep.nj.gov
Amy Hackman (2025*) **Present**	PA	AB	ahackman@pa.gov
Matt Graves (2025*) **Present**	ERA	Other	Matt_graves@waters.com
Ilona Taunton (Program Administrator) **Present**	The NELAC Institute	n/a	Ilona.taunton@nelac-institute.org

Attachment B
Action Items – MEC

	Action Item	Who	Expected Completion	Actual Completion
104	Implementation Guidance for Equilibrium.	Committee	TBD	See note in 5/11/21 minutes.
105	Discuss definition of Lot with Chair of CSDP EC.	Kasey Paul Junio	2/11/21	Started, but ongoing. 7/13/21: Remove
112	Develop Understanding Microbiology Course	Cody Committee	TBD	
113	Complete Response to Draft Comments Process	All	Ongoing	
114				

Attachment C

Backburner / Reminders – MEC

	Item	Meeting Reference	Comments
1	Update charter (if needed) every 5 years.	n/a	Ongoing
2	Review Method codes and send comments to Robin for Dan Hickman.		Moved to back-burner on 6/9/20.
3	Provide an update on what has been done with the method codes and database after Jennifer's review and internal EPA meetings.		This was moved from the Action Items table. Notes: 6/9/20: Ask Jennifer for a follow-up. 11/9/20 – Not available for a follow-up.