

**Microbiology Expert Committee (MEC)
Meeting Summary**

April 12, 2016

1. Roll Call and Minutes:

Robin Cook, Chair, called the meeting to order at 1:40pm EST by teleconference on April 12, 2016. Attendance is recorded in Attachment A – there were 7 members present. Associate Members present: Randi McCuin and Carl Kircher (2:05).

2. Standard Interpretation Request (SIR) # 301

Standard	2009 TNI Standard
Volume and Module (eg. V1M2)	V1M5
Section (eg. C.4.1.7.4)	1.7.3.1 ii
Describe the problem:	The micro standard discusses a method blanks to be performed every (10) samples. My question is what denotes a sample? My example is SM9222D that for each client's sample we will probably perform 3 dilutions - but the sample is the same. So would it be required to do a blank every 10 plates or every 10 job #s/samples?
Committee Comments:	
Response:	

SIR #301 (above) was received for committee response.

Patsy sent an email with her view:

3/11/16: my opinion on this SIR is that the blank is inserted after every 10 MF plates. That would correlate with SM9020 language that defines filtration samples as: *A test run is defined as an uninterrupted series of analyses.*

Jessica thinks a sample is a sample regardless of how many dilutions are done.

Robin asked if they are looking for rinsing technique? She asked what is trying to proved with the internal blank.

Jessica noted that the blanks help the labs figure out how far back in the analysis there is a blank problem. Dwayne noted that is why they require a blank every 10 or use a UV Sanitation unit.

Robin noted:

As the purpose of the “mid” blank is to check the analyst’s technique for carryover or other possible contamination, therefore this should be done every 10 plates. Any less frequency would constitute increased risk as there would be difficulty determining the last valid point without it.

Dwayne left the call at 2pm. Carl Kircher joined the call at 2:05.

Carl asked how do you assess system cleanliness? Someone made the technical decision it was best every 10 samples.

After further discussion Robin suggested adding the following to her text above: If a lab were using only one filtration set up and running all of the aliquots through it, the ”mid” blank is considered a system cleanliness check.

The committee comments are not the final answer, but it helps the committee come up with a final response. She asked that everyone review the comments and provide feedback towards preparing a final response.

3. Small Laboratory Handbook

Robin pulled up the new Standard and started reviewing comments she has received.

Robin is going to take the Standard and insert everyone’s comments of what should be in the Handbook. She will then talk to Paul Junio about what sort of format is needed. Ilona noted that inserted comments in the Standard is not what QS is expecting for the handbook. Robin noted that she will take the comments and put it in the format that is needed.

Robin will update the committee by email.

4. Glossary

Randi McCuin provided some comments by email. Robin distributed this marked up document to the committee for further work. Patsy and Gary also provided some comments by email.

The definitions were reviewed and an update to the document can be found in Attachment D. Further work will be done at the next meeting.

5. Action Items

A summary of action items can be found in Attachment B. The action items were reviewed and updated.

6. New Business

- An application was received for committee membership from Brad Stawick. Robin will distribute it for email and ask for a vote by email.

7. Next Meeting and Close

The next meeting will be held on May 10, 2016 at 1:30pm Eastern.

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

Robin adjourned the meeting at 2:53 pm Eastern. (Deb made motion to adjourn that was seconded by Mary. It was unanimously approved.)

**Attachment A
Participants
Microbiology Expert Committee (MEC)**

Members	Affiliation	Balance	Contact Information	
Robin Cook (Chair) Present	City of Daytona Beach EML	Lab	(386)671-8885	cookr@codb.us
Patsy Root (Vice-chair) Absent	IDEXX Laboratories, Inc	Other	(207)556-8947	patsy-root@idexx.com
Karla Ziegelmann- Fjeld Present	Microbiologics, Inc	Other		kfjeld@microbiologics.com
Jessica Hoch Present	TCEQ	AB	512-239-2353	Jessica.hoch@tceq.texas.gov
Colin Fricker Absent	Analytical Services, Inc	Lab		colinfricker@aol.com
Deb Waller Present	NJ DEP	AB	(609)984-7732	debra.waller@dep.nj.gov
Dwayne Burkholder Present until 2pm	Pennsylvania DEP	AB	(717)346-8213	dburkholde@pa.gov
Mary Robinson Present	Indiana State DOH	AB	(317)921-5523	mrobinson@isdh.in.gov
Elizabeth Turner Present	North Texas Municipal Water District	Lab	(972)442-5405 Ext 535	eturner@ntmwd.com
Po Chang Absent		Other		Dr.PoChang@yahoo.com
Gary Yakub Absent	Environmental Standards, Inc.	Other	(610)935-5577	gyakub@envstd.com
Ilona Taunton (Program Administrator) Present - Recorded	The NELAC Institute	n/a	(828)712-9242	Ilona.taunton@nelac-institute.org

Attachment B

Action Items – MEC

	Action Item	Who	Expected Completion	Actual Completion
1	Review Method Codes and send comments to Robin for Dan Hickman.	Deb	TBD	
4	Review Handbook and Method Codes before next meeting.	ALL	5/7/13	Handbook Complete.
12	Research possible effects of using bromine and whether it needs to somehow be included in the standard. Does not look like it.	Deb	November 2013 Meeting	
19	Provide EPA interpretation on temperature readings to Ilona. She will have it posted on the website.	Robin	1/31/14	
53	Finalize vote to post Interim Standard.	Ilona	10/23/15	Complete
54	Review previous minutes and pull out topics for the Handbook.	Robin	11/9/15	Canceled – Each committee member will do this for their section.
55	Ask Carl Kircher to prepare a table to list positive and negative organisms for specific tests.	Robin	12/31/15	
56	Prepare Draft or outline of assigned Handbook section. Email to committee.	All	12/7/15	Complete
58	Prepare DRAFT response to comments on the Standard and send to committee members.	Robin	2/9/16	Complete
59	Update Standard with everyone's Handbook comments and distribute to committee.	Robin	5/9/16	
60	Talk to Paul about Handbook format.	Robin	5/9/16	
61				

Attachment D

Glossary of Terms for Microbiology, Module 5

Buffered water (as in sterile buffered water). Deionized water to which a buffer has been added (usually phosphate buffer) to stabilize the media, especially from changes in pH; typically used as diluent and to rinse the membrane filtration apparatus and other labware used in bacterial studies.

Chlorine/Bromine residual. The amount of chlorine or bromine that remains active after a specified contact period.

Colony-forming unit (CFU). A method used to estimate the number of viable microorganisms in a test sample. A CFU does not equate to a single organism, because bacteria often occur as pairs, chains, and clusters, the units of CFU reflects this uncertainty.

Culture. 1) The cultivation of microorganism (bacteria, yeasts, molds, etc.) or tissue cells on specially prepared media. 2) A mass of organisms or cells cultivated on such a medium.

Diluent. A diluting substance.

False negative results. An error in a test in which the results improperly indicates no presence of a condition (the result is negative), when in reality it is present (positive).

False positive results. An error in a test in which the results improperly indicate the presence of a condition, when in reality it is not present (negative).

Filtration. A purification or concentration process where a liquid or gas is passed through a porous material to either remove particles or impurities, or to concentrate constituents.

Matrix: The material (water, soil, sediment) in which the chemical or potential toxicant is present, or to which the potential toxicant is added, in order for the organisms to be exposed to it.

Medium (Media pl.). Food or materials prepared for the growth and culture of bacteria or other microorganisms, commonly called culture medium.

Microbiology. The study of microorganisms, including their culture, economic importance, pathogenicity, etc. Organisms studied include viruses, rickettsias, yeasts, molds, bacteria, protozoans, and microzoa.

Most probable number (MPN). A method used to estimate the number of viable microorganisms in a test sample by using an indirect count method that employs dilutions and incubation of duplicate cultures across many serial dilution intervals; the units of MPN reflect the uncertainty.

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Peptone water (as in sterile peptone water). Any water soluble protein derivatives obtained by partial hydrolysis of a protein by an acid or enzyme during digestion and used in culture media in bacteriology.

Potable. Suitable for drinking [as defined or described in Federal and/or local regulations](#).

Quality Control: Specific, [documented](#) actions required to provide information for the quality assurance program, including [but not limited to](#), standardizations, calibration, replicates, control and sample checks suitable for statistical estimates of confidence of the data.

Reagent Grade Water. Water suitable for use in preparing critical reagents or for use in sensitive analytical procedures. Various professional organizations (e.g., ACS, ASTM, NCCLS, and USP) have provided minimal standards or guidelines for reagent water.

Reverse Osmosis. A technique for purifying water in which pressure is applied to force it through a semipermeable membrane in the opposite direction to that in normal osmosis.

Source water. When sampled for drinking water compliance, untreated water from streams, rivers, lakes, or underground aquifers, [or other sources](#), which is used to supply private and public drinking water supplies.

Sterile. Aseptic; free from microscopic organisms or any form of life. [\(note to Robyn this definition does not mean it must be endotoxin-free; which is fine for our purposes\)](#)

Cook, Robyn 5/10/2016 1:21 PM

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