

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

May 10, 2016

1. Roll Call and Minutes:

Robin Cook, Chair, called the meeting to order at 1:40pm EST by teleconference on May 10, 2016. Attendance is recorded in Attachment A – there were 5 members present. Associate Member present: Barb Sullivan and Jennifer Best.

The minutes from February 11, 2016 and April 12, 2016 were reviewed. Patsy made a motion to accept the meeting minutes with the change that Deb was present on 4-12-16. The motion was seconded by Mary and unanimously approved.

2. SIR # 301

Robin opened up the SIR #301 with the comments from the last meeting. The committee needs to develop a final response.

Robin asked for confirmation that it is OK to analyze 9 samples and then run a blank. There was agreement that this is correct.

Final Response:

The requirement of the standard is to perform a blank at least every 10 plates.

A motion was made by Patsy to accept the Final Response (above). The motion was seconded by Jessica.

Votes:

Robin – For

Patsy – For

Mary – For

Po – For

Jessica - For

The vote will be completed by email.

(Addition: Email votes:

Elizabeth – For (5/11/16)

Dwayne – For (5/24/16)

The motion passed and the response was forwarded to LASEC.)

3. Glossary

The committee continued their review of the Glossary. The current edition can be found in Attachment D.

It will be sent to the rest of the committee for final comment. It will then be sent back to the committee working on the Glossary.

4. Small Laboratory Handbook

Robin forwarded the Standard with the committee's comments to Quality Systems (QS). QS met yesterday and they started reviewing the information. They liked the idea of providing sample logbook pages. We will continue to incorporate the information into the Standard and then we need to edit out the Standard when we are done. The Handbook is not a substitute for the Standard.

Robin added everyone's comments into the Handbook. There are still some sections outstanding and these will be done as a committee instead. Robin reviewed a format example sent by Paul Junio. The information is summarized using bullet points. There are three main headings for each section: Definitions, Requirements, What Do I Do? We should pull our information together in a similar way.

Robin opened up the last version of the Standard with Handbook comments sent to committee members on 4-29-16. The committee started to review the Standard with thought to the three main section headings. Sections 1.4 and 1.5 were worked on to put them into the three bullet format. Robin distributed a copy of the changes to the committee members so they can use the format to update other sections.

Robin asked Mary, Patsy and Dwayne to redo their sections in the new format. Robin asked if someone can go through Section 1.6 and do something similar to what the committee did on the conference call today. (*Addition: Deb has volunteered for Section 1.6.*)

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.

(Additional Note: A motion was made by email on 4/13/16 by Patsy to add Brad Stawick to the committee. The motion was seconded by Elizabeth on 4/13/16 and the following votes were received:

Patsy – For (4/13/16)

Elizabeth – For (4/13/16)

Dwayne – For (4/13/16)

Karla – For (4/13/16)

Jessica – For (On Call – 5/10/16)

Mary – For (5/13/16)

Po – For (On Call – 5/10/16)

Robin – For (5/12/16)

Colin – For (5/12/16)

Gary – For (5/12/16)

Deb – For (5/16/16)

The motion passed and Brad will be added to the committee. Notifications were distributed to Ken Jackson and Bob Wyeth. The 2016 Charter was also updated.)

7. Next Meeting and Close

The next meeting will be held on June 14, 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 3:02 pm Eastern. (Mary made a motion to adjourn that was seconded by Jessica. 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) Present | IDEXX Laboratories, Inc | Other | (207)556-8947 | patsy-root@idexx.com |
| Karla Ziegelmann- Fjeld Absent | 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 Absent | NJ DEP | AB | (609)984-7732 | debra.waller@dep.nj.gov |
| Dwayne Burkholder Absent | 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 Absent | North Texas Municipal Water District | Lab | (972)442-5405 Ext 535 | eturner@ntmwd.com |
| Po Chang Present | | 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 | |
| 55 | Ask Carl Kircher to prepare a table to list positive and negative organisms for specific tests. | Robin | 12/31/15 | |
| 59 | Update Standard with everyone's Handbook comments and distribute to committee. | Robin | 5/9/16 | Complete |
| 60 | Talk to Paul about Handbook format. | Robin | 5/9/16 | Complete |
| 61 | | | | |
| | | | | |

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.

Disinfectant residual. The amount of disinfectant 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.

Cook, Robin 5/10/2016 2:11 PM

Deleted: Chlorine/Bromine

Cook, Robin 5/10/2016 2:11 PM

Deleted: chlorine or bromine

proot 3/13/2016 8:20 AM

Deleted: unit (colony)

proot 3/13/2016 8:21 AM

Deleted: bacterial or fungal cells

proot 3/11/2016 2:09 PM

Deleted: necessarily

proot 3/11/2016 2:10 PM

Deleted: .

proot 3/11/2016 2:11 PM

Deleted: in which

proot 3/11/2016 2:12 PM

Deleted: .

proot 3/11/2016 2:12 PM

Deleted: etc.

proot 3/13/2016 8:20 AM

Deleted: by microbiologists

proot 3/13/2016 8:33 AM

Deleted: living

proot 3/13/2016 8:32 AM

Deleted: . It is not a

proot 3/13/2016 8:34 AM

Deleted: but uses

Cook, Robin 5/10/2016 2:11 PM

Deleted: of MPN

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. [Free from all forms of life](#).

Cook, Robin 5/10/2016 2:15 PM

Deleted: Aseptic;

Cook, Robin 5/10/2016 2:15 PM

Deleted: f

Cook, Robin 5/10/2016 2:16 PM

Deleted: microscopic organisms

Cook, Robin 5/10/2016 2:16 PM

Deleted: or any form of life. (note to Robon this definition does not mean it must be endotoxin-free; which is fine for our purposes)