Microbiology Expert Committee (MEC)
Meeting Summary

January 14, 2014

1. Roll Call and Minutes:

Robin Cook, Chair, called the meeting to order at 1:30pm EST. Attendance is recorded in Attachment A – there were 6 members present. Associate Members present: Carl Kircher and Randi McCuin.

The December 10, 2013 minutes were reviewed. They will be approved at the next meeting.

Associate members need to let Robin and Ilona know they own a copy of ISO 17025 so they can be included in distributions of the draft working standard updates.

2. Membership and Charter

Robin will contact Gary Yakub to confirm his membership on the committee.

The final charter can be found in Attachment D.

3. Standard Interpretation Request (SIRs)

SIR # 133:

From Patsy:
SIR #133
Question: Appendix D.3.8(b)(6)(i) to NELAC Chapter 5
The laboratory has freestanding incubators that are not used every day for testing and turns them turned off and on with use. There would be times when the laboratory does not have temperatures documented twice per day with at least 4 hours apart for days of use. The incubators take about 30 minutes to 1 hour to reach the correct temperature. If the laboratory records the temperature when the samples are put in the incubator and when the samples are taken out, would this meet the standard? The laboratory would continue to record the normal morning and afternoon temperatures along with the times the samples were place in and taken out of the incubator.

Suggest Response from MEC
The section of the 2003 NELAC Standard indicates: "Temperature of incubators and water baths shall be documented twice daily, at least four hours apart, on each day of use".

This means if samples are in the incubator or water bath, the temperature of the incubator or water bath must be recorded twice that day.
For example, if a sample is retrieved from the incubator or water bath at 9 AM, the temperature can be recorded **at that time** and then again in 4 more hours, or no earlier than 1 PM that same day.

It seemed the general opinion of the MEC was that no interpretation was needed, but an example would be helpful.
Personally, I would like to note that this should be addressed in a revision of the 2009 TNI Standard to provide a more real-world option when labs are removing weekend or Holiday samples and the incubator/water bath will either be turned off, or otherwise not in use, after those samples are removed.

The relevant 2009 TNI Standard section is **1.7.3.7 b) v)** Incubators, Water Baths, Ovens. This section of the 2009 Standard has the same exact language as the 2003 NELAC Standard at Appendix D.3.8(b)(6)(i).

Discussion:

Robin noted that there is an EPA interpretation that should be considered. This interpretation can be included on the TNI Microbiology website page under documents. People should confirm with their AB if they are using this interpretation.

The 2003 and 2009 standards have the same text for this section.

Patsy said based on the current language in the standard, if you go in on Saturday morning to remove the samples, you still have to take another reading 4 hours later.

Carl provided some recommended language to solve this issue during the comment period in the Voting Draft Standard. Carl and Robin looked to find the language and found it:

COMMENT E: Clause 1.7.3.7(b)(v)(1) The ancient, carried-over EPA Microbiology requirements of requiring twice-daily incubator and waterbath temperature readings 4 hours apart on each day of use may be causing hardship on some laboratories that remove samples from the incubators and waterbaths on Saturday mornings and read the results. As currently written, the standard forces the analysts to stick around (and get paid?) for 4 more hours just to get the second incubator / waterbath temperature measurement. Maybe in the interest of reasonableness and accommodation to laboratories in tough economic times, and the lack of definitive requirement in Standard Methods or EPA ("should" in the latest DW Cert. manual), we can loosen the

requirement for Saturday morning conclusions of Microbiology sample tests. Recommendation: Add a last sentence to Clause 1.7.3.7(b)(v)(1), to read as follows: "An exception to the twice-daily temperature measurement documentation is permitted for the last day of the incubation period when samples are removed from the incubator or waterbath, the morning temperature(s) is subsequently measured and documented, and no other samples are present in the incubators and waterbaths that calendar day."

Robin had some ideas on how to add to Patsy's response. She would like to encourage labs to check with their ABs and that the expert committee will work on this language in the current standard update. She will work on some language for a final response to the SIR and send it out the committee for review and finalization.

SIR #98 and #132:

Robin pulled up the standard for assistance in answering the questions. The original responses and comments were reviewed.

There was more discussion on what type of water is being used and what type of checks are required.

Robin asked: If you purchase pre-analyzed water for the purpose of using it as a blank or dilution, does it have to meet the same requirements as reagent water you are using to make media with? Members of the NELAP AC thought any water that comes in contact with samples needs to meet the criteria.

Carl commented that FDOH requires that purchased source reagent water must be checked as per Standard Methods – QC and frequency. Lots stored at the laboratory for more than one month must be checked by the laboratory. Conductivity and pH need to be checked day of use. For dilution/rinse/buffer water purchased: Check lot as per Standard and Standard Methods. There are time frames in the requirement. There are sterility, pH and precipitate analysis requirements each month.

There was disagreement on sterility check requirements, but the current requirements are that these checks are performed. There would be more agreement with the requirement if it is a larger bottle that has been opened, but when it is sealed water in vials there is disagreement that sterility can be an issue.

The original response to SIR #133 stated:

If the water is used for only blanks, then only sterility needs to be checked at a frequency of once per lot.

If the water is used for serial dilutions, it is considered reagent water and needs to be treated as such. A vendor-supplied Certificate of Analysis for the required tests (the water quality for residual chlorine, specific conductance and heterotrophic plate count)

will be acceptable.

The NELAP AC did not agree with this response.

Carl noted that there are some method requirements that take priority over the standard.

Robin and Patsy commented that they do not understand what the difference is between having to send out the purchased water to another lab if you don't have testing capability (many small labs cannot test the metals) or using the Certificate of Analysis from the vendor.

Dwayne noted that Pennsylvania does not accept certificates because the vendor is not accredited. They want it run by an accredited lab.

Patsy noted that different types of water should be clearly separated in the Standard to make it clear what the requirements are for each type.

Pasty commented that she does not understand why things are done so differently in Europe. They accept accredited vendors. Everything in ISO is cohesive. Carl commented that Europe thinks of testing as a product and in n the US we think of it as a service.

The committee members are in agreement that if the pre-purchased water is only being used for blanks, then check for precipitate, verify pH and verify sterility when you get the lot.

Robin will work on language for the responses and send it to the committee members to review by e-mail She would like to complete this before the Louisville meeting or the following meeting. She asks that people continue to send her comments and ideas.

4. Louisville Meeting

Robin checked to see who will be in Kentucky for the next meeting. Ilona will check on phone line ability.

The agenda will include a summary of proposed changes to the Standard and completion of the SIRs. There will be open discussion times to get feedback from the TNI membership.

Patsy, Deb and Robin will be presenting at the Assessors Forum.

There will be a Cryptosporidium meeting on Tuesday morning at 8am that will be held as a Webinar. There will be a registration process for people that would like to participate from home. There may be a small fee.

5. Action Items

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

6. New Business

   Continue to review the Standard Robin sent and look for opportunities for improvement.

7. Next Meeting and Close

   The next meeting will be in Louisville, KY on 1/28/14 at 1pm EST. Robin will provide information if a phone line is available for people that cannot be there.

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

   The meeting ended at 2:52 pm EST.

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 **Present**	Microbiologics, Inc	Other		kfjeld@microbiologics.com
Donna Ruokonen **Present**	Microbac Laboratories, Inc	Lab	(219)769-8378 Ext 110	druokonen@microbac.com
Colin Fricker **Absent**	Analytical Services, Inc	Lab		colinfricker@aol.com
Deb Waller **Absent**	NJ DEP	AB	(609)984-7732	debra.waller@dep.state.nj.us
Dwayne Burkholder **Present**	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 **Absent**	Texas Commission on Environmental Quality	AB	(512)239-4876	Po.chang@tceq.texas.gov
Ilona Taunton (Program Administrator) **Present**	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.
11	The issue of how to recertify media will be looked at by Colin.	Colin	January Meeting	He will be working on it during the holidays and getting input.
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 Meeting	
14	Compile SIRs related to Microbiology for the Standard update.	Ilona	1/7/14	Complete
15	Prepare response to SIR #133 for comment by e-mail.	Patsy	12/17/13	Complete
16	Send out SIRs to committee with instructions to begin developing a response by e-mail.	Ilona	12/17/13	Complete
17	Expand on Patsy's email response to SIR #133 and distribute to committee for review.	Robin	2/10/14	
18	Contact Gary Yakub to confirm his membership on the committee.	Robin	1/31/14	
19	Provide EPA interpretation on temperature readings to Ilona. She will have it posted on the website.	Robin	1/31/14	

Attachment C

Backburner / Reminders – MEC

	Item	Meeting Reference	Comments
1	Update charter in October 2013	n/a	

Attachment D

Microbiology Expert Committee

(MEC)

2014 Charter

(Revised: 1-15-14)

Mission:

To maintain the microbiology standard (TNI Volume 1, Module 5) based on public input; to provide technical assistance on issues related to microbiology; and, to develop tools that facilitate the implementation of the standard.

Strategic Goals and Objectives:

1. Review and revise standards based on input from all stakeholder groups.
2. Improve the quality and consistency of environmental data by establishing standards for activities related to microbiology testing.
3. Provide technical assistance such as responding to Standard Interpretation Requests (SIRs).
4. Provide technical assistance in developing tools to facilitate the implementation of the Standard.
5. Ensure continuity with TNI Volume 1 Modules.
6. Utilize existing and future TNI infrastructure and resources to accomplish mission.

Success Measures:

- Completion of Standard revision process by 2015.
- Improvement of the Standard:
  - → Increased clarity of the intent of the Standard
  - → Incorporation of advances in technology
- Prompt response to SIRs (responses issued within 2 meetings)

Key Milestones for 2014:

- Balanced Committee representation
- Completion of Working Draft Standard
- Completion of Interim Draft Standard
- Forwarding Interim Draft Standard to LASEC, NELAP EC and CSDP EC

Considerations:

- Volunteer member organization with time constraints.
- Limited funding.

Available Resources:

- Volunteer committee members
- Existing national and international consensus-based standards
- EPA Cooperative Agreement

- TNI Website and other TNI support services (administrative, technical editing, etc.)
- Teleconference and web-based services
- Industry experts

Additional Resources Required:

- Travel funding

Anticipated Meeting Schedule:

- Monthly Committee Teleconferences (open to all Full and Associate Members)
- Additional committee teleconferences as needed
- Committee meetings (face-to-face) during semiannual TNI Forums (Winter and Summer)

Committee Membership

Proposed Members	Organization	Term Expires January	Representation	Subgroup
Robin Cook, Chair	City of Daytona Beach Utilities	2016*	LAB	
Patsy Root, Vice Chair	IDEXX Laboratories, INC	2016*	Other	
Deb Waller	NJ Department of Environmental Protection	2016*	AB	
Donna Ruokonen	Microbac Laboratories, INC	2016*	LAB	
Elizabeth Turner	North Texas Municipal Water District	2015*	LAB	
Po Chang	Texas Commission on Environmental Quality	2017	AB	
Karla Ziegelmann-Fjeld	Microbiologics, INC	2017	Other	
Mary Robinson	Indiana State, DOH	2017	AB	

Proposed Members	Organization	Term Expires January	Representation	Subgroup
Colin Fricker	Analytical Services, INC	2015*	LAB	
Dwayne Burkholder	Pennsylvania, Department of Environmental Protection	2016*	AB	
Gary Yakub	Environmental Standards, INC.	2017*	Other	
* - Renewable for 3 years.				

Balance:

- 4 Lab
- 3 Other
- 4 AB

Subcommittees:

- None

Program Administrator: Ilona Verrips Taunton