



DRAFT: 23 Jan 2017

Laboratory Methods & Services Committee Report/Minutes

AAFCO Mid-Year Meeting

January 17, 2017, 8:00AM – 5:00PM, Mobile, AL

Committee Recommendations

Committee recommendation summary or list.

(1) None

Board Recommendations

Board recommendation summary or list.

(1) None.

Association Actions

Association action summary or list.

(1) None.

Committee Participants

Members Present: List here.

First Name	Last Name	Affiliation	E-mail	Role
Aaron	Price	CFIA	Aaron.Price@inspection.gc.ca	Chair
Nancy	Thiex	AAFCO	Nancy.thiex@gmail.com	Vice Chair
Josh	Arbaugh	WV Dept. of Ag	jarbaugh@wvda.us	Member
Andy	Crawford	AAFCO	andy@crawford.org	Member
Deepika	Curole	LSU Dept. of Ag Chemistry	dcurole@ldaf.state.la.us	Member
Ted	Gatesy	MI Dept. of Ag & Rural Dev	gatesyt@michigan.gov	Member
Manisha	Das	FDA	manisha.das@fda.hhs.gov	Member
Teresa	Grant	NC Dept. of Agriculture	teresa.grant@ncagr.gov	Member
Heidi	Hickes	MT Dept. of Ag	hhickes@mt.gov	Member
H. Dorota	Inerowicz	OISC	inerowic@purdue.edu	Member
Mary	Koestner	MO Dept. of Ag	Mary.koestner@mda.mo.gov	Member
Patty	Lucas	FL Dept .of Ag &CS	patricia.lucas@freshfromflorida.com	Member
Kristi	McCallum	CO Dept. of Agriculture	kristina.mccallum@state.co.us	Member
Lawrence	Novotny	SD - retired	lawrence.novotny@sdaglabs.com	Member
Louise	Ogden	AAFCO	pt@aafco.org	Member
Bob	Sheridan	NY Ag	robert.sheridan@agriculture.ny.gov	Member
Brenda	Snodgrass	OK Dept. of Ag	Brenda.Snodgrass@ag.ok.gov	Member

First Name	Last Name	Affiliation	E-mail	Role
Michele	Swarbrick	MN Dept. of Ag	Michele.swarbrick@state.mn.us	Member
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Sharon	Webb	UK Reg Services	sharon.webb@uky.edu	Member
Sara	Williams	OTSC	smw@otcs.tamu.edu	Member

Advisors Present:

First Name	Last Name	Affiliation	E-mail	Role
Dan	Berg	Covance	Dan.berg@covance.com	Advisor
Lars	Reimann	Eurofins	larsreimann@eurofins.com	Advisor
Jeff	Rich	Romer Lab	jeff.rich@romerlabs.com	Advisor
Ken	Riter	Nestle-Purina Analytical Labs	ken.riter@purina.nestle.com	Advisor
Leo	Schilling	Eurofins	leoschilling@eurofins.com	Advisor
John	Szpylka	Merieux Nutrisciences	john.szpylka@mxms.com	Advisor

Committee Report

Committee Activities

ACTION: None

Sub-Committee Activities

ACTION: None

Committee Minutes

- 1) Call to Order (8:00 am)
- 2) Review and Approval of Agenda
- 3) Introductions – sign-up sheet sent around.
- 4) Committee roster reviewed. Anyone wishing to be added to the Committee should contact Aaron Price or Nancy Thiex.
- 5) Working Group Updates:
 - a. Tylosin – Leo Schilling gave an overview of the Method needs statement for tylosin and shared preliminary data obtained by a LC-MS/MS based method, *PowerPoint presentation, "Development of an LC-MS/MS Method for the Determination of Tylosin in Feed at Medicated levels"*. Issue with high CV's for the 4 components of interest and less than optimal recoveries. It was suggested to consider cryogrinding if finer particles were needed, to inject samples in duplicate to differentiate between instrument and extraction sources of error, and to check the availability of isotopically labeled standards. Louise Ogden offered to have PTP Round 201629 sent to Leo additional analysis

- b. CTC – by HPLC – Fluorescence. Tom Phillips reported that the SLV had been completed and that he had almost completed the collaborative study protocol. He was looking for samples that had been tested by the micro method for further equivalency verification. Need to get additional funding to Tom to continue the study. Sharon Webb has samples frozen that could be sent to him since they've done the micro testing on these.
- c. Fat Soluble vitamins. H. Dorota Ineroicz and Ken Riter reported on further studies which still indicated that the methods used were not very reproducible within most labs and definitely not reproducible between labs. Focus on improving method precision. AAFCO can make ring test samples if needed. Requested that Able Labs prepare the samples and fortify with a pre-mix of Vitamins A & E. Ken will contact PT Program with needs.
- d. Best Practices Working Group – Lawrence Novotny reviewed the first draft “Critical Factors in Determining Fiber in Feeds and Forages” from the Fiber working group. The working group was praised for the quality of the document and promised constructive criticism that could be considered for incorporation into the final version. It was specifically suggested to include a table listing preferred methods for specific matrices. Sharon Webb has a check list for the final review of the document before publication. Once completed the document can be posted, no motion is needed. PTP will send out an alert to participating labs about this new Best Practices document.

It was agreed that the next analyte would be “moisture” and the next step is to establish a “Moisture Working Group”. Andy Crawford will run the 2016 data for moisture.

- e. Sugars – Dan Berg’s PowerPoint presentation “*Sugar Analysis by HPAEC-PAD*” reported that the method is based on ion-chromatography with electrochemical detection, published in JAOAC 99(2), 2016 and can be downloaded for free. Dan Berg has since improved the method including adding arabinose as an internal standard and a post-column pump flushing the electrode with NaOH.

It was suggested to seek AOAC status for the method. This would require going through the AOAC process (Stakeholder Panel, ERP, Collaborative study with labs, etc.) and require paying AOAC around \$60,000 as a “Project Management Fee”. The scope of the method would include both foods and feeds. AAFCO has offered to provide \$20K. Other potential contributors include IDF, PFI and AFIA. Goal is getting funding commitments prior to the AOAC Mid-Year meeting in early April. Thermo may be willing to loan labs the appropriate instrumentation. Also anyone interested in collaborating on a 3rd party verification of the method should contact Dan Berg.

- f. Dietary Starch – The method authored by Mary Beth Hall received AOAC First Action status in 2014 and was scheduled to be evaluated for Final Action Status at the 2016 AOAC Annual Meeting. However due to administrative issues this review did not take place as scheduled and has been rescheduled for the 2017 Annual AOAC Meeting in Atlanta. Lars Reimann repeated his request that anyone using the method send him their feedback including performance parameters and suggestions for improvements.
- g. Mycotoxins – Robert Sheridan summarized a round-robin study in which 8 labs participated (7 LC-MS/MS and 1 ELISA Test kit). The data indicated very high variability between labs. A ring test managed by the EU followed a much more controlled approach (specified method) and provided significantly tighter results. There is also a FDA method that has been validated

through the FDA sponsored validation process. It was agreed that we should try to get copies of the methods and validation reports for the EU and FDA method.

- h. Multi-element validation – Robert Sheridan has validated a method in-house. The method is focused on validating label claims as well as identifying contaminants present at toxic (relatively high) levels. Michele Swarbrick, Sharon Webb and Robert will form a working group and recommend “next step” at the annual AAFCO meeting. In the meantime Robert would greatly appreciate if 2 labs would try his method and share their experiences. Contact the team if you want to participate.
 - i. Lab Sample Preparation Guideline Group – Michele Swarbrick – The group met in Saint Paul in November, 2016 and this past Sunday. The group hopes to have a rough draft by the AAFCO Annual meeting in August.
- 6) Vitamin A Splits:

Heidi Hickers reported that she struggled with the poor reproducibility of vitamin A assays even within her own lab. Based on the initial feedback Heidi believed the State of Indiana method may perform better and she will work further with this method to see if better results can be obtained. One key factor for improving performance is the use of Vit A2 as internal standard. Nancy Thiex will examine data from the 1990’s that in detail dealt with Vitamin A testing issues and see how much can be recovered and summarized for use with this project. Nancy has a paper, “Sources of Error in Vitamin A Analysis” from 25 years ago and will send the paper out again.

- 7) Methods and Method Needs Statements (MNS) – Aaron Price reported that we had a relatively large amount of completed MNS and that the AAFCO BoD was pushing to “clear the backlog”. It was agreed to survey the states for a priority ranking for methods as well as a commitment to participate in collaborative studies. Sharon Webb and Louise Ogden volunteered to prepare and distribute the survey. FDA suggested that focus be put on getting an updated thiamine method as the current AOAC method is old and results in variable data especially when applied on canned cat food.
- 8) Accreditation to the ISO/IEC 17025 Standard – Robyn Randolph reported that APHL as part of the FDA Collaborative Agreement had
 - a. Implemented a Discussion Board
 - b. Made training courses available
 - c. Would be holding a filth testing workshop
 - d. Had prepared a “Laboratory Best Practices” manual that currently were under FDA review. Hoping it will be available by August 2017.
 - e. Data Acceptance White Paper – Best Practices for Submission of Actionable Food and Feed Testing Data Generated in State and Local Labs – FDA added comment and changes – added importance of accreditation and working with customers. Published in October – on the APHL website. Working on a position statement as to FDA’s use of State and other NFP labs to support FDA’s analytical needs.
 - f. Current Major Lab Initiatives – Partnership – to be published later this year
 - g. APHL Position Paper “FDA and the Use of Governmental Food and Feed Testing Laboratories” – to be presented to board at the end of January 2017.
 - h. Sustainability for ISO continued funding

- i. A listing of proficiency samples commercially was also being updated. Kristi McCallum asked for people to provide her with any sources she had overlooked. The list is found on the APHL website and AAFCO Lab Website
- 9) Quality Assurance Sub-Committee -
- a. John Szpylka gave a PowerPoint presentation “*Big Picture of Becoming Accredited to ISO 17025*” outlining the many good reasons for seeking ISO 17025 Accreditation
 - b. Patty Lucas gave a PowerPoint presentation “*A State’s First Year Experience with FDA Grant to Gain ISO 17025*” describing the challenges her lab faced when seeking accreditation with focus on the challenges associated with document control.
 - c. Transfer of Methods for New Ingredient Approvals from FDA to State Labs - Lei Tang discussed how FDA could share methods submitted to FDA as part of new ingredient applications with state and private labs minimizing the need for labs to go through the FOI process. She said that she was working with FDA Legal staff that currently had to approve such distribution.
- 10) IFPTI Curriculum Framework - Chris Weiss from International Food Protection Training Institute (IFPTI) gave an overview of the status of their 5 year project with FDA creating a competency based framework for state lab professionals including sharing the current draft. Currently the curriculum framework is being worked on and not publicly available.
- Patty Lucas mentioned how she felt such a program would assist state labs dealing with high employee turnover while retaining institutional knowledge.
- 11) FDA Cooperative Agreement – Nancy Thiex reported that the status of the individual projects covered by the Agreement had already been discussed earlier in the meeting. In addition two 4 day sample prep training sessions for inspectors and lab personnel has been scheduled (March 6-9 in Dallas, April 3-6 New York). Nancy is also looking for states interested in being part of a pilot feasibility project.
- 12) Lab Centers of Expertise – Nancy Thiex & Aaron Price - Mentioned that at the request of the lab committee the AAFCO BoD has formed a working Group headed by Bob Geiger examining the possibility of states forming Centers of Excellence for tests with marginal volume in each state similar to the programs sponsored by EPA and industry. Goal is for the group to prepare a white paper on this issue for submission to the AAFCO BoD. It was mentioned that the laws in some states would make it difficult to implement such a program and that the Pesticide Residue Working Group is examining a similar approach.
- 13) FSMA Implementation Task Force – Robert Sheridan reported that not a lot was happening as the rules for FSMA were still being written and the impact of the Trump presidency was yet to be assessed.
- 14) Roundtable discussion –
- a. Lawrence Novotny - Mid-West AOAC – Scheduled for May 23-25, 2017 in Minneapolis.
 - b. Salmonella in Feeds - Ted Gatesy presented the successful identification of the pet food origin of a nationwide pathogen infection in humans identified through a routine sampling and analysis program. It was suggested that more microbiologists should be part of and active in the AAFCO Lab Methods and Services Committee.

- c. PTP Stability - Nancy Thiex discussed the need for analyte stability data for the samples prepared and distributed as part of the AAFCO Proficiency Testing program. Louise Ogden will send out a request to members and advisors on the PTP Advisory Committee.
- d. FDA Table-top – held on Sunday Jan 15 – poor lab presence because it was not advertised clearly to labs – need to improve the communications.
- e. Asked Kristy and Ted to do a Micro method validation & instrumentation, best practices in micro at an upcoming meeting.

15) Meeting Adjourned (4:50 pm)

Action Item Table

Responsible	Item	Action	Timing / Status
L. Ogden	Tylosin working group	Send L. Schilling PT round 201629 for additional analysis.	ASAP
S. Webb	CTC working group	Coordinate with T. Phillips to get samples to him that have been analyzed by plate assay.	Before August meeting
K. Riter	Fat soluble vitamins working group	Contact PT program with needs for some vitamin fortified samples.	ASAP
A. Crawford	Best Practices working group	Run the 2016 PT data for moisture.	ASAP
S. Webb, R. Sheridan & M. Swarbrick	Multi-element working group	Form a working group and recommend “next step” at the annual AAFCO meeting.	Before August meeting
N. Thiex	Vitamin A work	Send out to the committee paper from 1990’s on vitamin A sources of error.	ASAP
S. Webb & L. Ogden	Method Needs statements	Send out a survey to State Labs to prioritize needs and gauge commitment to collab studies. Resources can be obtained from A Price. Present survey results to committee.	Before August meeting



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Attendance List

First Name	Last Name	Affiliation	E-mail	Role
Josh	Arbaugh	WV Dept. of Ag	jarbaugh@wvda.us	Member
Dan	Berg	Covance	Dan.berg@covance.com	Advisor
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Gina	Clapper	Merieux Nutrisciences	gina.clapper@mxns.com	
Andy	Crawford	AAFCO	andy@crawford.org	Member
Deepika	Curole	LSU Dept. of Ag Chemistry	dcurole@ldaf.state.la.us	Member
Manisha	Das	FDA	manisha.das@fda.hhs.gov	Member
Ted	Gatesy	MI Dept. of Ag & Rural Dev	gatesyt@michigan.gov	Member
Teresa	Grant	NC Dept. of Agriculture	teresa.grant@ncagr.gov	Member
Nadia	Guagliardo	CF Industries Nitrogen	nguagliardo@cfindustries.com	
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H. Dorota	Inerowicz	OISC	inerowic@purdue.edu	Member
Isiah (John Smith)	Isakson	FDA/ORR/OP	Isiah.isakson@fda.hhs.gov	
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Brenda	Keavey	WV Dept. of Ag	bkeavey@wvda.us	
Mary	Koestner	MO Dept. of Ag	Mary.koestner@mda.mo.gov	Member
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Joyce	Lewis	LA Dept. of Ag & Forestry	jlewis@ladf.state.la.us	
Patty	Lucas	FL Dept .of Ag &CS	partricia.lucas@freshfromflorida.com	Member
Kristi	McCallum	CO Dept. of Agriculture	kristina.mccallum@state.co.us	Member
Dragan	Momcilovic	FDA	Dragan.Momcilovic@fda.hhs.gov	
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Lawrence	Novotny	SD - retired	lawrence.novotny@sdaglabs.com	Member
Louise	Ogden	AAFCO	pt@aafco.org	Member
Aaron	Price	CFIA	Aaron.Price@inspection.gc.ca	Co-Chair
Robyn	Randolph	APHL	robyn.randolph@aphl.org	

First Name	Last Name	Affiliation	E-mail	Role
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Leo	Schilling	Eurofins	leoschilling@eurofins.com	Advisor
Bob	Sheridan	NY Ag	robert.sheridan@agriculture.ny.gov	Member
Brenda	Snodgrass	OK Dept. of Ag	Brenda.Snodgrass@ag.ok.gov	Member
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Lei	Tang	FDA CVM	lei.tang@fda.hhs.gov	Member
Nancy	Thiex	AAFCO	Nancy.thiex@gmail.com	Co-Chair
Sharon	Webb	UK Reg Services	sharon.webb@uky.edu	Member
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Appendix

Attachments: