

Laboratory Methods and Services Committee Report/Minutes

Final: March 29, 2018

AAFCO Mid-Year Meeting
January 23, 2018, 8:00 – 5:00 PM, Garden Grove, CA

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:

Aaron Price	CFIA		
Nancy Thiex	Life Member		
Josh Arbaugh	West Virginia Dept. of Agriculture		
Ametra Berry	Georgia Dept. of Agriculture		
Deepika Curole	LSU Dept. of Ag Chemistry		
Teresa Grant	North Carolina Dept. of Agriculture		
Casey Guccione	Kansas Dept. of Agriculture		
Heidi Hickes	Montana Dept. of Agriculture		
Halina Inerowicz	Office of the Indiana State Chemist		
Jason Kong	Ohio Dept. of Agriculture		
Kristina McCallum	Colorado Dept. of Agriculture		
Louise Ogden	Life Member		
Lise-Anne Prescott	CFIA		
Brenda Snodgrass	Oklahoma Department of Agriculture		
Robert Sheridan	New York Dept. of Agriculture		
Michele Swarbrick	Minnesota Dept. of Agriculture		
Lei Tang	FDA CVM		
Sharon Webb	University of Kentucky Regulatory Services		
Sara Williams	Office of the Texas State Chemist		

Advisors Present:

Kyle Bennett	Neogen
Andy Crawford	Consultant
Jeff Horst	Agri-King
Lars Reimann	Eurofins
Ken Riter	Pet Food Institute
Lisa Ruiz	Eurofins NAC
John Szpylka	Merieux Nutri Sciences

Committee Report Committee Activities ACTION: None

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Sub-Committee Activities

ACTION: None

Committee Minutes

1.) Call to Order

The Agenda was approved with minor changes.

Introductions – sign-up sheet sent around.

2.) Committee Roster was reviewed and updated. Aaron Price will add additional updates as needed. There is a need to transition leadership of the Committee since Aaron and Nancy Thiex will be stepping down after the annual meeting. Nancy and Aaron recommend that the 2019 Committee agenda items need to be a team approach instead of 1 or 2 individuals. Please let Aaron and Nancy know if you are interested or can suggest candidates (note that they have to be employed by a regulatory agency).

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- 3.) FDA update due to government shutdown, no one representing FDA was able to attend the meeting in person to give an update.
- 4.) FSMA Implementation Task-Force Still waiting for feedback from FDA as to the testing needed.
- 5.) Working Group updates
 - a. Tylosin Leo Shilling provided an update. He is still working on the method in his lab and seeking input from the LMSC and stakeholders for participation and industry and FDA guidance for the upcoming method validation protocol.
 - b. CTC Leo Shilling reported that he had received good response to his survey even though some of the responses lacked detail. He is looking for volunteers to help identify the appropriate method including touching base with Tom Phillips to avoid reinventing the wheel. Leo hoped to be able to provide more information at the next meeting.
 - c. Fat soluble vitamins Dorota Inerowicz and Ken Riter are looking for participants in their ring trial study to provide the validation data behind their methods. It was agreed that separation of 13-cis-retinol was an advantage and to focus on quantifying alpha tocopherol due to its higher biological activity among the tocopherols. Issues to consider when reviewing data were test portion mass, hot versus cold saponification, liquid/liquid extraction versus SPE, and a simple neutralization/dilution approach. The first study performed by MN Department of Ag will center on the test portion mass needed to ensure a representative sample.
 - d. Multi-element (mineral) analysis Robert Sheridan reported on his single lab validation that looked at 27 elements. Samples were spiked at 2x the LOQ as well as the middle of the operational range. Samples examined included feeds, feed ingredients plus some old AAFCO samples. The method was based on microwave digestion followed by either ICP-OES or ICP-MS (no clear benefit with either technique). Michele Swarbrick reported on her survey that most labs used a test portion mass between 0.1 g to 1.0 g and either ICP-MS or ICP-OES. Some labs used both techniques depending on the concentration and nature of the analyte. Lise-Anne Prescott reported that the Canadian Food Inspection Agency uses an on-line diluter to ensure that the analyses are performed in the "sweet" spot of the analytical



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The workgroup recommends a best-practice guide to test portion mass and methodology.

- Sugar method Nancy Thiex and John Szpylka reported that the SMPR for "sugars" had been posted on the AOAC website and for people to provide feedback ASAP. An SMPR on fructans should be posted soon.
- f. Dietary Starch Lars Reimann reported that the Dietary Starch method developed by Dr. Mary Beth Hall had been awarded "Final Action" status and that this issue was now closed.
- g. Mycotoxin Bob Sheridan reported on the results from the AAFCO PT data. Following the development of an ISO method addressing mycotoxin residues there have been little further development on this issue in the US. Lars and Nancy mentioned the method alignment efforts by the DDGs manufacturers headed by Shon van Hulzen with Poet.
- h. Best practices Larry Novotny reported on the final draft off the "white paper" addressing moisture. The WG has completed its work and has been disbanded. The white paper has been distributed for comments and final approval.
 It was suggested that the next subject to focus on would be "Nitrogen to Protein Conversion Factors". Discussion followed as to the political and science aspects of this issue.
 Fiber Best practices is being rewritten and expanded and will be published in the JAOAC
- 6.) Proposal to BOD for placing fat method references on labels there were general consensus that doing so was a bad idea (too much "stuff" on a label already; of no value to the consumer).
- 7.) Mycotoxin best practices Nancy Thiex reported that Distillers Grain Council had developed a working group currently with 43 participants. Goal for the group is to produce scientifically supported, publishable best practices recommendations. However only 6 people had contributed material so far and it has become an administrative nightmare. Nancy chaired this WG by default and asked for help in locating good candidates for chapter editors (lead authors). John Szpylka to provide Nancy with a list of the committee members for the AOAC Mycotoxin committee. The following people volunteered (or were "voluntold")

Kyle Bennett Test kits

Bob Sheridan & Sharon Webb Instrumental analyses

Lei Tang Regulations

- 8.) FDA Cooperative Agreement Yvonne Salfinger reported that the program had received a "no cost extension" through 2018 to complete several tasks in the pipeline including accreditation of PT program, updating of laboratory sampling guidelines and producing webinars and lab workshops. The "Good Test Portions" is in its final stage prior to publication. A study focused on test portions will be issued soon. Focus on high, medium and low concentration analytes as a function of sample handling methods. The Sampling section on the AAFCO Laboratory Web Page is being developed.
- 9.) Test portion size for the analysis of milk replacers for nutrients Nancy Thiex reported on receiving a request highlighting the issues associated with the analysis of nutrients in milk replacers including the selection of nitrogen factors, test portion size for nutrients and specific issues associated with the analysis for crude fat, crude fiber and salt. A recommendation for a best practice guide was discussed to include standardizing the preparation for the method, and not following the dilution ratio given by the manufacture. The guide would also address best practice recommendation for matrices that form suspension in an aqueous solvent.



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- 10.) Cationic Soaps in feeds Issue was brought forth by members of KS Dept of Ag. It was agreed that soaps are poorly quantified by simple solvent extraction and that the optimal approach would be the FDA recommended method for "Total Fat in Food".
- 11.) AAFCO-NASDA WG Nancy Thiex reported that the WG is working within the PCAF framework writing a "Laboratory Services" Chapter.
- 12.) State Feed Lab Network (Centers of Excellence) Nancy Thiex reported that the workgroup had prepared a position paper on the issue that had been submitted to the AAFCO BoD 1+ year ago and currently the Working group is in the process of putting together 2 surveys a survey of needed analyses currently not available in state labs as well as services offered by state labs. AAFCO had requested a "White Paper" stressing the sharing of resources beyond feed.
- 13.) Quality Assurance Sub-Committee ISO 17025 has been revised. AOAC is updating its ALAC document to ensure compliance and is expecting to publish the final document this summer. Per A2LA labs will be given 2 years from the time the doc is published to become compliant with the new standard.
- 14.) Laboratory Sampling Program Nancy Thiex provided an update on the "Guidance on Obtaining Defensible Test Portions" (aka "Good Test Portions"). The original document was written in 2000 but is now being updated. Discussion where a 2-day training seminar would be held (e.g., in connection with an AOAC meeting and whether a WebEx option should be included). Chief consideration between the two plans: which method will reach more of the people who need this training?
- 15.) Round table discussion:
 - a. ISO 17025:2017: This edition includes changes in scope; a lot has changed in terms new technology and techniques, and, accordingly, the sections are numbered differently from the previous edition. Laboratories already accredited to ISO/IEC 17025:2005 will need to transition their processes to the new version within a three-year period from the publication date of the new standard. Quality management systems that refer to specific chapters will need to be updated to the current format in the 2017 edition.

Action Item Table

Responsible	Item #	Action	Timing / Status
A Price	2	Update committee roster based on recent changes and submit to AAFCO BOD	End of March, 2018
All committee members	2	Consider whether you would like to become a co-chair or vice-chair of the committee and respond to N Thiex and A Price if interested	Mid April, 2018
All committee members	3b	Consider whether you are able to assist L Schilling to identify appropriate Chlortetracycline methods for further study	Mid April, 2018
All committee members	3c	Consider whether your lab is able to volunteer for the fat- soluble vitamins ring trial. Contact D Inerowicz and K Riter if interested.	End of March, 2018
J Szpylka	7	To provide N Thiex with a list of the AOAC Mycotoxin Committee members	End of March, 2018



Appendix

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Attachments:

For a list of presentations given during this meeting, please see the AAFCO Laboratory Methods and Services committee website at the following link:

https://www.aafco.org/Regulatory/Committees/Laboratory-Methods-and-Services#minutes

Attendee List

Last Name	First Name	Affiliation	E-mail	Present
Arbaugh	Josh	West Virginia Dept. of Ag	jarbaugh@wvda.us	X - Member
Bailie	Jenny	Milk Specialties	jbailie@milkspecialities.com	Χ
Bennett	Kyle	Neogen	kbennett@neogen.com	X - Advisor
Berry	Ametra	GA Dept. of Agriculture	ametra.berry@agr.georgia.gov	X - Member
Caldwell	Jane	Midwest Laboratories	icaldwell@midwestlabs.com	Х
Crawford	Andy	AAFCO PTP	andy@crawford.org	X - Advisor
Curole	Deepika	LSU Dept. of Ag Chemistry	dcurole@ldaf.state.la.us	X - Member
Flowers	Sally	Nebraska Dept. of Ag	sally.flower@nebraska.gov	Х
Grant	Teresa	NC Dept. of Agriculture	teresa.grant@ncagr.gov	X - Member
Guccione	Casey	KS Dept. in Ag	casey.guccione@ks.gov	X - Member
На	Tai	Nebraska Dept. of Ag	tai.ha@nebraska.gov	Х
Hickes	Heidi	MT Dept. of Ag	hhickes@mt.gov	by phone - Member
Horst	Jeff	Agri-King, Inc.	jeff.horst@agriking.com	X - Advisor
Huyghuesdespoin tes	Alexis	JH Smuckers	alexis.huyghuesdespointes@ @jmsmucker.com	Х
Inerowicz	H. Dorota	OISC	inerowic@purdue.edu	X - Member
Kong	Jason	Ohio Dept. of Agriculture	Jason.Kong@agri.ohio.gov	X- Member
Koestner	Mary	Missouri Dept. of Ag	mary.koestner@mda.mo.gov	Х
Levin	David	Covance	david.levin@covance.com	Χ
McCallum	Kristi	CO Dept. of Agriculture	kristina.mccallum@state.co.us	by phone - Member
Mostyn	Paul	Westway Feed	paulm@westwayfeed.com	Х
Muenks	Quintin	MO Dept. of Ag	quintin.muenks@mda.mo.gov	Х
Nobo	David	KS Dept. in Ag	david.nobo@ks.gov	Х
Novotny	Lawrence	SD - retired	lawrence.novotny@sdaglabs.c om	by phone
O'Mara	Lauren	UK Reg. Services	lauren.omara@uky.edu	Х
Ogden	Louise	AAFCO	pt@aafco.org	X - Member



Final: March 29, 2018 **Affiliation** E-mail **Present** Last Name **First Name** Michigan Dept. Χ Pietrzen Karen pietrzenk@michigan.gov of Ag **CFIA** anne.prescott@inspection.gc.c Prescott Lise-Anne X - Member Price Aaron **CFIA** Aaron.Price@inspection.gc.ca X - Co-Chair Eurofins larsreimann@eurofins.com X - Advisor Reimann Lars Nestle-Purina Riter Ken ken.riter@purina.nestle.com X - Advisor **Analytical Labs** Ruiz Lisa **Eurofins NAC** lisaruiz@eurofins.com X - Advisor theresa.rygiel@freshfromflorida Rygiel FL Dept. of Ag Χ Teresa Salfinger Yvonne APHL yhale@aol.com Χ Χ Sanchez Bobby NM Dept. of Ag bsancez@mda.nmsu.edu Χ Scheaffer Abe SweetPro Feeds abe@sweetpro.com Schilling Leo **Eurofins** LeoSchilling@eurofinsus.com Χ robert.sheridan@agriculture.ny X - Member Sheridan Robert NY Dept. of Ag .gov University of Χ Sikora Frank fsikora@uky.edu Kentucky X - Member Snodgrass Brenda OK Dept. of Ag Brenda.Snodgrass@ag.ok.gov Swancer Jason Pa Dept. of Ag jsawncer@pa.gov Χ Michele.swarbrick@state.mn.u Swarbrick Michele MN Dept. of Ag X - Member kathy.swartout@vuvanalytics.c Swartout Kathy **VUV** Analytics by phone christy.swoboda@romerlabs.co Χ Swoboda Christy Romer Labs Merieux Nutri Szpylka X - Advisor John john.szpylka@mxus.com Sciences by phone -FDA CVM Tang Lei lei.tang@fda.hhs.gov Member Taylor Julie Cargill Inc. jtaylor@provimi.na.com Thiex Nancy Life Member nancy.thiex@gmail.com X – Co-chair victoria.watkins@ks.gov Watkins Victoria KS Dept. of Ag Χ UK Reg. Webb Sharon sharon.webb@uky.edu X - Member Services Χ Weiss Chris **IFPTI** chris.weiss@ifpti.org By phone -**OTSC** Williams Sara smw@otcs.tamu.edu Member Wu Dancia OISC scharfd@purdue,edu Χ