

**ASSOCIATION OF AMERICAN FEED CONTROL OFFICIALS (AAFCO)
1800 SOUTH OAK STREET, SUITE 100
CHAMPAIGN, ILLINOIS**

**MINUTES OF THE LABORATORY METHODS AND SERVICES COMMITTEE MEETING
AUGUST 8, 2024, 8:00 A.M.**

MEMBERS PRESENT:

Josh Arbaugh (WV)	Ametra Berry (GA)	Srinivasulu Chigurupati (FDA)
Carrie Crabtree (GA)	Tai Ha (NE)	William Hoek (NY)
Naomi High (NC)	Dominika Kondratko (CO)	Kristi McCallum (Chair)
Rebecca Moseley (AL)	Michele Swarbrick (MN)	Angela Swinford (FDA)
Dancia Wu (OISC)	Solomon Kariuki (UKY)	Denice Mittelstaedt (NM)
Erik Pearson (NE)		

ADVISORS PRESENT:

Ken Riter (PFI NPAL)	Leo Schilling (Eurofins)	Sally Flowers (AFDO)
Jenny Baillie (NutriQuest)	BJ Bench (Tyson)	Jeff Horst (Agri-King)

VIRTUAL ATTENDEES:

Deborah McKenzie	Lawrence Novotny	
Alexa Bombich	Susan Humphries	Robyn Randolph
Brenda Snodgrass	Teresa Rygiel	Adalia Espinosa
Amber Pinnell	Mir Khan	Robin Johnson
Nancy Thiex	Dr. Andy Crawford	Lars Reimann (Eurofins)
Marlize List		

OTHERS PRESENT:

Josat White	Carrie Manny	Melissa Nichols
David Snell	Victor Vega	Jordan Bierbaum
Zachary Cool	Justin Kenny	Macy Harris
Aline Nunes	Cecili Wood	Andrew McGillivray
Molly Weber	Erica W.	

Jodie Percy Recording Secretary, Minutes Solutions Inc.

1. CALL TO ORDER

There being a quorum present, and adequate and proper notice of the meeting having been given, the meeting was called to order at 8:01 a.m.

2. REVIEW AND APPROVAL OF AGENDA

On a motion made by Rebecca Moseley, seconded by Ametra Berry, it was resolved to approve the agenda for the Laboratory Methods and Services Committee meeting, as presented. Motion carried.

3. INTRODUCTIONS

All members and guests introduced themselves and completed the sign-in sheet.

4. LMSC UPDATE

Kristi McCallum is retired from AAFCO and this was her last meeting. Dominika Kondratko (CO) and Erik Pearson (NE) are the new LMSC co-chairs.

There is a new AAFCO Sharepoint site. All LMSC documents have been moved to this new Sharepoint site. The LMSC FoodShield site will not be used moving forward.

Please email feedbin@aaafco.org if you need assistance or access and you are a member or advisor. Access is limited to LMSC members and advisors only.

5. AOAC INTERNATIONAL METHOD AND ORGANIZATION UPDATES

Deborah McKenzie noted that AOAC is 140 years old, and it was noted that the AOAC now has a career center. Two new awards have been added to the international awards program, and an AOAC app has been launched for members. A new AOAC publication called "Official Methods of Analysis" has been released, and the existing AOAC publications have been redesigned. Two new global standards have been added, and there are nine new standards in development. It was noted that standards become methods in the standards development process.

The Committee noted that it was favorable toward receiving methods for cannabis.

6. OVERVIEW OF APHL RESOURCES AND LEARNING

The current focus of APHL activities is quality-related training and events directed at training new hires. Training programs under consideration include internal audits training and teasing uncertainty training. A workgroup is investigating the current needs of the HAF laboratories. The APHL risk assessment guide for testing raw milk samples that may contain highly pathogenic avian influenza has been published. A resource flyer is available to HAF laboratories for reference. Nine laboratories have provided data to the Public Health Laboratory Systems Database, and more laboratories are being sought to join the database. ELP focuses on mid to senior level training. The Committee was invited to share ideas for projects to be used for fellowships and internships. It was noted that the accreditation process has been completed with the Alabama Department of Agriculture.

The NCS laboratory curriculum framework was finalized in May, 2024. All the skills noted in entry core are expected to be present in all other levels as well. It was noted that leadership should be trained at every level to develop quality managers.

The website has a listing for each community and the contact's name for that community. A direct message should be sent to the contact to pursue collaboration. Training modules are available to members and non-members of the organization. The animal feed course is competency based. The Board had voted to accept the training system.

7. LMSC TRAINING PROGRAM UPDATE AND WORKING GROUP DISCUSSION

On a motion made by Josh Arbaugh, seconded by Michele Swarbrick, it was resolved to form a sub-committee to develop training programs. Motion carried.

The sub-committee will include Michele Swarbrick (MN – Lead), Teresa Rygiel (FL), Cecili Wood (UKY), Dr. Cecil Wood (UKY), Denise Mittelstaedt (NM) and Andrew McGillivray (Red Barn).

There are broken links in SharePoint that will be fixed as soon as possible. The Board has approved the training program and the proposal to the Board will likely be placed in the

procedure manual. The training will be different from the workshops that the Committee has attended and will be available to all members. Example templates will be available through SharePoint. The Committee members were reminded to download all templates for use to avoid overwriting the templates on SharePoint.

Laboratory training is available on the website, and there will be an expansion in the chromatography and chemistry sections. The Committee members were asked to provide feedback on the training, as well as suggestions for new laboratory training courses.

8. UPDATE ON AUGUST 2023 ACTION ITEMS AAFCO STRATEGIC PLAN OBJECTIVES

The development of a LMSC training program has been completed. Every 2 years, regulatory will be surveyed to look at analytical needs. The results will be distributed to the committee before it is sent back out to regulators. The second objective was to develop Feed Testing Laboratory Design & Structure Guidelines which was written and revised by L. Novotny, S. Flowers, R. Moseley, L. Benjamin. The LMSC needs to vote to approve this document before it goes to the Strategic Affairs Committee for approval. This document is intended to help laboratories are setting up a new laboratory and to assist laboratories in achieving and/or meeting ISO 17025 requirements. The document sections include Personnel, Training, Instrumentation & Equipment, Purchasing & Inventory, Verification/Validation, Analytical Quality Control, Documents & Records, LIMS, Risk Management, CAPA, Lab Assessments & Audits, Process Improvement, Customer Service, Facilities & Environment, Methodology, Storage & Handling, Utilities, Waste Management. The feed testing laboratory structure guidelines have been completed and will be sent to the Committee for review and approval to forward to the Board of Directors. The Committee will be given 30 days to review and amend the documents and were reminded that it is for guidance and is not meant to be a mandate. Committee members were encouraged to add appendices where geography or other factors are seen to warrant a change in the guidance. It was noted that compartmentalized methods and recommended methods for best practices remain as merely a guide.

9. MYCOTOXIN BEST PRACTICES PANEL DISCUSSION

The frequently asked questions would be distributed after the meeting.

Mycotoxin testing was noted to be important because of a lack of background information. The methods vary between each laboratory and each region. It was noted that there are many challenges when testing for mycotoxins, including cross contamination and hotspots. Due to hotspots, it was noted that larger sample sizes should be requested for testing. Before substituting another ELISA kit, the manufacturer's list of direct replacement should be reviewed, or the manufacturer should be contacted to determine if the substitute is acceptable. Compliance was noted to be an issue due to the cost, contamination problems, testing times, and difficult clean-up procedures. Further issues arise when there is enhancement or suppression of the mycotoxin based on the grinding or storing procedure of the sample. Instrument error is also a concern. The testing frequency was noted to be variable depending on the type of mycotoxin and the region with no specific guidance provided by the FDA. Completing multiple tests using different analysts was suggested to ensure the reproducibility of results. It was noted that respirators or masks should be used when mycotoxins are ground to protect the analysts. The Committee noted a particular risk to pregnant women and those of child-bearing age.

10. FDA LAMP METHOD

The recorded presentation could not be played during the meeting and will be placed on the AAFCO website.

11. DART-MS TESTING

The applications for DART-MS within the pet food and feed world were reviewed. Bruker had created a new division to address the needs of the pet food and feed industry. DART was defined as “direct analysis in real time”. DART can complete testing much more quickly than a standard mass spectrometry and provides greater versatility, power, speed, and low environmental impact. Previous versions of DART had used a steady stream of helium to obtain results, but the system has been improved, and 95% less helium is used in current models. Sample testing takes approximately five seconds, reducing bottlenecks during the testing process. Little to no maintenance is required for the DART as there are no moving parts. Bruker does not provide a library of test results for purchase but relies on the NIST library.

12. QUANTITATIVE METHODS FOR FEED ADDITIVES UPDATE

The existing methods were developed in the 1950s and 1960s. The methods need to be brought up to date with the current additives and made appropriate for use. The Committee members were encouraged to reach out if they are interested in helping with the project. The process for approval is underway and should be easier than other approval processes because the master file belongs to AAFCO. No specific starting point for additives has been established.

13. LMSC WORKING GROUP BEST PRACTICES AND LMSC ROLE

The Committee discussed the need to rethink its goals and processes, and members were encouraged to ensure that they participate fully if they are part of a workgroup or serving on a committee or sub-committee.

Workgroups do not appear to be meeting the goals set out for them. The role of the Committee is outlined in the bylaws and should be reviewed and adhered to by the members. The goal is not to mandate methods but to provide a resource for all laboratories to confirm best practices and method standards. Methods being used in laboratories are released with the monthly reports and are available on the website and could be used to track the usage of each method and its value to analysts. There are difficulties with collaboration for a single method due to different technical environments. It may be easier to strive for equivalency of methods and reporting rather than sticking to a single method. The Committee will consider compiling hints, tips, and tricks for methods to be shared with laboratories, and it will consider quarterly meetings to check on the progress of workgroups more regularly.

14. OTHER BUSINESS

14.1 Moisture in Pet Food Working Group Update

The focus has been to determine which extraction method is best, and it has been noted that the overnight method is best for dry and wet food. The next objective is to extend AOAC 991.02 to include dry and wet pet food.

14.2 AV Update

All the new AVs created are equations and there has been agreement found between the AVs. The workgroup is seeking input on the adoption of the new AVs as well as any additional AVs that should be developed. AVs that are no longer used will be removed from the table. There have been no changes made to the vitamins as there was too much variability. Some minerals

will be added, but no heavy metals will be added. There were two sets of limits available for drugs, and the workgroup is considering removing drugs from the AV table and referencing the assay limits.

14.3 Fat Soluble Vitamins Update

Larger tests are underway, and submissions are pending.

14.4 Moisture Update

Lawrence Novotny is looking for volunteers to resume the Moisture Best Practices workgroup on Karl-Fisher Titration. Volunteers should be able to analyze moisture per AOAC 991.02 in their lab. Email Lawrence if your laboratory is interested.

15. NEXT MEETING

The date of the next meeting is to be determined.

16. ADJOURNMENT

On a motion made by Brenda Snodgrass, seconded by Michele Swarbrick and unanimously carried, it was agreed that there was no further business to transact; the meeting closed at 3:19 p.m.

DISCLAIMER

The above minutes should be used as a summary of the motions passed and issues discussed at the meeting. This document shall not be considered a verbatim copy of every word spoken at the meeting.

Chair

Director

Date

Date