



Proficiency Testing Committee Report

2023 AAFCO Annual Meeting

July 31, 2023, 2:15 pm, EST Baltimore, Maryland

Committee Recommendations

NONE

Board Recommendations

NONE

Committee Participants

Members Present: Josh Arbaugh (Board Liaison), West Virginia Department of Agriculture; Kristi McCallum, Colorado Department of Agriculture; Sharon Webb, University of Kentucky Division of Regulatory Services; Sally Flowers (Chair), Kansas Department of Agriculture; Teresa Rygiel (Vice-Chair), Florida Department of Agriculture & Consumer Services; Patty Lucas, Florida Department of Agriculture & Consumer Services; Michele Swarbrick, Minnesota Department of Agriculture; Tai Ha, Nebraska Department of Agriculture; Ametra Berry, Georgia Department of Agriculture

Advisors Present: Frank Sikora, Magruder PT Program (virtual); Ken Riter, PFI; Lars Reimann, AFIA

Virtual Attendees: Andy Crawford (PTP Statistician), Crawford Consulting Services; Alexa Bombich (PTP QA Manager), Brenda Snodgrass (AAFCO PTP Program Manager), AAFCO; Denice Mittelstaedt, New Mexico Department of Agriculture; Susan Humphries, FDA; Gail Swinford, FDA; Janna Hutchinson, FDA; Linda Benjamin, FDA; Bob Kieffer (PTP), Able Laboratories; Mo Kieffer (PTP), Able Laboratories; Nancy Thiex, AAFCO Life Member; Rebecca Moseley, Alabama Department of Agriculture & Industries; Jamie Minter, Melissa Nichols, Missouri Department of Agriculture; Jeff Horst; Katie Nass; Carolina Ribeiro; Hannah Brown.

Committee Report

January 2023 committee action items were completed or are on track. The new ISO 17043 standard is available for purchase. Alexa will update the quality manual and any other system documents to align with the changes. Andy has added Robust R-Bar statistics to AAFCO PT reports. Mo Kieffer is no longer running Able Laboratories. The committee continued to shape the AAFCO Laboratory Round Robin. Once details have been finalized, a proposal needs to be sent to the Board of Directors (BOD) for review. The Analytical Variances Workgroup previewed recommendations for updating the AAFCO AVs as a series of short-, mid-, and long-term goals with PTP Committee ahead of the August BOD meeting.

Committee Activities

ACTION: Approve meeting agenda

MOTION: B. Snodgrass/Second: J. Arbaugh – passes

ACTION: Move to adjourn meeting

MOTION: B. Snodgrass/T. Ha - passes

Subcommittee Activities

NONE

Committee Minutes

1. Call to order - S. Flowers
The meeting agenda was reviewed and approved.
ACTION: Approve meeting agenda
MOTION: B. Snodgrass, Second: J. Arbaugh
2. Program Leadership and Administrative Update
 - a. Introduce new QA Manager, Alexa Bombich – S. Flowers



- i. Alexa introduced herself.
 - b. Quality Management System Update – A. Bombich
 - i. Recently received the updated Standard and are reviewing it. We will work to update the quality manual and any policy and procedures to make sure we are in line with any changes.
3. Update on January 2023 Action Items

Responsible	Item	Action	Timing/Status
Program Manager	Reference Materials	Provide to AAFCO laboratory training participants	Approved by Committee; provide reference materials as needed (completed)
Committee Chair	Sampling Pilot PT discussion	Plan and hold committee discussion(s) with Nancy Thiex on Pilot PT for Lab Sampling	Plan to hold remote meeting in March 2023 (completed)
QA Manager/Program Manager	ISO 17043 updates	Update Quality Management System to meet updated ISO 17043 standard	Pending availability of standard to be purchased; complete by 2025

Question in Chat about accreditation: Denice Mittelstaedt asked if the updates on QC documents would need to be sooner due to the upcoming audit. Brenda Snodgrass addressed the timeline.

4. PTP Budget Update – B. Snodgrass
- a. Refer to the AAFCO PT Program Budget Overview PowerPoint
 - b. Budget looks good and the excess monies is being held in the AAFCO account and can be used for special projects and unexpected expenses.
 - c. No questions on the budget
5. 2023 Subscription Update – B. Snodgrass
- a. Refer to the Scheme Subscription Status PowerPoint
 - b. As of July 2023: Animal Feed 228 labs (236 ordered); Pet Food Ingredients 118 labs (120 ordered); Minerals 48 labs (51 ordered); Mycotoxin 91 labs (91 ordered)
 - c. No labs reported metals speciation data.
 - d. Background on the schemes provided by Brenda –
 - i. Animal Feed is monthly but with various matrix types you actually get a total of 13 samples.
 - ii. Pet Food Ingredients – (2013) was added next because the pet food manufacturers wanted to be able to do PT for their quality labs. Four samples a year. Pet Food Quality Labs are requiring each analyst to perform a PT.
 - iii. Minerals (2015) -Added with federal grant monies. It was started in 2015.
 - iv. Mycotoxin (2014)
 - v. Addition to Robust Range to PT Program Reports - Andy has added Robust R-Bar to the reports.
 - vi. Comment from Andy: %RSD is the %RSD of the Assigned Value, not the duplicates.
 - vii. Mo/Bob provided an update - Bob explained that his daughter, Mo, is now running Able Laboratories.
6. Customer Feedback - B. Snodgrass



- a. No customer feedback received.
7. Laboratory Sampling Survey / Sampling Round Robin overview presentation (Michele Swarbrick) -refer to PowerPoint for details.
- a. Proposal: Two rounds (semiannual), each test item would be 1 kg. Able Laboratories prepares the test items by weighing each ingredient individually and put them into each lab's container, cost based on the number of labs, when labs receive the samples they would prepare it as normal, labs would analyze the samples. The aim is to have Lab Sampling Round Robin, subscription for 2024. Statistical evaluation would be provided.
 - b. Survey questions - See PowerPoint for questions.
 - c. Benefits - Labs are to having to construct/design sample prep study themselves. Labs would see how their results compare to other. Data could be used as part of validation of sample prep. Labs could purchase multiple subscriptions.
 - d. Questions –
 - i. Kristi -What kind of reports are labs going to get back? If you have acceptable results for some analytes and not others what will that mean?
 - ii. Tai/Josh -How will we know the difference between sampling error verse method errors?
 - iii. Brenda -The WG is still discussing how best to capture the Sample Prep & Test Portion Selection. Then once the information is captured, how best to present that information.
 - iv. Andy – We can use the same sample for both so you can have the sample prepared by Able labs as normal and then have Able lab send the bulk unprepared sample so you can use it as comparison.
 - v. Brenda - Rather than replacing a round in the PT scheme, instead we can have Able Labs make a big mix of a sample and let them process it for both the normal PT and then the Sample Prep PT.
 - vi. Nancy - This proposal would double the amount.
 - vii. Sally – Is this feasible for Able Labs? Bob - I believe we can do that, but it would be more expensive.
 - viii. Josh - Do we need to limit the number of labs? We have not set a limit.
 - ix. Kristi – Would labs not want to participate after a while unless their sample preparation procedures change?
 - x. Nancy - This should be considered like a QC that could be just incorporated into a labs process like any other QC for other procedures.
 - xi. Brenda – A lab would want to demonstrate to ISO accreditors that sample prep is in control.
 - xii. Sharon - Agrees with Kristi's concern that the labs will lose interest in participating frequently.
 - xiii. Kristi - When it's advertised make sure you mention what it used for and how it can continue to be used.
 - xiv. Denice - When you suggested sending it unground and ground has value to see the difference it would have value every year to know that your consistent. You can have multiple staff do it and develop a measurement uncertainty.
 - xv. Sally - It has been suggested that we try this for one year as a pilot.



- xvi. Leo - Even if you are sending out a ground and unground, they will not be equivalent. As an alternative look at other sources that leads to particle segregation. Try instead experiments within the lab that avoid shipping segregation.
 - xvii. Nancy - All this information is available to you in your PTs but if we want to do one set of ground vs. unground, we can do it but it's going to provide reduced returns.
 - xviii. Nancy - We do know that you're going to get varied results based on how well some analytes perform inherently. You need to gear your sample prep process to the most demanding analytes.
 - xix. Brenda - Test portion size is extremely critical in micronutrients and vitamins
 - xx. Ken - Why don't we do a study and we send a sample around and tell each lab what method to do?
 - xxi. Brenda – It may have three options for specific sample prep procedure.
 - xxii. Rebecca - It would be great if after sample prep we could ship the sample back to the same lab that's going to analyze all the participants samples the same way (same method code).
 - xxiii. Frank – It seems like there will be another level of method to report. Method for sample prep and method for chem analysis.
 - xxiv. Andy – I will do the statistics on the data.
 - xxv. Bob - Recommends that we don't start early in the year. Set the deadline for sign up in January and start maybe in May
 - xxvi. Josh - PTP Committee needs to send this proposal to the Board. You need to send the proposal to the Board by September. Then we could start recruiting directly after that. We will need to write the proposal up and include the pricing structure and then do an e-vote by the end of August.
 - xxvii. Sally reviewed the proposed scheme for a possible vote.
 - 1. Proposal -two rounds (semiannual)
 - 2. Each test item would be 1 kilogram
 - 3. Able Laboratories would prepare the test items by weighing each ingredient individually and put them into each lab's container
 - 4. Labs receive the samples they would prepare it as normal, labs would analyze the samples.
 - 5. The number of labs could be capped at 60 labs.
 - 6. Target start date -May 2024
 - 7. For the survey questions we will start with the 6 we already have for the pilot.
 - 8. Brenda can add the method codes.
 - 9. All samples will be unground
 - 10. Name: AAFCO Laboratory Sampling Round Robin
8. AV Workgroup update – S. Flowers
- a. Sally reviewed the Workgroup recommendations which were broken out into Short-term, Mid-term and Long-term goals.
 - b. Questions
 - i. Lars -to what extent is this wishful thinking, where will we find the resources, money and volunteers.



- ii. Josh -My concern is not as much with the financial aspect but with finding enough staffing resources.
- iii. Ken - Will you be able to send this draft out?
- iv. Sally - We will need to get it reviewed by the board before publishing this draft proposal.
- v. Frank – I noticed that there is a \$80,000 / year surplus in the PT program that can be used.
- vi. Kristi - This is comprehensive but I agree with Lars that it's a big investment. The one thing that comes out of this I hope is some guidance for the field sampling.
- vii. Ken - My biggest concern is the short-term plan. I 'm just concerned about changing things for the short-term.
- viii. Mark L- We are better off with data that reflects modern check sample data rather than historical data which they are using now every day.
- ix. Andy - Some analytes may not have any PT data available to evaluate.
- x. Nancy - I agree with Ken, the Mid-term and Long-term goes are great but get rid of the short-term goal.
- xi. Frank -In the Hemp world, they are only using measurement uncertainty.

9. Other Business

- a. In the future Zoom links for PTP Midyear and Annual meeting only be sent by FASS to registered attendees. There are AAFCO scholarships available to support member attendance.
- b. Use of Baltimore B room on Tuesday: This room is being used by multiple groups so please make sure to take all belongings during Tuesday lunch.
- c. Roundtable Discussion – none; previous PTP agenda items used the allotted meeting time

10. The meeting was adjourned.

ACTION: Move to adjourn meeting

MOTION: B. Snodgrass/T. Ha - passes

Action Items

Responsible	Item	Action	Timing/Status
QA Manager/Program Manager	ISO 17043 updates	Update Quality Management System to meet updated ISO 17043 standard	Complete by 2025
Committee Chair	AAFCO Laboratory Sampling Round Robin	Finalize details with PTP Committee input; prepare proposal; share with BOD	October 2023



Appendix: Attachments

Swarbrick Lab Sampling Round Robin July 2023 – Final (PowerPoint)
2023 Annual Robust Range (R-Bar) to PT Program Reports (pdf)
2023 Annual Meeting PT Program Scheme Subscription Update (pdf)

Scheme Subscription Status

2023 AAFCO Annual Meeting

Monday, July 31, 2023

Baltimore, MD

AAFCO PT Program Schemes 4-Year Program Participation Comparison

SCHEME NAME	HISTORY				CURRENT	
	# of Labs (# Ordered)				As of Jan 15	As of July 27
	2019	2020	2021	2022	2023	2023
Animal Feed	261 (270)	234 (234)	181 (181)	237 (246)	194 (200)	228 (236)
Pet Food Ingredients	74 (87)	69 (79)	42 (42)	105 (118)	70 (79)	118 (120)
Minerals	40 (40)	42 (42)	30 (30)	51 (52)	38 (39)	48 (51)
Mycotoxin	74 (74)	72 (74)	64 (64)	92 (92)	76 (76)	91 (91)

Addition to Robust Range to PT Program Reports

2023 AAFCO Annual Meeting
 Monday, July 31, 2023
 Baltimore, MD



AAFCO
 Association of American Feed Control Officials



Animal Feed Scheme

Test Material Code # 202326

Report Card for Lab Code [REDACTED]

Issue Date : 07/31/2023

Dry Dog Feed

Proficiency Testing For 5 Analytes

Method Group	Analyte Group (Units)	Lab [REDACTED]	Data	*Robust Method Values				AAFCO PT	Lab [REDACTED]	Flag	
		Value	range	Mean	SD	%RSD	R-bar	# Labs	Z Score		Method
001	Loss on Drying (%)	7.105	0.0500	7.360	0.3061	4.2%	0.0840	106	-0.83	001.07	0
002	Protein, Crude (%)	25.09	0.1100	24.70	0.2752	1.1%	0.1585	207	1.41	002.06	0
004	Fiber, Crude (%)	4.520	0.4600	3.962	0.5273	13.3%	0.1909	114	1.06	004.07	0
005	Ash (%)	7.410	0.0320	7.359	0.0938	1.3%	0.0570	171	0.55	005.05	0
013	Fat, Pretreat (%)	13.56	0.0100	13.52	0.6227	4.6%	0.2389	96	0.05	013.13	0

Note 1: Interpreting Z Scores: Red indicates a normally distributed Z value >3 or <-3 (requires action), Orange = Z between 2 and 3 or between -2 and -3 (warning) and Green = Z <= 2 and >= -2 (OK at 95%).

Note 2: Data Not Used Flags: 1=Rejected for duplicates too far apart, 2=Rejected as extreme outlier, 5=Reporting limit (<), 4=Zeros submitted as values and 3=Statistical problem. Flag 0 indicates data used in calculations.

Note 3: *Robust statistics not used if < 6 labs reporting, in the case of 4 or 5 labs reporting Means and SD's may be reported based on Raw Data with obvious blunders removed (Mandel h and k exclusions apply; Grey). A zero range is not included in robust R-bar calculation.

Link 1: Presentations on Program statistics, reports and reading: <https://pt-drw.aafco.org/CSPStatsDocs/CSPStatsDocs.html>

Link 2: Info on the AAFCO PT Schemes, data entry, method codes, current & past reports: <https://www.aafco.org/Laboratory/Proficiency-Testing-Program>