

Magruder Committee Minutes
February 15, 2022
Mobile, AL

Meeting called to order at 8:00 am CST by Frank Sikora

Attendance – 41 (13 control officials; 28 industry)

Welcome, Introductions, Agenda Review and Approval – Frank Sikora

Agenda - Motion to approve agenda Sharon Webb, seconded by James Bartos - motion approved

Approval of Last Meetings Minutes – Frank/Patty

Minutes – Motion to approve by Sharon Webb, seconded by Ametra Berry – motion approved

Treasurer's report – Matt Pearson

Matt shared the information about the financial status. We are in good shape. He is learning the Quickbooks system. For the account reports (Quickbooks) the deposits need entered but invoices paid. Discussion: Sharon asked a question about which invoices they've been reimbursed for (for quality samples); and said she can send an invoice.

Administration Update – Frank Sikora

- New N, P, and K sample schemes
- Number of labs enrolled
- Paid vs. unpaid labs
- Scheduled Samples
- Method Codes

See Powerpoint

Frank shared a slide on the number of labs reporting. There was a dip during the Covid-19 timeframe. There was a low reporting for Gypsum 70/95 and CaSO₄ B-Zinc and UAN.

There was a successful push to get labs to pay earlier. The number of paid labs is:

Regular – 110-115 labs (Note: 25 labs in regular scheme chose other schemes)

N – 25 labs, P – 38 labs, K – 22 labs

There are 30 unpaid labs. The deadline is March 1 or no sample is sent in next shipment.

See slide on type of labs in scheme and number of labs paid/scheme.

International, USA Regulatory, USA Manufacturing, USA Service and USA Other

New Labs to the Program

14 International, 10 Manufacturing, 4 USA Service

James Bartos asked what the total number of participating labs in program is. Frank Sikora said total number that are paid for 2022 is 136. He then shared a chart of the number of paid labs vs. enrollment year. The trend shows an overall increase from 129 (2017) to 136 (2022) with a reduction around 2020. It was identified that there are 39 unpaid labs that may yet pay. Mark LeBlanc asked about unpaid labs and at what point do we address. Is 39 typical year to year? Frank said it's hard to say because we used to send samples at the beginning and wait on payment after. Bill Hall asked a 2 part question regarding how the statistician cost increased and will revenue from new schemes cover the cost in statistician services. Frank said the cost is per sample and it might take a year or two to get things going. Frank doesn't have hard numbers yet. Bill said its an investment in the future.

See slides for total paid labs (US public 41-regulatory), US private 46 (service 23, manufacturing 21, other 2) and international 49. For all labs (paid and unpaid), the total is 175 (US public 42-regulatory), US private 49 (service 25, manufacturing 22, other 2) and international 84.

Sharon Webb asked how Bob Kieffer is keeping up. Frank said it's a little challenging. Per Bob, there was a challenge in preparing packages for the February sample; and Frank provided him a list.

Upcoming samples –

Discussion: Potassium sample (MgSO₄ product) – mesh size – either go out at this size or lab's grind to dissolve potassium (65 mesh screen). Job Fugice asked Frank what sieve size Bob uses. It's a herring bone-measure size of width. Hugh explained it as 500 μ min. And said have him grind it and test to be sure it is homogeneous to see what the particle size is in his normal operation. Would it be ok to have some taken out? No, it changes material. Need to see what size he gets from his procedure. If all passes 65 mesh, its ok. See if sample prep had an effect (particle sizes). Hugh discussed that we may need to look at sample prep. Changes may be needed due to changes in product. James asked if we go to the extent to verify. Bill said the current procedures developed in 1929 and materials have changed. It was discussed that if it doesn't work, Michelle should provide the specific sample. Sharon said its great that she knows her product so well, but the sample should be done the way a regular lab would grind/prepare it. Discussion continued about methods we have vs. special method considerations. Bill said what if a manufacturer says here is my sample method. Needs to be validated for all samples. Frank asked will it be ground and applied at this 65 mesh (agronomy consideration). Homogeneous sample to labs, get variability of results, determine IA. For integrity of program, Michelle's is regarding increasing solubility. A regulatory lab may determine its deficient because they aren't going to get to that extent of grinding to 65 mesh. Frank said approach for modified procedures. We have AOAC standardized. Another way to look at it, Bill said if not soluble in this method, is it a slow-release potassium product.

Question from the audience (Dr. Elizabeth Woznick), asked can you send 2 samples, one ground and one unground? Frank said there will be a difference. James said maybe send a different grind next year to see difference due to grind error/distribution from different labs. Frank said Job is in charge of getting samples for program. Bill shared info from AOAC (sieve size details); may need to tighten up.

Updating LabPortal to handle payments, contact changes, list of labs to ship, shipment information – Frank Sikora

Frank shared a proposal he has for updating the lab portal to handle payments, contract changes, list of labs to ship, shipment information

Frank spoke to Brenda Snodgrass at AAFCO regarding the Data Reporting Website (DRW). Frank met with her to look at how this could be used for Magruder program. Frank would like to transition the Access database to a web based/easier to use system that others could use to perform detailed functions. (See Powerpoint on FASS PT Program Functions)

Data Reporting Website Lab Portal (Magruder) – Current functions, data entry/access to reports

Proposed additional functions – invoicing, generating invoices, receiving payments, provide shipment option when invoicing, new lab enrollment; sample shipments; laboratory contracts, lab edits contact for DRW Access; QRMS, purchasing, inventory

Provide list of paid labs for sample shipments

- Lab edits address for shipment
- Provide shipment tracking

- Add email contact for shipping notices

Big advantage of going with FASS is AAFCO already has a working system; not starting from scratch.

Frank shared the dashboard for Laboratory Manager. There is separate login for different functions (manager, invoice, etc.). Discussed payment types and pro-forma invoice. A big advantage using FASS for AAFCO program is the schemes they sign up for are available to them in DRW.

AAFCO Quality Reference Material Order Form - Sharon said this would really help her out. Wouldn't need to track/enter into a different separate spreadsheet. James asked if when the material quantity goes to zero, does it go away? They don't know for sure, but assume it may. Bill asked about what to use if folks want to continue using bank drafts vs. credit cards, Matt or FASS. Mark said whatever is easier for Matt. Sally Flowers shared that when they moved, they had lots of turnover. Would Matt/Sharon be handling those questions?

Last slide addresses what would it cost for FASS to handle those things; look at what the cost would be. Sharon shared that from a feed side user, it is way more efficient (faster).

Advantages – Administrative functions are pushed to the lab (Bob Kieffer); invoicing is synced with the DRW.

The cost – development is \$8,300

- \$1600 Baseline app cloning
- \$1600 Developing discount support
- \$2500 Data migration/import and switch over
- \$2600 Communication/project management/training/support
- Support \$60/hour for support with customer issues on payment (max 10 hr/month)

It was asked how much do they have to help feed customers? Feed may have someone who handles it.

James asked how much it would need to be tweaked? It was said that if we go with this, it would be Frank's time to assist with customizing but will free up Frank's time if this is done.

James Bartos made a motion to pursue this, seconded by Ametra Berry. Motion passed.

Magruder Newsletter – Frank Sikora

There was discussion on what topics might be useful in future newsletters. James suggested the topic of testing various forms with a focus on Nitrogen (speciating ammoniacal vs. others). One aspect may be plant available forms and agronomic considerations/educational. Sharon clarified to discuss element/availability to plant; and how it reacts in soil? James said for example, do people realize ammonium will convert to nitrate over time?

Another topic is the history of how we came up with available phosphate. Bill said from an environmental perspective (metal speciation).

Sally suggested including information from PT programs. A lot of good things come out of the program including QC factors for supporting continuous improvement and educational information.

Frank suggested having a lab volunteer how they use the information from the PT program. Hugh said maybe we can find a way within the program to help labs that don't perform as well; methodology to help them improve. Frank said that was a great idea but does take someone's time, which can be limited.

Bill shared vendors that have good training videos, etc. and suggested putting a link in newsletter. Sally indicated that starting a vendor's corner. Dr. Elizabeth Woznick liked the idea to evaluate data and share information about for example, a poorly performing method, etc.

Sally asked if we could solicit feedback about the newsletter? Frank said Bill had shared an older practice of writing up how methods are performing. Would be good if we can get back to doing this once a year. It could be put in the newsletters by nutrient/method and would be a value to industry in general. The work could be spread out within experts. Hugh suggested having someone new to Magruder program to share their experience; and referred to a question from Sanford regarding 190511 and how to get more. Sharon summarized the process of going to Magruder website, order past QRM, cc: treasurer, and once he receives the payment, she will send it out.

Regarding newsletter content, James said that if manufacturers want to share anything about product, industry could provide background such as contributions to variability. Also, Elaine Hasty at CEM volunteered to provide a vendor perspective for the Vendor's Corner. Bill said Andy would like labs to also run for nonnutritive metals. And asked if there's a way to promote more labs reporting nonnutritive data for good statistics?

Dr. Elizabeth Woznick (Verdesian) mentioned looking at breakout by regulatory/international, etc. (variability). Bill suggested putting an email place to provide information; which could provide Frank a list of potential recipients.

There was a discussion regarding getting more participants. Hugh said there is a new international initiative that is working on a workgroup for N, P, K. During an upcoming meeting could emphasize Magruder to compare data and increase overall aspects of Magruder. Bill mentioned advertising in IFA Newsletter (goes out over the world). A question was asked about advertising through TFI? Frank said what it boils down to is having people to do things, need more volunteer effort.

A question was asked about how quickly will you be able to introduce new FASS system? Frank said he would like to have it in place for 2023 and hopes the motion still stands.

Regarding Biostimulant involvement, a question was asked, would you consider having industry WP involved? Possibly the development of additional samples/program; maybe a marketing group – between Magruder and industry to introduce. Frank wondered how interested industry would be in regular schemes. Ask industry if they'd be interested in discussing how to advertise/develop program (Biostimulant scheme)? In general, get more voices from manufacturers in developing Magruder program in general. Magruder committee, industry can vote. Will gladly accept members from industry. Frank said group is meeting monthly, would welcome more participation. Email Frank to be on distribution list or email Frank in newsletter.

A different concept: Measurement Uncertainty rather than Investigational Allowance for compliance testing

(see presentation)

Frank shared Hemp PT program information.

For MAP/DAP, similar but not newer materials.

Bill said need to factor in sampling contributions with today's materials/mixtures.

New Topics

Adjourn

Motion to adjourn by Sally Flowers, seconded by Sharon Webb - motion approved

Magruder committee meeting adjourned at 10:15 am.

Magruder Committee meeting

4/6/22, 3 pm ET

Attendees: Frank Sikora, James Bartos, Andy Crawford, Sally Flowers, Bill Hall, Maryam Khosravifard, Bob Kieffer, Patty Lucas, Matt Pearson, Scott Roalofs, Hugh Rodrigues, Sharon Webb

April 2022							May 2022							June 2022						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
27	28	29	30	31	1	2	1	2	3	4	5	6	7	29	30	31	1	2	3	4
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31	1	2	3	4	26	27	28	29	30	1	2

1. Treasurer honorarium for Jamey Johnson.
Matt shared the email from Jamey. This agenda item was tabled until the June meeting which will be after the May BOD conference call.
2. Update on 2022 enrollees and payments
 - a. # paid labs = 139, # unpaid labs = 37
 - b. Unpaid labs are 2 US labs and 35 International labs

	#Regular	#N	#P	#K
# enrolled	150	30	39	25
# enrolled both Reg and X		16	26	17
# paid	116	29	35	23
# paid both Reg and X		16	24	17
% paid	77	97	90	92

Frank reported that we won't be generating income until the next invoicing period.

3. Budget update (Matt)
Matt went over the report and supporting documentation that he submitted to the committee prior to the meeting. Questions were asked about the Zoom fees and licenses for the methods forum and what the MOU with FASS is. The MOU was for online registration, contract, etc. The net income was \$8,865.75. The Magruder account ending balance is \$94,233.97 and there are some additional funds to be transferred in from the general account. There are also some payments from the international labs. None of the funds received are transferred over yet. James asked about feedback on virtual vs. in person for the forum and whether we will ever have an only in person meeting. Sally asked if we received any feedback from the virtual attendees. Bill said he didn't hear anything but he will get with Bette Jo about it. Bill asked about the 35 international labs, are they in one region, one country and whether there are any sanction issues? Frank said they are mostly in Pakistan. Sharon said there were questions from

some on why they were not getting samples. The answer was that we won't send them until payment is made. Hugh has difficulty getting payments from the Middle East (3-6 months). Frank said they are working with 3rd party entities.

4. Committee vacancies (Frank)

See spreadsheet. Need to replace two industry and one regulatory. There are some names on the waiting list. Discussion: Bill offered to go off committee if we want some new folks. Melanie Titley is active on the feed side. Sharon and Sally recommended her. Would be good to have a Canadian perspective. James is in favor of Melanie and also added Kevin Sapp and Wendy Zellner. Hugh also supports Kevin, Wendy and Melanie. Bill has heard Mosaic may be interested in engaging in Association, etc.

***Frank is to reach out to Kevin, Wendy and Melanie.**

For the future...

Possible vendors – Deion Tsourides, maybe to replace Bill Hall. Also, Elaine Hastings from CEM and her replacement Macy Harris.

5. Sample schedule for 2022 (Job and Bob)

See spreadsheet. Job could not make the meeting. Frank asked Bob about waiting on organic with humic acid. Bob said he doesn't have it yet. May need to move one of the others up. For high micros samples, Bill will be doing. He is going through Magruder data. Frank asked if Bill could get Potassium Sulfate.

6. Methods Forum (Bill, leadership transfer)

- a. Winter annual meeting set for Feb 13-14 in Santa Fe, NM
- b. Methods forum scheduled for Feb 15-16

Bill is searching for leadership transfer. The forum is scheduled for 2023 and if we are going to do 2024, we need to let Steve know. James said we are going back to Mobile, AL for AAPFCO in 2024. Bill said he will continue through 2023 and would help in 2024. Frank said James/Hugh are leaders for 2024; Wendy to assist long term. Plans are to break up tasks in subsections and share. Sharon suggested forming a committee; Bill to work with the committee. Can be done by steering committee but someone has to be in charge. The Methods Forum Board will meet and plan it out.

***Bill Hall made a motion to go ahead and commit to the 2024 Methods Forum with a shared responsibility leader. James seconded the motion and the motion carried.**

7. Contract with FASS for updating data reporting website (DRW).

- a. Invoicing
- b. Labs having ability to update their contacts
- c. Shipping data available to Bob and shipping information available to the labs
- d. Cost of \$8,300 for upgrade
- e. Provide services to process all payments (wires, ACHs, checks, credit cards) for an hourly fee rate of \$65.35 and will bill monthly.
- f. Beta version ready for review Oct 1
- g. Need ready for invoicing by Nov 1

Frank signed the contract with FASS for DRW. Said there are a lot of good features (feed side). FASS has agreed to do a, b, c. For g., timeline is tight to be able to do November invoicing. FASS said that they will try to get it done by then. May have to be flexible. James asked about whether there is an intermediary if someone doesn't pay? Frank said Bob gets a list of who to

send samples to once payment is made. Hugh discussed that this website may be easier to pay rather than having to go through accounting dept (checks). Will make things easier for Matt. Frank said that timing wise, have two samples in February instead of one in January and one in February; or delay payment til March. Move forward to get things in place. James asked about having labs pay with beta version. Others agreed to pay that way.

8. Summer 2022 newsletter, due date for articles 5/15/22
 - a. Chairman notes (Frank)
 - b. Update on number and type of labs participating in various schemes (Frank)
 - c. Determining your lab's measurement uncertainty
 - d. Chemistry of phosphorus in soil and history of "available" P
 - e. Vendor webinars and training opportunities
 - f. Upcoming meetings

Ideas Frank has are listed above (a-f). Bill suggested adding a summary of history/benefits of the Forum. Frank said that it would be great for Bill to write this (for summer or fall/winter). James/Hugh said that UNFAO/IMFA are very interested in Magruder. Frank asked if any of their members are members of Magruder? They are organics, INFE (Hugh)

Frank added:

- g. History/benefits of the Forum.
- h. UNFAO, IMFA (organizations want a proficiency program)
- i. Biostimulants, nonfertilizers

Frank discussed due dates, would like to get by May 15.

9. Next meeting date/time
Next meeting is June 1, 2022 at 3 pm.

A couple of additional items regarding the Forum. Sharon emailed Steve about 2023 meeting. Papers are ready to sign. James said that maybe we could assign one person for AV (maybe easier and smooth things out). Maryam said the Methods Forum was great and shared that CA can't travel to some states (for consideration). She also indicated the sound was rough sometime.

Meeting adjourned at 4:30 pm.

Magruder Committee meeting

6/1/22, 3 pm ET

Attendees: Frank Sikora, Job Fugice, James Bartos, Ametra Berry, Andy Crawford, Bill Hall, Maryam Khosravifard, Robert Kieffer, Patty Lucas, Steve McMurry, Matt Pearson, Dion Tsourides, Sharon Webb

June 2022							July 2022							August 2022						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
29	30	31	1	2	3	4	26	27	28	29	30	1	2	31	1	2	3	4	5	6
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30	1	2	24	25	26	27	28	29	30	28	29	30	31	1	2	3

1. Magruder turns 100!

Frank Sikora shared that Magruder was started in 1922 and would like to do something to commemorate the 100th anniversary occasion at the summer meeting. He asked for ideas and suggested noting the occasion with a reading of the article he wrote for it. Sharon Webb proposed notifying all the membership as well so they could hear the history and importance of the program. James Bartos suggested having someone speak to it at the SA meeting at the end of the general session. Frank said he'd be willing to speak. James also suggested putting an emblem on reports, like "Serving fertilizer laboratories for 100 years" – 100 year anniversary for Magruder. AAPFCO is planning to have a cake for AAPFCO's 75 year anniversary at the welcome reception. It was suggested that Magruder could have a little reception on Tuesday for the 100 year anniversary. Dion Tsourides said they could provide something, like "Helping support 100 years of Magruder" on their website and a monetary contribution for the event. Frank suggested having a reception after the Lab Services committee meeting.

Andy Crawford spoke to the article findings from then and how some of them were still happening today; and also discussed the benefit of running blind duplicate samples. He can provide a report card with comparison results for duplicate samples.

2. Summer 2022 newsletter, due date for articles 6/15/22

- a. Chairman notes (Frank Sikora)
- b. Samples scheduled (Job Fugice)
- c. Magruder turns 100! (Frank Sikora)
- d. Name change to Proficiency Testing Program from Check Sample Program (Frank Sikora)
- e. Upgrade of Lab Portal website (Frank Sikora)
- f. Value of Magruder program in a Regulatory Laboratory (Maryam Khosravifard)
- g. Goals of the International Network on Fertilizer Analysis (INFA)
- h. Vendor webinars and training opportunities
- i. Upcoming meetings

Discussion: James Bartos mentioned that Sally Flowers had discussed a vendor's corner (possibly CEM?). Frank asked if we had received anything regarding training opportunities. He also asked if Job could write an article on the sample schedule for the rest of the year. Job said he has some information put together and will share a draft for this.

3. Survey on K method used

- a. Over 40% of labs reporting a value for K₂O are reporting the method used as "Other". Survey created to determine method used.

- b. 39 respondents so far, 24 respondents report “Other”

Frank Sikora said he noted a lot of labs report the method used as “other”. He sent out a survey to get additional information. 39 have responded (so far) and 24 of them report as “other”. Frank will report the survey information at the summer meeting. Bill Hall asked if potassium is the worst offender? James Bartos said when he looked at the IA for P&K, they are almost twice as high for potassium as opposed to phosphorus. Phosphorus is held to a tighter standard.

4. Treasurer honorarium for Jamey Johnson.

Jamey Johnson is requesting \$3,000 for July 2020- June 2021 payment and \$1,500 for July 2021- December 2021. Full email on request is below.

Frank Sikora said this had been tabled at the last meeting. Jamey did not pay himself the honorariums and was requesting payment. The decision was postponed until after the May Board of Directors (BOD) meeting. Patty Lucas shared information from the BOD meeting that a lot is still pending and this is not yet resolved. A total of \$4,300 was spent by Jamey in 2020 for computer support of which \$1,625 was charged to Magruder and \$2,675 was charged to AAPFCO. The AAPFCO BOD was not informed of these expenditures prior to purchase. **James Bartos made a motion to approve \$2,875 for payment now and have a group review/discuss the circumstances regarding the \$1,625 balance to determine whether payment would be made. Sharon Webb seconded the motion and the motion carried.**

5. Update on 2022 enrollees and payments

- a. # paid labs = 146, # unpaid labs = 33
- b. 11 labs enrolled this calendar year

	#Regular	#N	#P	#K
# enrolled	152	32	39	25
# enrolled both Reg and X		16	26	17
# paid	122	30	35	23
# paid both Reg and X		16	24	17

Frank Sikora said we have 146 paid labs and 33 unpaid labs. We had a pretty good number of labs enrolling this year. We recently had a potassium scheme but didn’t have enough participants to have a COA for the KMgSO4 sample.

6. Budget update (Matt Pearson)

Treasurer Matt Pearson sent bank statements, account balances and the budget information spreadsheet to committee members prior to the meeting.

He shared the budget information spreadsheet on his screen during the meeting.

Methods Forum

Income = \$17,230.41

Expenses = \$8,004.66

Net = \$9,225.75

Magruder

The Magruder account balance has increased \$14,077 since November 2021. A total of \$15,985.11 will be transferred into Magruder from the AAPFCO general account either today or tomorrow. When someone pays it goes into the AAPFCO general account first and is then transferred to Magruder.

Frank Sikora would like an itemized budget so we can see the amounts per scheme vs. expenses. Matt said he can run a report for the details of the expenses. He has a breakdown of expenses, (eg. Shipping is over \$12,000), and will be able to provide an overview of expenses as well as how much we've collected for the different schemes. Bill Hall said we had discussed that it may take a year to two for start up costs as a starting point. Sharon Webb said she'd like to see just what has been paid for regarding QRM expenses (what has been paid and is being paid for reconciliation for these). She would like to have this wrapped up by the end of this year. Bill also asked about the cost of sending out two samples at the same time (double prep fees, shipping costs, etc.). Frank said that it is not too expensive. Bill said we may need to have a couple more samples sent to address the data gaps.

7. Committee vacancies (Frank Sikora)
 - a. Wendy Zellner (Assoc. Professor, Univ. of Toledo), emailed affirmative and provided CV
 - b. Melanie Titley (Section head of CFIA Feed and Fertilizer Chemistry Lab), emailed affirmative
 - c. Kevin Sapp (Mosaic)

Frank Sikora said that at the last meeting we indicated that we'd like to fill the 3 vacancies with the above people. He said both Wendy and Melanie were positive for joining and are sending CVs. Kevin has not responded yet. Frank asked how would the committee like to proceed? James Bartos asked if Wendy is classified as industry or regulatory? Frank shared the spreadsheet information on this. Sharon Webb said she is not regulatory; would classify her as industry. James said he would lean as well towards industry. Frank to get their CVs and circulate them to the membership committee. Sharon said we could do it now if we wanted. Bill Hall said we didn't typically review CVs; also said he thinks Kevin may have challenges. If the committee accepts all three, we could accept Wendy and Melanie; and Kevin on contingency if he accepts.

Motion made by Bill Hall to accept Wendy Zellner and Melanie Titley and Kevin Sapp if he agrees. Sharon Webb seconded and the motion carried.

8. Sample schedule for 2022 (Job Fugice and Bob Kieffer)

Job Fugice shared the sample schedule spreadsheet. Per previous discussion, Bob Kieffer is going to purchase the K_2SO_4 sample. Job asked Bill Hall about the August sample. Bill said he hasn't made it yet but is working on the calculations and doesn't see any problems. Sharon Webb will help with the next month's sample. Discussion about the high micros sample and whether many people would run it. If we make a 5-5-5 plus micros, it wouldn't be as good for data gaps. High micros alone would help with data gaps. Participants only in Magruder program will get high micros. Would it be a good time for a double sample month? Just high micros is fine. If signed up for regular and nitrogen, getting high micros and ammonium sulfate.

Andy Crawford suggested that we don't wait longer than 6 months for duplicates to minimize number of variations (temperature, analysts, etc.). Every 3 months would be better. There was discussion about the number of labs, duplicate reports, etc.

Frank Sikora said there are two objectives, one is for labs to compare their results and the second is to get enough data for Sharon's data gaps. Andy said the average of duplicates information is useful. Sharon said she needs the reproducibility data. Down to 5 labs? Andy needs to see the data first to get a handle on it; then, he will take the results and compare them. Said we need a way for every lab participating to get a result. Bill said if the data comes back with enough labs, would show this as a very good sample for reference material.

9. Methods Forum (Bill Hall, leadership transfer)
 - a. Winter annual meeting set for Feb 13-14 in Santa Fe, NM
 - b. Methods forum scheduled for Feb 15-16

**At our last meeting in April, Bill Hall made a motion to go ahead and commit to the 2024 Methods Forum with a shared responsibility leader. James seconded the motion and the motion carried.*

Frank Sikora reminded everyone about what was voted on for 2024. Bill Hall asked Steve McMurry if this is ok? Steve said he doesn't know yet but will contact the hotel. Main thing is what days you are planning on having the meeting and it will be in Mobile, AL in 2024. If you start at 8 am vs. noon on Wednesday through 5 pm on Thursday, it is different. People would travel out Friday morning. Bill recommended keeping the format the same now unless we hear otherwise. New leadership will then decide.

Leadership transfer discussion: Frank Sikora said that at the last meeting, James Bartos and Hugh Rodrigues could do it together. James said that would be ok. He and Hugh will do their part. James said Steve is going to need some definite answers as he books meetings going forward. Bill will be waiting until after the SA to start the 2023 Method Forum plans (MF BOD meeting). Need to have some biostimulant folks on the planning group. Wendy is very interested in being active as a forum leader.

10. Contract with FASS for updating data reporting website (DRW).
 - a. No activity to report

Frank anticipates working on this in the fall. Will be a little tricky seeing all of this through for 2023.

11. Next meeting place/date/time
 - a. St. Louis/August 2, 2022/2 pm – Magruder meeting

Enjoy your summer!

Discussion: Question was asked about summer meeting agenda. Frank Sikora said it is on the website but he will add some information about Magruder turning 100!

Maryam Khosravifard asked if there was any record that shows when CDFA began participating in Magruder? Frank said he will look into it. He said he started in 2013, would it be after that? Maryam said they have been doing it for a very long time but wanted to confirm when. Bill Hall said there may be some information in the historical AAPFCO OPs. James Bartos said the Magruder number could help indicate (lower number may indicate earlier participation).

Motion to adjourn by James Bartos and Sharon Webb seconded.
Meeting adjourned at 4:27 pm