

**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (Department)
FERTILIZER INSPECTION ADVISORY BOARD (FIAB)**

**CDFA
2800 Gateway Oaks Drive
Sacramento, CA 95833
Room 101
916-900-5022**

**October 1, 2019
9:00 a.m. – 12:00 p.m.**

MINUTES

MEMBERS

David McEuen
Doug Graham
Ed Needham
Gary Silveria
Greg Cunningham
Jake Evans
Jay Irvine
Melissa McQueen
Steve Spangler

CDFA

Adriana Avalos
Amadou Ba
Barzin Moradi
Brittnie Sabalbro
Brooke Elliott
Carla Sanchez
Dale Woods
Emad Jahanzad
Jenna Leal
Mark Cady
Martin Burger
Maryam Khosravifard
Natalie Jacuzzi
Natalie Krout-Greenerg
Nick Young
Nicole Crouch
Stacy Aylesworth

INTERESTED PARTIES

Michael Koewler
Rebekah Finn
Renee Pinel

INTRODUCTIONS AND ANNOUNCEMENTS

Melissa McQueen, Chair, called the meeting to order at 9:02 a.m. Self-introductions were made, and a quorum was established.

APPROVE JUNE 26, 2019 MEETING MINUTES

Chair McQueen requested the board review the minutes from the June 26, 2019 FIAB meeting.

MOTION: Ed Needham moved to approve the minutes; Steve Spangler seconded. The motion passed unanimously by all board members present with a vote of 8 - 0. Jake Evans was not present for this vote.

DEPARTMENT / DIVISION / BRANCH UPDATES

Natalie Krout-Greenberg announced the Department's Division of Inspection Service's (Division) new Public Information Officer II, Joshua Bingham, has been a great asset to assisting the Division achieve their goal in better communicating with the industry by sharing all the work performed within the Division.

Krout-Greenberg stated that nutrient management continues to be a high level interest from the secretary. The secretary has advised the Division to work closely with stakeholders and think about programs that can help growers address nutrient management.

The Department's Produce Safety Cooperative Agreement, designed to assist the United States Food and Drug Administration (FDA), tasks the Department's Produce Safety Program (PSP) to perform inspections throughout California for the purposes of the Food Safety Modernization Act (FSMA); 70 inspections are completed. The PSP also responds to emergency outbreaks by working with the California Food and Emergency Response Team, FDA, and the California Department of Public Health.

Since the 2018 outbreaks linked to romaine lettuce, the Department has been focused on the process, system inputs, and adjacency to farms. The Department has partnered with the University of California, Davis (UCD) and FDA to host the Good Ag Neighbors workshops to address produce safety and food safety issues. A notice will be released detailing the Department's surveillance sampling project of animal based manure and compost, and heat treated products under the Department's jurisdiction. The sampling project will be looking at E.coli O157:H7 and salmonella.

Dr. Amadou Ba announced that after 30 years of state service, Gary Castro, Research Data Specialist II, is retiring on December 1, 2019. Castro started his career in state service with 22 years in the Division of Measurement Standards and ends his career with the Division of Inspection Service's Feed, Fertilizer, and Livestock Drugs Regulatory Services Branch. Adrian Jasper, Management Services Technician I, promoted to a Staff Services Analyst with the Division of Plant Health and Pest Prevention Services.

Dr. Ba reported that at the last FIAB meeting the board recommended the Department send two Fertilizer program scientific staff to the 4th Biostimulants World Congress in Barcelona, Spain, which would allow for the Fertilizer Program to engage with other scientists and regulators regarding biostimulants. The international trip has been approved by the Governor's Office; Dr. Martin Burger and Nick Young, current acting president of the Association of American Plant Food Control Officials (AAPFCO), will be in attendance.

Dr. Ba reported that for the last five years, the Department, University of Agricultural and Natural Resources, and California Association of Pest Control Advisers (CAPCA) have managed the nitrogen certification process for Certified Crop Advisers (CCAs). The nitrogen certified training has evolved and the International CCAs is actively engaged in seeking to incorporate a nitrogen based curriculum. CAPCA no longer manages the CCA program.

Assembly Bill (AB) 434 requires every state agency or entity's website to be certified in compliance with the Americans with Disabilities Act (ADA) standards. The Branch has been working diligently on converting documents to meet ADA requirements by the end of the year.

Jake Evans arrived at 9:15 a.m.

The virulent Newcastle Disease (vND) quarantine area from Southern California led to a recent detection of the disease in San Diego County. The Department and United States Department of Agriculture (USDA) vND response team have effectively contained the virus to a small area and will continue their work in detecting any area of infection, stopping the spread of the virus, and eradicating the disease.

Dr. Ba gave a grant update reporting that the Department's Dairy Digester Research and Development Program is releasing a request for proposal on new technologies for manure management; the Specialty Crop Block Grant Program received \$22.9 million for funding; and the Office of Farm to Fork is preparing to release a second request for proposal for the Healthy Stores Refrigeration Grant Program.

Dr. Ba announced Juan Koponen and Michelle Phillips from the Pest Exclusion Branch, are in attendance to provide an overview of the implementation of the California Industrial Hemp Program (CIHP) in response to Evans inquiry at the last FIAB meeting.

Phillips, Senior Environmental Scientist (Supervisor) of the CIHP, provided a legislative history and overview of the program. In 2013, Senate Bill (SB) 566 established Division 24 in the Food and Agricultural Code (FAC). In 2018, SB 1409 allowed the Department to establish sampling procedures, testing methods and laboratories, and to establish an agricultural pilot program. SB 153, currently pending review by the Governor's Office, would amend various definitions and requirements for registration, reporting, and testing. This bill would also set a deadline for the Department to submit a state regulatory plan to the USDA. FAC Division 24 established the Industrial Hemp Advisory Board to advise the Department and make recommendations pertaining to the cultivation of industrial hemp. Phillips reported Hemp Program activities of 2019 which included the adoption of a registration fee and registration for hemp cultivation; adoption of emergency rulemaking to address the sampling and testing which became effective June 10, 2019; hiring additional staff; and responding to public inquiries and

collaboration with county ag commissioners on administering and enforcing the Hemp Program.

FUND CONDITION / MILL ASSESSMENT / BUDGETS

Dr. Dale Woods announced that the Fertilizer Program was not able to capture all program expenses due to the delayed information through the Fi\$cal system; therefore, two fund condition reports were provided in the meeting materials; one reported as of March 31, 2019 and the other as of June 30, 2019. Dr. Woods presented the fund condition as of March 31, 2019, a more realistic view of current funds. The beginning balance for the Commercial Fertilizer and Organic Input Material Program (OIM) was about \$10.9 million; total revenue was about \$5.1 million; expenditures were about \$4.6 million; and encumbrances were \$132,182 with an adjusted balance of about \$11.2 million.

Chair McQueen asked if the Fertilizer Program can give an up-to-date fund condition report at the next FIAB meeting.

The beginning balance for the Fertilizer Research and Education Program (FREP) was about \$4.5 million; revenue was about \$2.3 million; expenditures were about \$1.7 million; encumbrances were about \$1.2 million with a total adjusted balance of about \$3.8 million.

Dr. Woods presented the mill assessment trends and reported that the last four fiscal years (FY) of three mills (\$0.003) per dollar of sales for all fertilizing materials illustrate similar mill assessment totals.

Greg Cunningham asked how long will it take for the reduced amount to affect the current balance presented and when the program must reassess the mill. Dr. Woods stated that when the 2.5 mill is set in place and entered in the database system, the system will automatically recalculate the amount of mill assessment fee. A notice to industry will announce the mill assessment change and its effective date. At the February 6, 2019, FIAB meeting, the Fertilizer Program prepared and presented a five-year projection of revenue and budgeted expenditure calculations for one and a half mills (\$0.0015) per dollar of sales. Based on the five-year projection, the mill assessment trend will be reassessed in about four years to determine if the 2.5 mill is sustainable for the Fertilizer Program.

Dr. Woods gave an update on the rulemaking process to lower the mill assessment in accordance with the board recommendation. The 45-day public comment period on the originally proposed text ended on June 11, 2019. The Department published a notice of a 15-day comment period on the revised proposed text which ended on August 31, 2019. The final proposed rulemaking process is under the Department's Executive Office review and approval to move forward for final submission to the Office of Administrative Law (OAL). The Fertilizer Program anticipates the regulations will become effective January 1, 2020.

Maryam Khosravifard presented the proposed lab budget for the Fertilizer Program reporting that the FY 20/21 projected budget reflects the five percent salary increase for personnel salaries and benefits, \$114,000 for equipment and \$47,000 for ag supplies and services, and five percent increase in the indirect costs. Khosravifard stated that the lab plans to hire for two vacant positions; an environmental scientist and an agricultural biotechnician. The lab is also hiring an additional temporary staff to assist in the lab's sample preparation and sample backlog.

Chair McQueen asked that the lab present their updated budget prior to the board making a recommendation and approving the lab's FY 19/20 revised budget.

Stacy Aylesworth presented the lab's implementation plan to transfer methodologies to the new instruments. Aylesworth provided a layout from the vendor selection date, the purchase order submittal and approval date, the instrument receiving and installation date, to the method transfer verification, sample analysis, and validation completion dates. Aylesworth presented a table illustrating a comparison of the old method versus the new, highlighting the most recent method transfers of phosphorus pentoxide (P₂O₅) and potassium oxide (K₂O) analysis by the inductively coupled plasma optical emission spectrometry, and mineral analysis. The sample analyses have improved and the lab is starting to see the benefits of the new technologies.

Aylesworth reported as of September 27, 2019, the lab received 1,007 samples and completed 886 of those samples.

Dr. Barzin Moradi reported the lab's initiative to look at comprehensive processes by reviewing sample collection in the field, from shipment to the lab, to sample receiving and prep, analysis and read out by the instruments, analyst reporting to the database, and program reporting to field program staff for review and determination of whether it is deemed a notice of violation. This review of the entire process helped the lab identify opportunities for improvement, such as the electronic data sheet designed to transfer lab results to ensure efficiency and prevent transcription errors.

Jay Irvine recommended the lab look at a Laboratory Information Management System (LIMS) as mentioned at a previous FIAB meeting. Khosravifard stated that the lab is looking at the feasibility of LIMS and discussing internal information management processes with the Department's Office of Information Technology Services prior to procurement of the LIMS. Dr. Moradi stated that the lab's Pesticide Residue program (PR) has a customized LIMS that allows for data to populate in the database and data reporting. The lab intends to use PR's LIMS as a model for the entire lab.

Krout-Greenberg stated the importance of reviewing the lab's comprehensive process is to look at the long-term capacity of the LIMS and advised that the Feed and Fertilizer Boards create a partnership to review budget and system wide processes and enhancements.

Irvine further recommended the lab look at Hach instruments from the firm Hach, one of which allows for a variety of over 200 tests and costs about \$5,000. Aylesworth responded stating that the lab will look into the Hach instruments.

Chair McQueen inquired when the lab expects to reap the benefits of the lab's transition to the nine new technologies with the implementation of new processes. Chair McQueen expressed appreciation of the lab as it helps the board better understand the expectations of the lab and determine what resources should be provided to the lab. Dr. Moradi provided historical data on sample turnaround time for Feed and Fertilizer lab. He stated that in 2007 a Memorandum of Understanding was developed between the lab and Feed and Fertilizer programs. Sample turnaround time was agreed to be 21 days. The lab realized that during the past five years, the 21-day turnaround time was being met for only up to 85 percent of samples, which were all being analysed using older chemistry methods. The transition to the new instruments in the past few months have created a sample backlog due to the lab processing the same annual sample loads while transferring technology, training on the new equipment, and multiple staff retirements. The lab's goal is to have a 10-day sample turnaround time and a better database system for data reporting such as the LIMS.

Krout-Greenberg asked if there is an opportunity for both the Feed and Fertilizer Board to collaborate based on the Feed Board's input from last week's FIAB meeting. Chair McQueen announced that Michael Koewler, Feed Board member, is in attendance to share his experience and stated maybe it will open up a possible collaboration.

Koewler, President of the Sacramento Rendering Company, has served on the Feed Inspection Advisory Board since 2005 when the Feed and Fertilizer Inspection Advisory Boards were combined. Koewler explained that the Feed Inspection Advisory Board is raising the feed tonnage tax and there is some anxiousness with that for the Feed Board when it comes to the lab's sample turnaround time and the investment in lab equipment. The Feed Board discussed the possibility of an opportunity to establish a subcommittee with the Fertilizer Board to collaborate and identify lab concerns that would benefit not only both Feed and Fertilizer Boards but industry as well. Koewler advised that the lab develop a plan to present at the next FIAB meetings for both Boards and Programs to move forward and address the challenges faced as a whole.

Koewler asked if the lab could outsource some tests to improve the 21- to 10-day sample turnaround time. Dr. Moradi agreed stating that there are some tests that could potentially be outsourced.

Irvine agreed with the idea of outsourcing some tests encouraging the lab to look long term.

Ed Needham also agreed with the lab outsourcing tests and suggested that protocols be established to ensure the lab maintains the sample turnaround time. Needham expressed the importance of having a backup protocol in place in case of a catastrophic failure.

Chair McQueen asked on behalf of Feed and Fertilizer Boards, if the lab needs any assistance from the Boards. Dr. Moradi responded stating that the lab's priority is the time needed to transfer the rest of the instruments; five instruments have been completed with method transfers.

Jenna Leal, Program Manager of the Feed Program, stated that the Feed Program is also considering outsourcing some tests through strategic planning especially with streamlining assays. Leal advised that the lab take a holistic approach in identifying the totality of each program's budget, necessary equipment and personnel services.

Dr. Woods stated that the lab is seeking board approval for the lab's FY 19/20 revised budget and the FY 20/21 proposed budget. Dr. Moradi stated that the majority of changes in FY 19/20 revised budget are due to the personnel services costs.

Evans asked how the funding is split between the Feed and Fertilizer Programs. Dr. Moradi stated the funding split depends on the complexity of analysis performed on the samples received from each program and the level of expertise needed to complete the sample analysis. Some lab staff are dedicated solely to run certain samples whereas other staff are split 50/50 between feed and fertilizer samples.

Chair McQueen asked that the board approve the lab's FY 19/20 revised budget. Renee Pinel, President/Chief Executive Officer of the Western Plant Health Association (WPHA), stated that even though the Fertilizer Board approves the lab budget, the lab may not be able to move forward as the Feed Board had not approved the lab budget and had tabled the discussion. Dr. Moradi stated the items specific to the Fertilizer Program will get done, but those items shared with the Feed Program will be on hold.

Krout-Greenberg provided clarification stating that the Feed Board will address the lab's FY 19/20 revised budget at the next FIAB meeting and tabled the approval of the FY 20/21 proposed budget.

Dr. Ba stated he felt it is incumbent upon the Fertilizer Board to take action on the lab budget; he asked if the Fertilizer Board saw any expense items of concern on the lab's proposed budget that the Board would like the lab to revise. Dr. Ba agreed with the idea of creating a working group as Koewler proposed to mutualize shared interests and go forward in assisting the lab to meet the expectation of both the Feed and Fertilizer Programs.

Discussion ensued regarding the lab's current and future needs.

MOTION: Jake Evans moved to approve the lab's FY 19/20 revised budget; Steve Spangler seconded. The motion passed unanimously by all board members present with a vote of 9 - 0.

Irvine asked the lab to present a proposal on utilizing a third-party lab to help with the backlog of assays, if the program can negotiate a contract, at the next FIAB meeting.

Irvine advised the lab not to discard all wet chemistry methods in case they may be needed in the future.

Dr. Moradi stated the lab will evaluate the assays to determine which assays are critical to keep in house and identify assays that can be outsourced or eliminated. The lab has looked at other private and government labs analyses including the FDA, UCs, and other state labs, but will research further and draft a proposal with costs associated and report back to the Feed and Fertilizer Boards.

Needham asked for an overview of the lab's structure to better understand where fertilizer ties into the lab at the next FIAB meeting.

Dr. Woods presented the Fertilizer and OIM Program's FY 20/21 proposed budget of about \$7.2 million stating that it includes the lab's proposed FY 20/21 budget. The Program's FY 19/20 revised budget would have to be revised to include the lab's proposed FY 19/20 revised budget. The increase from the combined Fertilizer and OIM Program's FY 19/20 revised budget to the FY 20/21 proposed budget is due to the five percent salary increases. Another minor adjustment to the FY 20/21 proposed budget include the purchase of two vehicles.

Krout-Greenberg explained the purpose of having board approval of the Fertilizer and OIM Program's FY 20/21 proposed budget is that the Programs go through a continuously appropriated program exercise where the secretary delegates authority to approve spending authority for all programs within the Division. The Fertilizer Program seeks feedback from the board prior to the exercise to make adjustments as needed.

Chair McQueen reiterated the increase for the Fertilizer Program's FY 20/21 proposed budget reflects the salary, distributed costs, and the purchase of two vehicles.

MOTION: Greg Cunningham moved to approve the Fertilizer Program's FY 20/21 proposed budget; Gary Silveria seconded. The motion passed unanimously by all board members present with a vote of 9 – 0.

Dr. Woods reported that the FREP budget has been stable throughout the years mentioning that there is minimal change from the FY 19/20 approved budget to the FY 20/21 proposed budget.

MOTION: Steve Spangler moved to approve the FREP's FY 20/21 proposed budget; Greg Cunningham seconded. The motion passed unanimously by all board members present with a vote of 9 – 0.

PROGRAM UPDATES / BIOSTIMULANT WORKING GROUP FOLLOW UP

Irvine announced that the FIAB Biostimulant Working Group met on August 28, 2019. The Working Group was driven by the Environmental Protection Agency (EPA) Guidance Document recognizing that biostimulants are a product in the industry that is growing rapidly in use and sales. The Working Group concluded that the focus should be on the management and regulations of biostimulants, and product chemistry looking

at how biostimulants should be broken down to chemical classes or compounds, organisms, biochemicals, and then the meaning of the classes and their purposes.

Dr. Woods stated the Fertilizer Program's take is that when biostimulants reach the market, the industry would expect the Program to look at efficacy and dependability of products.

Dr. Burger reported, as of August 29, 2019, the Fertilizer Program approved 7,797 conventional fertilizer and 2,088 OIM labels highlighting that the amount of commercial fertilizer and OIM registration applications in provisional review have been reduced to about 40-50 percent. Dr. Burger presented a line graph illustrating conventional fertilizer and OIM approvals and new applications received from January 2018 through August 2019.

The Fertilizer Program Workshop will be November 13-14, 2019 at the Holiday Inn in Downtown Sacramento. The Program is currently working on a notice of proposed rulemaking to update the regulations for the term biotics such as microbes, enzymes, microbial by-products and biochar.

Young reported that at the AAPFCO summer meeting held in Louisville, Kentucky, the Department proposed two new definitions that are now tentative: corn steep liquor and seaweed. The term seaweed is for clarification purposes as not all seaweed is kelp which is already in the AAPFCO terms and definitions. There have been multiple definitions for Fe/Cu Gluconate and Fe/Cu/Mn Glucoheptonates for years with firms arguing whether they are complexes or chelates; it has now come back to the proposal that they are chelates rather than complexes. California only recognizes these terms as complexes, therefore the Fertilizer Program will be reviewing and evaluating the most recent data submitted by a firm which claims that they are in fact chelates and see if the Program's position will change or if the Program cannot support the move to chelates.

Young announced that public comments submitted during the EPA Guidance Document comment period which ended on July 28, 2019 can be accessed on the government regulations website. Most of the comments are regarding the listing of seaweed extract and foliar humic acid as plant growth regulators. Responses to the public comments are expected to occur in late 2019 or the first quarter of 2020. The Biostimulant Working Group has commented providing recommendations to have direct oversight by USDA. The Department and AAPFCO are awaiting the USDA report in December 2019 and revised EPA Guidance Document.

Young reported that OAL disapproved the administrative penalty's violations matrix proposed rulemaking on August 19, 2019 due to a procedural issue of substantive changes not properly noticed. The substantive changes require a 3rd 15-day comment period. Young mentioned that there is no new text on previous versions; however, the public may comment on the newly proposed text during the 3rd 15-day comment period. The Fertilizer Program has 120 days to resubmit from the date of disapproval.

Natalie Jacuzzi reported that 16 of 50 concept proposals received were moved forward for the full proposal phase; of those, the Technical Advisory Subcommittee (TASC) recommended seven for full proposal funding. Jacuzzi gave an overview of the sixteen proposals, and which of those proposals were recommended for funding.

MOTION: Ed Needham moved to approve the \$1.5 million for full proposal funding; Steve Spangler seconded. The motion passed unanimously by all board members present with a vote of 9 – 0.

Jacuzzi announced the FREP WPHA Conference will be held on October 28-30, 2019 in Fresno, California at the DoubleTree by Hilton.

Dr. Ba reported that board terms expire on October 14, 2019 for Irvine, McEuen, and Spangler. Dr. Ba stated that the Branch continues to receive guidance from the Department's Executive Office and the secretary, that a consecutive period of nine years of service is appropriate for board members, which will allow for new members to apply. Dr. Ba stated the board can share information recognizing which applicants will bring value to the board.

Chair McQueen agreed with retaining members that add value to the board. Chair McQueen stated that both Irvine and Spangler reapplied to serve another term on the board. But, as no other applicants applied to fill the vacant public member role, McEuen may be considered to serve another term. Chair McQueen stated that Chris Gallo, Regional Sales Manager of Yara North America, is very active in his area of expertise. Spangler commented that Gallo has an extensive background in agronomic training and had talked about being interested in the board.

Chair McQueen stated Mark Trostle, Vice President of Concentric Ag Corporation, is very active in the company mentioning that she has worked with Trostle in the past in the biostimulant area. Chair McQueen stated there are a lot of competent applicants and invited the board to provide their thoughts.

Needham stated that he has known Christina Johnson, Agricultural Department Manager of Blue Mountain Minerals, since 2011 commenting that he learned about soil amendments from Johnson. Johnson educates crop advisors and growers about the benefits and chemistry of agricultural Limestone and Dolomites, assists them adhere to the Department's label guidelines, and would be great asset to the Fertilizer Board.

MOTION: Jake Evans moved to approve the appointment of Jay Irvine, David McEuen, and Steve Spangler; Doug Graham seconded. The motion passed unanimously by all board members present with a vote of 6 yes – 3 abstain.

Dr. Ba announced that the TASC terms for Steve Petrie, Jenny Remple, and Chuck Hornung expired on September 17, 2019. FREP received 14 applications and worked with a subcommittee to review the applicants and make recommendations. The subcommittee recommended Steve Petrie, Lisa Hunt and Ben Faber for the TASC.

MOTION: Greg Cunningham moved to approve the TASC appointments of Steve Petrie, Lisa Hunt and Ben Faber; Gary Silveria seconded. The motion passed unanimously by all board members present with a vote of 9 – 0.

PUBLIC COMMENT

Koewler expressed the importance of ensuring the lab is prepared and structured in a way to meet the challenges that arise from FSMA and CalRecycle regulations, and asked if the Fertilizer Board would be interested in working with the Feed Board to address current and future lab needs. The goals would be to identify areas of deficiency with investment of personnel services or instruments, the pros and cons of various constituents to test, where the boards collectively see the lab fitting in the future, and how best to leverage resources. Chair McQueen asked the board for volunteers.

Krout-Greenberg stated it would be of value to have a Fertilizer Board member liaison who could consult with the Feed Board, while keeping the interest of fertilizer as the lab progresses.

Irvine and Needham volunteered to be liaisons. Leal stated that she will arrange the meeting and reach out to the volunteers.

AGENDA ITEMS FOR FUTURE MEETINGS

Chair McQueen asked for agenda items for the next FIAB meeting. Needham asked that a lab overview be an agenda item. Irvine asked for a proposal of a third-party lab and a FIAB Biostimulant Working Group follow up be an agenda item.

NEXT MEETING

The next FIAB meeting will be February 25, 2020 at 9:00 a.m., in Fresno, California.

MOTION: Jay Irvine moved to adjourn the meeting; Greg Cunningham seconded. The motion passed unanimously by all board members present with a 9 - 0 vote.

Chair McQueen adjourned the meeting at 1:00 p.m.

Respectfully submitted by:

ORIGINAL SIGNED BY DALE WOODS

Dr. Dale Woods

10/01/2019

Date

Environmental Program Manager I
Fertilizing Materials Inspection Program