**CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (Department)**

**FERTILIZER INSPECTION ADVISORY BOARD (FIAB)**

**CALIFORNIA FARM BUREAU / HYBRID**

**May 31, 2023**

**9:00 AM – 12:00 PM**

**MINUTES**

**MEMBERS** **CDFA STAFF** **INTERESTED PARTIES**

Chris Gallo Amadou Ba Mike Menes

David McEuen Angelia Johnson Renee Pinel

Gary Silveria, Vice Chair Barzin Moradi

Greg Cunningham Brittnie Williams

Gus Olson Dale Rice

Jake Evans Elizabeth Moseby

Melissa McQueen, Chair Emad Jahanzad

Timothy Howard Karen Adler

William Oglesby Kristopher Gulliver

 Maria Tenorio Alfred

 Mark Cady

 Martin Burger

 Minal Patel

 Nick Young

 Nicole Smith

 Stacy Aylesworth

**INTRODUCTIONS AND ANNOUNCEMENTS**

Melissa McQueen, Chair, called the meeting to order at 9:06 AM and self-introductions were made.

Chair McQueen announced three upcoming board member terms expire on October 14, 2023 for herself, Gary Silveria, Vice Chair, and Timothy Howard. Chair McQueen encouraged recruitment in the fertilizer industry and interested parties.

**ROLL CALL – ESTABLISH QUORUM**

Roll was taken and a quorum was established.

**APPROVE FEBRUARY 7, 2023, MEETING MINUTES**

Chair McQueen requested the board review the minutes from the February 7, 2023, FIAB meeting.

**MOTION:** William Oglesby moved to approve the minutes as presented; Chris Gallo seconded. The motion passed unanimously by all board members present with a vote of 9 to 0.

**DEPARTMENT / DIVISION / BRANCH UPDATES**

Dr. Ba provided Branch updates. Dr. Ba stated that the legislative concept proposal that was approved by the FIAB to allow the Fertilizing Materials Inspection Program (FMIP) an exemption from being required to go through the rulemaking process and offer flexibility to change the mill assessment has not yet been approved. Although the Secretary agreed with the intent of the proposal, the Governor’s Office (GO) filtered proposals that included a fee or mill change due to budgetary issues. The Department’s Legislative Office has been engaged with the GO and clarified to the GO that the proposal did not include a fee change but was a mechanism to allow flexibility when a mill change is needed. This required involvement from the Department of Finance and wordsmithing the draft language to ensure the proposal continued to move forward. The proposal is currently under review by the Legislative Office.

The GO 2023 budget that was released in January 2023 demonstrated a $22 billion deficit. The May revised budget presented a $32 billion deficit. The impact of the $32 billion deficit is unknown. The budget deficit is much larger than expected and is compounded by two factors: high inflation and a decision to let people delay filing their taxes due to a series of winter storms. The ramifications are unknown at this time.

Dr. Ba presented the Branch’s organizational chart. The FMIP has no vacancies. The Agricultural Technician position presented on the chart is a seasonal position and is based on program need. The Branch has been intentional with filling its vacant positions in case of a potential hiring freeze. An incumbent has been selected to fill the Branch Office Support Staff Unit’s Office Technician position and the incumbent is anticipated to start in June. The Feed and Livestock Drugs Inspection Program’s (FLDIP) one Environmental Scientist vacancy has been intentionally left vacant as federal funds needed for this position are not available at this time.

Dr. Ba announced that the bill regarding the allowance of remote attendance in meetings without notification of the location to the public is still being reviewed and the finality is unknown. If the proposal does not pass and become law, remote locations of attendees must be noticed and open to the public.

Dr. Ba reported 7.7 million acres of crops may be affected in the flooding area. Commodities with acreage greater than 50,000 include almond, corn, cotton, pistachio, safflower, tomato, and wheat. The California Office of Emergency Services (CalOES) has requested state agencies provide information on outcomes if floods rise in King and Tulare counties. The Department was asked to model an economic impact looking at nearby facilities of major snowmelt, impact unknown. The Department’s Plant Health Division performed a geographical information system map identifying feed and fertilizer facilities in the area and provided the feedback to CalOES. Nine fertilizer firms were asked to identify their location and issues as well as fertilizer production in the specified area. In 2022, these firms reported distributing 102,532 tons of fertilizing materials; three firms accounted for 93% of tonnage. One feed integrator was identified in the area. All the information was provided to CalOES in a potential emergency response case.

Dr. Ba reported the emerging topic of feed strategies for enteric methane reduction within the Feed industry prompted two legislative bills. The Department organized a State of the Science Summit on May 2-3, 2023 with the University of California, Davis (UCD) College of Agricultural and Environmental Sciences. There were over 300 attendees, including Food and Agriculture Organization, federal agencies, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA) and the California Air Resources Board (CARB). The purpose of the Summit was to identify opportunities for collaboration and research that will help the dairy and beef industries and animal agriculture meet climate goals. The state of current research around enteric methane reductions via feed strategies, methods and protocols for evaluating methane reduction, opportunities for research, supply chain drivers influencing the adoption of feed additives, outlook and industry guidance when evaluating product safety and claims, and producer adoption of feed additives were panels discussed at the Summit.

The Department’s Office of Environmental Farming and Innovation (OEFI) and FLDIP received $10 million from CARB for research to ensure product safety in the marketplace.

Gary Silveria left the meeting at 9:30 AM.

**PROGRAM UPDATES**

Nick Young reported FMIP’s beginning fund condition balance as of July 1, 2022, for fiscal year (FY) 2022/23 for Commercial Fertilizer was $10,287,207 and Organic Input Materials (OIM) was $3,873,120. Revenue for Commercial Fertilizer was $3,505,481 and expenditures were $4,765,750, with $201,105 in encumbrances. Revenue for OIM was $822,059 and expenditures were $1,547,090, with $293,882 in encumbrances. The adjusted ending balance for Commercial Fertilizer was $8,825,833 and $2,854,207 for OIM, for a total combined adjusted balance of $11,680,040.

FREP’s beginning balance as of July 1, 2022 was $7,937,382; revenue was $3,535,696, and expenditures were $2,315,798, with $2,728,594 in encumbrances through June 30, 2023. FREP’s total ending balance as of March 31, 2023 was $9,157,280, for a total adjusted balance of $6,428,686.

Young presented the mill assessment trends, reporting $6.6 million through April 2023 at a 2.5 mill rate for FY 2022/23. FMIP anticipates a projection range between $7.8 and $8.6 million for mill assessment revenue for FY 2022/23.

Young gave a biostimulant update, reporting that on February 13, 2023 at the Association of American Plant Food Control Officials’ (AAPFCO) Winter Annual Conference, the Biostimulant Committee voted unanimously in favor of the Beneficial Substances Uniform Bill. This Bill memorializes definitions for “plant biostimulant,” “beneficial substances,” and creates labeling parameters and provides comprehensive structure for this category. No additional revisions are anticipated at the AAPFCO Summer Annual Conference. The official vote is expected by February 2024.

Gus Olson inquired about implementation of the Bill regarding the fertilizer product registration process. Young responded, stating biostimulant claims on a product label may be accepted for review next February 2024; however, the label format may require rulemaking. FMIP will approach the Department’s Legal Office for guidance. FMIP would not require a firm to reregister a product that does not fit the new labeling standard. Firms would wait until its product expiration and make changes during renewal period. The intent is to streamline the process.

Chair McQueen asked how FMIP would spread the information to manufacturers. Young expressed the importance of publicizing the information, stating a discussion will be held on how to best facilitate it through states and/or trade associations.

The AAPFCO Summer Annual Conference is on August 3-4, 2023 in Baltimore, Maryland. The Biostimulant Committee is on August 3. Registration is open for those interested in attending.

Chris Gallo inquired about where the AAPFCO status fits in with the European Union (EU) standard. Young stated the definition for biostimulant is synonymous with the EU standard. There is no conflict between the two definitions and domestically it is the same definition through USDA and International Organization for Standardization (ISO).

Young gave an update on the 2023 proposed rulemaking that was presented at the last FIAB meeting. The 45-day public comment period is forthcoming as the rulemaking is currently under review by the Department’s Budget Office. The anticipated publication date is July 2023.

The Department’s civil hearing date for the $1.89 million herbicide adulteration case of Agro Research International for Agro Gold WS has been postponed to December 2023. The case continues to move forward with additional investigations.

Dr. Martin Burger gave FMIP’s product registration update as of May 8, 2023, reporting a total of 2,019 OIM registrations and 7,969 commercial fertilizer registrations were approved. In total, there are 3,307 OIM and 9,728 conventional fertilizer registrations that are active label registrations. Dr. Burger presented a table displaying a breakdown of total labels from 2019 to present time between OIM and conventional fertilizer product labels. OIM product labels appear to increase each year whereas conventional fertilizer product labels appear stable, peaking in 2021.

Olson inquired about the timeframe that registrations are in a provisional status and whether it is an extension to the amount of time it takes for product registration. Dr. Burger responded, stating registration review takes approximately six months if a firm submits the required documentation at the beginning of the renewal period.

Young commented, stating the provisional status does not add time to product registration review. The intent of the provisional status is to incorporate the time it takes for the program’s registration staff to complete its review process. It allows additional time for a product to be sold.

Nicole Smith provided 2023 sampling and complaint summaries as of May 26, 2023, reporting 578 total samples taken. FMIP received six formal complaints; three resolved and three pending investigations. Smith announced the Pathogen Pilot Survey contract was approved on May 1, 2023. The FMIP’s field staff obtained 80 samples to-date. Staff will continue to obtain samples at a steady pace. The duration of the survey is from May 2023 through April 2024, focusing on distinct products, its manufacturer, product and its ingredients. If FMIP receives more positive results, it may lead to more targeted samples towards manufacturers. UCD has final lab results that will soon be submitted to FMIP’s lab coordinator. The results will be reported at the next FIAB meeting.

Mark Cady provided FREP updates. Cady announced 13 full proposals were due April 14, 2023. Eleven full proposals were submitted by the due date and two Principal Investigators decided not to submit their full proposal for phase II. FIAB’s Technical Advisory Subcommittee (TASC) met on May 19, 2023, and moved seven of the 11 full proposals to recommend to the FIAB for approval:

1. Three-year proposal by Bruce Linquist from University of California, Davis: No-till planting of rice into existing soil moisture to conserve irrigation water and ensure the sustainability of rice systems – saves 15 to 20% of annual soil water use in rice production.
2. Three-year proposal by Daniel Geisseler from UCD and Scott Stoddard from University of California Cooperative Extension (UCCE) Merced: Estimating mineralization and nitrogen utilization from banded compost applications in drip irrigated sweet potatoes and processing tomatoes.
3. Three-year proposal by Sacha Lozano, Resource Conservation District (RCD) of Santa Cruz County, Laura Murphy, RCD of Monterey County and Elliot Grant of Sustainable Conservation: Facilitating grower adoption of cover crop nitrogen scavenging to minimize residual nitrogen discharge and comply with the irrigated lands water quality protection program (Ag Order 4.0) on the Central Coast of California. The practice is facilitating grower adoption of winter cover cropping in vegetable cropping systems in the Central Coast.
4. Three-year proposal by Sat Darshan Khalsa, Ranjith Karunakaran and Patrick Brown of UCD: Improving nitrogen and potassium management in almond orchards with hulls and shells as a soil amendment and off ground harvest. The goals of this project are consistent with strategic goals of the Almond Board.
5. Three-year proposal by Patrick Brown and Yufang Jin from UCD and Elia Scudiero from UC Riverside: Optimizing potassium (K) fertilizer management in Almond and Pistachio Orchards. Mainly to look at how to be more economically efficient with K fertilizer recommendations using site-specific fertilization strategies.
6. Two-year proposal proposed by Valerie Perez and Jeffrey Orrey from GeoVisual Analytics: Evaluating strategies to increase adoption of nutrient and irrigation management for Central Coast Vegetable production. Focused on coupling CropManage with other software to provide growers guidance adopting more precise nutrient and irrigation practices.

Three-year proposal by Isaya Kisekka and Thomas Harter from UCD. Nitrogen movement out of root-zones in Central Valley irrigated lands: a multi-scale management, monitoring, modeling and outreach project. Highly instrumented research fields in the Central Valley will be monitored for water and nitrogen movement in the Vadose Zone (unsaturated zone) in Almond, Citrus, and Tomato fields. This proposal will take a series of models used for Irrigated Lands Regulatory Program (ILRP) compliance and validate with real world sampling of nitrogen to better understand nutrient movement from the root zone in the three systems.

Timothy Howard expressed concern regarding the sixth proposal and the expenditures and allotted funds being requested to help develop GeoVisual Analytics business model for what is already being performed in the fertilizer industry by major agricultural retailers and available to growers.

Cady stated GeoVisual Analytics has Green Seed, the only crop management software program used in the proposal; however, TASC members did not raise any concerns.

Jake Evans and Chris Gallo agreed with Timothy Howard’s concern.

Chair McQueen also agreed with Timothy Howard’s concern, stating the importance of supporting growers and providing tools for efficient fertilizer use.

Discussion ensued regarding CropManage and the intent of the sixth proposal.

David McEuen stated TASC has worked on CropManage for years and have had extensive discussions on these subjects. The goal of the project is the reason the TASC is in support of the project going forward. McEuen does not see conflict in terms of the grower and coalition through nitrogen management.

Bill Oglesby requested additional information on the sixth proposal.

Emad Jahanzad informed the FIAB that the main issue being raised in this proposal is regarding CropManage use as larger growers are not willing to use it due to the amount of time it takes for many planting entries and having to upload the data separately to be able to use it. The suggestion to use the API function and methodology is to help larger operations and farms to use CropManage instead of uploading data each time for each plan. GeoVisual Analytics is working with two growers who will provide access to their field data. GeoVisual Analytics will use these case studies as a model to see how to help larger operations.

**MOTION**: Gus Olson moved to approve funding the six of seven proposals with the exception of the sixth proposal by GeoVisual Analytics: Evaluating Strategies for Increase Adoption of Nutrient and Irrigation Management for Central Coast Vegetable Production; Chris Gallo seconded. The motion passed by a vote of 7 to 0, with one abstention.

Chair McQueen asked for a motion to approve the sixth proposal by GeoVisual Analytics: Evaluating Strategies for Increase Adoption of Nutrient and Irrigation Management for Central Coast Vegetable Production. No motion was made to approve the proposal.

Cady gave project updates implemented by the Fertigation Education Resources from the Irrigation Training and Research Center (ITRC), Cal Poly San Luis Obispo. The update of the Fertigation Handbook, an industry standard of fertigation practices was previously approved for funding by the FIAB. ITRC has since used FREP funding to update the Handbook and translate it into Spanish. The FREP Project 20-0961, Certification and Distance Learning for Fertigation created by Dr. Charles Burt, is an online training program consisting of a series of 22 videos available on ITRC’s YouTube channel. Dr. Burt is still trying to obtain accreditation for the training program with a private association. The online training program is free with no certification requirement.

Cady reported an update on the Nitrogen and Irrigation Initiative (NII). Hiring continues to be a challenge; but the majority of the positions are filled. A lot of training has occurred, the cadre of research staff associates who work with farm advisers are exchanging information and meeting regularly, conducting site visits, and hosting workshops in Central Coast and Valley. FREP staff will provide an extensive update and data at the next FIAB meeting and invite UCCE to participate. FREP/Western Plan Health (WPH) 2023 Nutrient Management Conference will be held in November 8-9, 2023 at the DoubleTree by Hilton in Modesto, California. The official agenda is anticipated to be released in late June or July 2023.

**CENTER FOR ANALYTICAL CHEMISTRY (CAC) LAB UPDATE**

Stacy Aylesworth presented CAC updates, reporting assays completed for samples received from January through April 30, 2023. CAC completed a total of 1,232 assays, averaging an eight-day turnaround time. Aylesworth reported CAC completed a total of 1,370 assays with a 10% of rerun samples and an average of 5.7 assays completed per sample.

CAC received 315 samples and completed 242 samples. Of the total number of samples received, 87% were routine samples and 13% were priority samples.

Aylesworth provided program updates. CAC’s two staff members from the regulatory analysis unit have been promoted within the Department and will be leaving the program. Two replacements will start soon, and cross-training is already in the works and should be completed quickly. CAC has had several vacancies, including two more Environmental Scientists for the Environmental Monitoring Analysis Unit.

**PUBLIC COMMENT**

Renee Pinel, Chief Executive Officer of WPHA, reported bills that could potentially impact the Department and/or the fertilizer industry. Assembly Bill (AB) 1042, pertaining to pesticides, does not impact the Department but conversations with sponsors are seeking authority in areas related to planting systems. WPHA is concerned about the protection of the Department’s authority over agronomic issues. AB 1590, prohibiting nonorganic fertilizer or pesticide products to be used on resource or coastal California, has died. AB 475 and Senate Bill 224, prohibiting foreign investment in agricultural lands in California, are now also dead. Pinel reported the GO proposed an additional $25 million to small business drought relief funds, which could potentially rise to $100 million. However, there is uncertainty due to the state deficit. Pinel thanked the Department in support of the drought relief program with WPHA. Small business applications should be released in July 2023. Agricultural retailers or businesses that support business directly related to agriculture would be able to apply for loss due to impact of agricultural lands during the last couple years of drought.

Olson commented, stating a request for FMIP to address a large conflict between regulation of misinformation and overdoing censorship. Acknowledging the obligation to protect growers from fraud, there is concern about the balance between regulatory action and sensitivity. Olson requests the Department and FIAB come up with a consensus that would allow consumer protection and free speech.

Young responded, stating the topic will require a discussion of the situation and censorship. FMIP’s registration staff have weekly discussion of uniformity to ensure that all staff are uniform in applying the fertilizer laws and regulations and reviewing labels in the same context of program’s authority.

Olson stated the Department can demand proof for product label review but when it comes to collateral material, public speaking or blogs there are representations made that lack research. Young responded, stating it is in law that collateral material claims are specific to a product. Claims made on a website, fact sheet mailer or radio advertisement fall under the definition of labeling for program enforcement. Information found online is pervasive and may change anytime so the program may issue a violation to a firm. However, the changes can be reverted without program knowledge, which is where the program relies on the complaints.

Olson suggested program issue a cease and desist before regulatory action. Young stated the program is required to send a Notice of Warning/Notice of Violation requesting firms to revise or correct the violation within 30 days of notice. These are sent out prior to administrative civil penalties being issued.

Smith commented, stating proof of evidence that the complaint is directly from a firm representative is needed. Young stated if a claim is inaccurate or cannot be supported, the program can use evidence such as social media where claims were made that are clearly unfounded with no supporting evidence.

Olson requested discussion with FMIP about a complaint regarding a violation of free speech.

**AGENDA ITEMS FOR FUTURE MEETINGS**

No additional agenda items were requested for the next FIAB meeting.

**NEXT MEETING**

The next FIAB meeting will be on Tuesday, September 12, 2023 in Sacramento, California.

**MOTION**: Jake Evans moved to adjourn the meeting; William Oglesby seconded. The motion passed unanimously by all members present with a vote of 8 to 0.

**ADJOURNMENT**

The meeting was adjourned at 11:30 AM.

**ORIGINAL SIGNED BY NICK YOUNG** 05/31/2023

Nick Young **Date**

Environmental Program Manager I

Fertilizing Materials Inspection Program